IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

ANTHONY MAYS, *et al.*,	)	
	)	
Plaintiffs-Petitioners,	)	
	)	Case No. 20-cv-2134
v.	)	
	)	The Hon. Matthew F. Kennelly
THOMAS J. DART, Sheriff of Cook County,	)	Emergency Judge
	)	
	)	The Hon. Robert Gettleman
Defendant-Respondent.	)	Presiding Judge

REPLY IN SUPPORT OF PLAINTIFFS' RENEWED MOTION FOR A PRELIMINARY INJUNCTION AND FOR LIMITED, EXPEDITED DISCOVERY

INTRODUCTION

The Sheriff's response has clarified the path forward in this litigation. The Sheriff has conceded that medically required social distancing is not possible with the current jail population given the basic security requirements of running a jail. Doc. No. 62 at 19 ("[T]he Sheriff cannot implement 'full' social distancing throughout the Jail at this time."). The Sheriff having conceded the point, this court should so find.

The Sheriff's concession leads necessarily to the conclusion that, without a reduction of the Jail's population, the lives and safety of the persons confined there cannot be reasonably protected. As a society, we have sacrificed our economy and upended every aspect of our collective and individual lives because of the consensus that social distancing is critical to the protection of health and life. That consensus applies no less to the presumptively innocent individuals who are facing confinement as they await their trials, even if they cannot afford to pay the cash bonds required for their release. Indeed, that is the judgment of every medical expert in this case. *See* Declaration of Dr. Homer Venters, former Chief Medical Officer of the NYC Jail Correctional Health Services (Ex. A hereto) ¶ 19; Declaration of Gregg Gonsalves, Yale Medical School

Epidemiologist (Ex. G to Plaintiffs' Renewed Motion for Preliminary Injunction (Doc. No. 55-7)) ¶ 29; Declaration of Dr. Amir Mohareb (Ex. B hereto) at 5-6; Declaration of Laura Rasmussen-Torvik (Ex. C hereto), ¶ 8. The Sheriff has proffered no contrary medical opinion. Thus, this court should also find that "social distancing" as defined by the Centers for Disease Control and Prevention (CDC), Illinois and federal emergency orders for the protection of the general public, and by Plaintiffs' medical experts is necessary to reasonably protect individuals confined in the Jail.[1]

From these two findings, it follows that the court must address how to reduce the population of the Jail's physical plant. Without such a reduction, the Jail is concededly incapable of protecting the due process rights of those confined there.

As we explain below, there are three practical steps that should be taken simultaneously. *First,* the court should convene a three-judge panel to consider whether and to what extent to enter a prisoner release order. *See* 18 U.S.C. § 3626(a)(3)(A). In light of the extreme urgency, Plaintiffs ask this court to request that this tribunal be convened immediately. *Second,* independently from the three-judge panel procedure, the court should order the Sheriff to transfer detainees to some other safe location of his choosing where they will remain in his custody. *Third,* the court should immediately determine the eligibility of the subclass A Plaintiffs to emergency habeas relief. In

[1] The key feature of social distancing is that individuals be able to keep at least 6 feet (or 2 meters) apart from other individuals. This is the position of the CDC (https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html); the Illinois Department of Public Health (http://dph.illinois.gov/sites/default/files/COVID-19_SocialDistancing.pdf); the American Medical Association (https://www.ama-assn.org/delivering-care/public-health/covid-19-how-persuade-patients-practice-social-distancing); the American Red Cross (https://www.redcross.org/about-us/news-and-events/news/2020/coronavirus-what-social-distancing-means.html); Johns Hopkins Medicine (https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/coronavirus-social-distancing-and-self-quarantine); and the American Psychological Association (https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/coronavirus-social-distancing-and-self-quarantine), among others; *see also infra* Section I.

light of the Sheriff's acknowledgement that he has *not done any medical triage* of the most vulnerable (and in fact does not know who the medically vulnerable are)—even after the recent death of a third class member—there is a clear and present danger to the lives of the most medically vulnerable inside the Jail.

Finally, even as the release of some detainees is being addressed, the court must evaluate the conditions within the Jail for those who will remain behind bars. There is evidence of frequent breakdowns in the Sheriff's sanitation regimens; there is great uncertainty about the extent of spread of the virus within the Jail and a serious question as to the adequacy of the Jail's testing regimen; there has been rapid reallocation of housing within the Jail, potentially exposing detainees to unacceptable living environments, among other things. In the final section, Plaintiffs explain that—even though there is no factual dispute as to the necessity for reduction of the Jail's population—targeted, expedited discovery, the conversion of the TRO into a Preliminary Injunction (or the extension of the TRO with good cause), and potentially an evidentiary hearing are necessary to ensure adequate conditions for those who will remain.

THE FACTS BEHIND THE JAIL WALLS

The Evidence on the Imperative of Social Distancing Is Undisputed

The Sheriff does not dispute that maintaining social distance is an imperative for protection against becoming infected with the novel coronavirus. It is a medical necessity—even for those confined in a jail. All of the evidence in this record supports that proposition. Plaintiffs have discussed in their previous filings the voluminous evidence in the public record on the imperative of social distancing. The CDC describes social distancing as "a cornerstone of reducing

transmission of respiratory diseases such as COVID-19[,]"[2] as "[t]he best way to prevent illness[,]"[3] and as "extra important" for vulnerable individuals.[4] Governor Pritzker has described social distancing as a "paramount strategy for minimizing the spread of COVID-19 in our communities[.]"[5] The City of Chicago advises that "[w]ithout social distancing to slow the spread of COVID-19, the number of cases can increase so quickly that hospitals will not have nearly enough beds and equipment to care for all patients."[6]

Medical and epidemiological experts agree. Dr. Homer Venters, an epidemiologist and correctional medical expert who formerly oversaw the delivery of medical care in New York City jails, has submitted a declaration opining that social distancing is among the most evidence-based and critical interventions to slow the spread of COVID-19. Ex. A ¶ 9. Because individuals can transmit the disease before becoming symptomatic, *id.*, social distancing is "imperative to decrease rampant spread . . . and protect people's health." *Id.* ¶ 18.

Dr. Amir Mohareb, an infectious disease physician at Massachusetts General Hospital who is a member of that hospital's Biothreats Response Team and an instructor at Harvard Medical School, has explained in his declaration that social distancing is the "primary means" of protecting public health. Ex. B at 5-6. Dr. Mohareb further explains that proper hygiene and the provision of surgical masks *cannot* serve as an adequate substitute for social distancing, given the inability of

---

[2] "Interim Guidance on Management of Coronavirus Disease 2019 (COVID-19) in Correctional and Detention Facilities," CDC, *available at* https://www.cdc.gov/coronavirus/2019-ncov/downloads/guidance-correctional-detention.pdf.

[3] "How to Protect Yourself & Others," CDC, *available at* https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html.

[4] "What You Can Do," CDC, *available at* https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/what-you-can-do.html.

[5] Executive Order 2020-18, Apr. 1, 2020, *available at* https://www2.illinois.gov/Documents/ExecOrders/2020/ExecutiveOrder-2020-18.pdf.

[6] City of Chicago, Frequently Asked Questions (Apr. 17, 2020), *available at* https://www.chicago.gov/city/en/sites/covid-19/home/frequently-asked-questions-.html?#faq-protect.

surgical masks to protect individuals from airborne transmission of COVID-19 and the inability of proper hygiene to protect against both droplet and airborne transmission of the virus. *Id.* at 3, 5-6. The medical evidence instead establishes that "social distancing [is] a necessary intervention to prevent the spread of infection and downstream complications of COVID-19." *Id.* at 6.

Dr. Gregg Gonsalves, an epidemiologist and professor at the Yale Schools of Medicine and Public Health, concluded that "ensuring that all detainees in Cook County Jail can socially distance from one another is the *only* way to prevent further, essentially uncontrolled, spread of the virus." Doc. No. 55-7 ¶ 29. Dr. Gonsalves has further explained that the Jail's ability to effect social distancing will have a direct impact on the utilization of county hospital beds (beds that are required for all County residents), as well as mitigating the harm to Jail staff and the public from an uncontrolled outbreak. *Id.* ¶¶ 29-31.

Dr. Laura Rasmussin-Torvik, Ph.D., Chief of Epidemiology in the Department of Preventive Medicine at Northwestern University and a member of the Northwestern faculty, concurs. Ex. C at ¶ 8 ("Given recent evidence of spread of COVID-19 from people without any symptoms (https://www.cdc.gov/mmwr/volumes/69/wr/mm6914e1.htm) it is critical that all Illinoisans continue to practice social distancing, remaining 6 feet apart, practicing appropriate hand hygiene, and utilizing cloth masks whenever possible in order to control the spread of this disease.").

Even the Sheriff agrees that social distancing is necessary. In a recent supplemental declaration, Michael Miller states that the Sheriff has "emphasized that detainees should maintain 6-feet of distance from each other." Doc. No. 62-5 (Miller. Supp. Decl.) ¶ 18; *see also* Doc. No. 62 at 13 ("complete social distancing is the ideal"). Despite these admissions, the Sheriff continues

to house Plaintiffs in a way that makes social distancing among detainees impossible because there are too many people in his custody to do otherwise.

The Sheriff Has Conceded That Social Distancing Is Impossible at Current Population Levels

The Sheriff concedes that he "cannot implement 'full' social distancing throughout the Jail at this time." Doc. No. 62 at 19. This is not for lack of trying. The Sheriff appears to have taken dramatic steps to try to expand the Jail's capacity, including by opening tiers that have been closed for some time. For example, since March 15 the Sheriff has opened Division 4, which had been closed entirely, as well as numerous tiers in Division 2. *See* Doc. No. 62-5 (Miller Supp. Decl.) at 11-14. Indeed, multiple detainees have reported that in the last few days they have been moved to mothballed units that appear not to have been used in year, many of which are filthy, lack heat, and lack running or potable water. *E.g.,* Ex. D (Detainee Decls.) at 4, 11, 13.

These efforts are insufficient. *First,* the Sheriff's submission concedes that detainees are still being confined in double cells. Doc. No. 62 at 20. Social distancing in a double celled environment is categorically impossible.

Second, the Court will recall expressing concern that given the tight bunk-bed arrangement in Division 2, even placing units in that Division at 50% capacity was unlikely to effectuate social distancing. *See* Apr. 7, 2020 Tr. at 24:9-20. Yet the Sheriff's latest submission shows that of Division 2's 40 dorm units, 20 are at above 40% capacity, ranging up to 70% and above. Doc. No. 62-5 at 9-12. A similar pattern appears in Division 8, a photograph of which is also included in Plaintiffs' complaint. *See* Doc. No. 1 at ¶ 33 (bottom photograph). Of the 30 RTU tiers in Division 8, 21 are above 40% capacity, and 12 are at or near 70% capacity. Doc. No. 62-5 at 14. These tiers house hundreds of people who are unable to take the most basic protective measures against COVID-19. These detainees will be forced to sleep and live well within six feet of each other. Not

surprisingly, many of these tiers are quarantined, indicating that some of the detainees housed there tested positive for COVID-19.

Third, the jail's dorms and tiers are enclosed spaces in which dozens of detainees are confined together. Thus even if detainees manage at times to achieve six feet of separation, that will not be sufficient to address the health risk in such environments. As Dr. Amir Mohareb explains, such settings are ideal environment for long-distance, airborne transmission of COVID-19:

> virus particles in small respiratory droplets (<5micrometres) that are emitted by an infected person can remain suspended in the air and remain infective over several hours and over long distances. Pathogens that travel via airborne transmission can infect persons even if they are wearing surgical or procedural masks. Healthcare workers protect themselves against airborne transmission by wearing specialized masks (N95 masks or Powered Air-Purifying Respirators) and by isolating infected persons in closed rooms with negative-pressure ventilation. Buildings or facilities with other forms of ventilation may spread aerosolized pathogens between rooms.

Ex. B (Mohareb Decl.) at 3.

Notably, this form of transmission is distinct from the large respiratory (>5micrometres) transmission for which the six-foot rule is designed. *Id.* The jail's detainee housing, needless to say, is not a negative pressure environment, nor is it well ventilated. Hundreds of detainees, in other words, still sit all day in close proximity to numerous other detainees, in poorly ventilated rooms that will allow any one of them to pass on a virus that can survive in the air for at least three hours. *Id*. In such environments, as Dr. Mohareb notes, the cloth masks that detainees have been provided (*see* Doc. No. 62-5 (Miller Supp. Decl.) ¶ 23) are not adequate protection against airborne transmission. *Id.* at 5-6. Indeed as the CDC cautions, effective social distancing is required "even when you wear a face covering."[7]

[7] "Social Distancing, Quarantine, and Isolation," CDC, *available at* https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html.

Finally, the jail's dorms and tiers are simply not set up to isolate large numbers of people. To the contrary, they are designed in a manner that ensures large numbers of people will touch the same things, constantly. As can be seen from the complaint photos of Tiers 2 and 8, for example, dozens of detainees share common bathrooms, showers, sinks, toilets, meal tables, microwaves, and the like. The same situation exists on other tiers, even those with individual cells. Ex. D (Detainee Decls.) at 2-3, 7-8, 10, 14. Although increased cleaning will certainly help, each of those surfaces inevitably will be touched by numerous different people throughout the day—compounding the risk of transmission.

In the present emergency, the design of the jail makes it impossible to imprison so many persons in a reasonably safe manner. As a district court recently explained, "the only way to stop [COVID-19's] spread is through preventive measures—principal among them maintaining physical distancing sufficient to hinder airborne person-to-person transmission. Creating physical distancing is uniquely difficult in a congregate environment like a prison. . . . [which is] a problem shared by *all* prisons" alike. *Coleman v. Newsom*, 2020 WL 1675775, at *5 (E.D. Cal. Apr. 4, 2020) (citations omitted, emphasis original).

ARGUMENT

I. THE CONSTITUTION PROTECTS CLASS MEMBERS FROM A SERIOUS AND UNREASONABLE RISK TO THEIR HEALTH AND SAFETY.

It cannot be consistent with due process to allow the Jail's detainees to remain in an environment in which they are unnecessarily and unreasonably exposed to a potentially deadly, life-altering coronavirus. The consensus of medical and epidemiological judgment on the record of this case is that such a practice is intolerable and cannot be justified.

Due process requires that detainees in a jail be protected from conditions that "pose an unreasonable risk of serious damage to . . . future health." *Helling v. McKinney*, 509 U.S. 25, 35

(1993); *see also Powers v. Snyder*, 484 F.3d 929, 931 (7th Cir. 2007) (The Eighth Amendment protects prisoners from known exposure to serious diseases, and in such circumstances, "[t]he prison must be allowed to choose between removing the prisoner from the unhealthy environment and protecting him from its consequences . . . provided, of course, that the protection is efficacious."); *Mark v. Officers Olson, Haglin, Harsma Granton's 1st, 2nd, 3rd Shift Officers Between Dates of 7-29-02, 8-13-02*, 2003 WL 23221515, at *7-8 (W.D. Wis. Oct. 21, 2003) (plaintiff properly alleged that prison officials acted with deliberate indifference to his health when they knowingly placed another inmate who had been diagnosed with hepatitis B and hepatitis C in his cell, for "[c]ertainly, in some cases, the risk of harm in placing a healthy inmate in the same cell as one with a communicable disease would be significant enough to be considered cruel and unusual punishment.").[8] So too here: it cannot pass constitutional muster to allow detainees in the Jail to live in close proximity to others who may be infected with a deadly virus.

The Sheriff contends that he has satisfied the Fourteenth Amendment by complying with the CDC's Guidance for jails and prisons because that guidance essentially tells him to do the best he can to socially distance, understanding he has no control over jail population. But the CDC's guidelines to jails to do the best they can to protect confined prisoners as practicable based on current population and space limitations does not, by definition, purport to be a statement of what

[8] Scores of cases nationwide reinforce this principle, and show that, even if held to an Eighth Amendment standard, the Sheriff would be liable for failing to provide protection from a risk of serious medical harm. *See also*, *e.g.*, *Washington v. Denney*, 900 F.3d 549 (8th Cir. 2018) (failure to protect an inmate from exposure to secondhand smoke constitutes deliberate indifference to his serious medical need); *Ball v. LeBlanc*, 792 F.3d 584 (5th Cir. 2015) (failure to remedy extreme temperatures and sanitation issues in prisons constitutes deliberate indifference); *Spencer v. Bouchard*, 449 F.3d 721 (6th Cir. 2006) (in § 1983 action against a county sheriff in Michigan, court found that "[t]he fact that cold, wet conditions existed would have been obvious to anyone in the vicinity . . . [a]lthough jail officials might be unaware (due to unfamiliarity) that certain conditions are dangerous, the fact that exposure to cold, wet conditions for months at a time is a substantial risk is so obvious as to merit no further discussion."); *Gray v. Hardy*, 826 F.3d 1000 (7th Cir. 2016) (failure to address birds and pests within an inmate's cell constitutes deliberate indifference); *Wallis v. Baldwin*, 70 F.3d 1074 (9th Cir. 1995) (failure to protect inmates from exposure to asbestos-containing insulation constitutes deliberate indifference).

is *medically required*, much less a repudiation of the CDC's general scientific guidance. On this question, the CDC can set neither a constitutional floor nor a constitutional ceiling for jails on what is objectively reasonable—that is for this Court to decide, in light of the particular conditions that Plaintiffs are experiencing and the particular risks that they face as a result. *See United States v. Proano*, 912 F.3d 431, 439 (7th Cir. 2019) (the Constitution, "not departmental policy, sets the constitutional floor"); *Thompson v. City of Chicago*, 472 F.3d 444, 454 (7th Cir. 2006) (administrative regulations "shed[] no light on what may or may not be considered 'objectively reasonable'").

In *Thompson*, the Seventh Circuit held that an administrative order regarding use of force had no relevance to the question of whether a police officer's use of force was "objectively reasonable" under the Fourth Amendment. 472 F.3d at 454-55. The court explained that because an assessment of objective reasonableness demands particular consideration of the precise circumstances of the case, administrative guidance and general orders were not "reliable gauges" of what was required by the Constitution. *Id.* at 455. In *Proano*, the Seventh Circuit explained that administrative guidance and the like are admissible in cases where intent is at issue—because a deviation from guidance and training permits an inference of culpable intent—but often *are not* relevant in cases that lack a specific-intent requirement. 912 F.3d at 439.

Administrative guidance may have some relevance in certain situations, like when the reasonableness of the particular circumstances involves consideration of issues for which expert testimony would helpful to the trier of fact to understand the evidence. *See United States v. Brown*, 871 F.3d 532, 537 (7th Cir. 2017). But even if relevant, this type of evidence must be assessed in light of the other expert testimony and evidence in the case, including all of the CDC's guidance about COVID-19, and the court must ensure that the constitutional inquiry "is governed by

constitutional principles, not [administrative] regulations." *Id.* at 537; *see also England v. Allen*, 2019 WL 2743481, at *5 (N.D. Ill. July 1, 2019) (describing the slight relevance that administrative regulations have in objective reasonableness inquiry).

The Sheriff's citation to *Carroll v. DeTella*, 255 F.3d 470 (7th Cir. 2001), supports the principle. Doc. No. 62 at 17. In *Carroll*, the Seventh Circuit determined that no reasonable jury could find that the defendant had the requisite subjective disregard for health and safety required by the Eighth Amendment, given his compliance with mandatory state standards. 255 F.3d at 473. But in *Carroll*, the EPA standard at issue reflected the agency's judgement about an acceptable safety standard for *all* people—the EPA did not single prisoners out for less protection from water contamination, or conclude that a higher risk of cancer was acceptable for prisoners than the public at large. *Id.* at 473.

The CDC Guidance at issue here does something else entirely. The Guidance encourages correctional institutions to implement social distancing, but only to the extent practicable given the facility's particular circumstances.[9] The CDC's correctional guidance effectively abandons the social distancing recommendation to the extent that a jail's population and its physical plant make social distancing impracticable. But it is not for the CDC to decide whether it is objectively reasonable to expose pretrial detainees to serious medical risks that our society has deemed intolerable for everyone else; that is a decision for this court.

The Sheriff thus wrongly implies that the CDC Guidelines for jails indicates that the CDC believes that social distancing can safely be abandoned in jails. To the contrary, public health authorities, the CDC first among them, have issued a raft of admonishments that effective social distancing is critical for stopping the spread of COVID-19.[10]

---

[9] *See supra* n.2.

[10] *See supra* n.1.

The CDC's Guidance for individuals[11] explains that "keeping space between you and others is one of the best tools we have to avoid being exposed to this virus and slowing its spread." CDC therefore advises individuals to:

- Stay at least 6 feet from other people, "even when you wear a face covering"
- Do not gather in groups
- Stay out of crowded places and avoid mass gatherings
- Avoid grocery shopping; use a delivery service
- Work from home
- Avoid public transportation

The CDC's guidance for public officials place this individual guidance in context, recommending that when there is community spread, officials should consider closures of schools, workplaces, and even assisted living facilities and religious congregations. Other authorities are equally emphatic. The Illinois Department of Public Health recommends that people stay at least six feet apart, avoid public transportation, work from home, use a delivery service instead of shopping, suspend schooling, and the like.[12] The American Medical Association likewise recommends that "[p]hysical distancing and staying at home are the key to slowing the spread of 2019 novel coronavirus," and likewise recommends a six-foot separation,[13] as does the American Red Cross.[14] And the court, of course, is witness to this advice playing out in the most dramatic fashion. On the advice of these same authorities, to accomplish social distancing, we have shut down our national economy, with catastrophic and cascading effects across the country. If public

---

[11] "Social Distancing, Quarantine, and Isolation," CDC, *available at* https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/social-distancing.html.

[12] "COVID-19 Social Distancing," Ill. Dep't of Pub. Health, *available at* http://dph.illinois.gov/sites/default/files/COVID-19_SocialDistancing.pdf.

[13] "AMA, AHA, ANA: #StayHome to confront COVID-19," AMA, *available at* https://www.ama-assn.org/press-center/press-releases/ama-aha-ana-stayhome-confront-covid-19.

[14] "Coronavirus – What Social Distancing Means," Am. Red Cross, *available at* https://www.redcross.org/about-us/news-and-events/news/2020/coronavirus-what-social-distancing-means.html.

health authorities believed that other measures could effectively manage the disease, they would have recommended them instead.

Fundamentally, the Sheriff may not point to the CDC Guidance as the arbiter of his compliance with the Constitution. The CDC's Guidance merely acknowledges that jails and prisons may not be able to implement proper social distancing. It urges these institutions, in effect, to do their best within the limits of the carceral environment. But that cannot be taken to say that to place the Jail's detainees at a high risk of contracting a deadly disease—a risk that our society has deemed unacceptable—comports with the Fourteenth Amendment.

II. THE COURT MAY MAKE THE NECESSARY FINDINGS AND BEGIN THE STEPS NECESSARY TO CONVENE A THREE JUDGE PANEL TO CONSIDER RELEASE OF DETAINEES.

Plaintiffs urge the court to request the convening of a three-judge panel to determine whether and to what extent a prisoner release order should be entered in this case. 18 U.S.C. § 3626(a)(3)(A). Plaintiffs further request that this court simultaneously enter a preliminary injunction mandating the Sheriff to permit detainees to socially distance from one another, except in an emergency situation.

A. This Court Should Immediately Request That A Three-Judge Panel Be Convened.

The Prison Litigation Reform Act (PLRA) prohibits a prisoner release order to be entered unless a court has "previously entered an order for less intrusive relief that has failed to remedy the deprivation of the Federal right" at issue, and the defendant has had "a reasonable amount of time to comply" with prior court orders. 18 U.S.C. § 3626(a)(3)(A). Once these conditions are satisfied, a three-judge panel should be convened, either upon request of the party seeking the order or *sua sponte* by the court, following the procedures set forth in 28 U.S.C. § 2284.

The conditions of Section 3626(a)(3)(A) have been satisfied. *First*, the court has already entered an injunctive order for less intrusive relief. On April 9, 2020, this court issued a temporary restraining order, directing the Sheriff to (a) establish a policy requiring prompt testing of symptomatic detainees and, to the extent feasible, those who were exposed to symptomatic or confirmed COVID-19 detainees; (b) effect social distancing for detainees during the intake process (and to suspend the use of bullpens during intake); (c) provide soap or hand sanitizer to detainees in quantities sufficient to permit frequent hand-cleaning, provide sanitation supplies sufficient to permit regular sanitization of surfaces on which the virus could be present, and establish a policy requiring sanitization of frequently touched surfaces between uses (with compliance monitoring); and (d) provide facemasks to detainees who have been exposed to a symptomatic detainee. Doc. No. 47 at 34-36.

Second, as described above, that Order has failed to remedy the constitutional violation at issue in this case: the objectively unreasonable conditions of confinement that Plaintiffs are forced to endure as a result of the COVID-19 outbreak at the Cook County Jail. 18 U.S.C. § 3626(a)(3)(A)(i); *Brown v. Plata*, 563 U.S. 493, 514 (2011) (Section 3626(a)(3)(A)(i) "is satisfied if the court has entered one order, and this single order has failed to remedy the constitutional violation." (internal quotation marks omitted)). The Sheriff has admitted that social distancing, which the undisputed evidence establishes is necessary to protect Plaintiffs' right to objectively reasonable conditions under the Fourteenth Amendment, is impossible without reducing the population in custody at the Jail. Doc. No. 62 at 20. *See Brown*, 563 U.S. at 515 (holding that the three-judge panel was properly convened because, even though more recent orders had been entered, the evidence did not "provide assurance that further, substantially similar efforts would yield success absent a population reduction"); *see also Roberts v. County of*

Mahoning, 495 F. Supp. 2d 694, 697 (N.D. Oh. 2006) (convening three-judge panel after finding by the court that it was "unlikely that the plan to maintain constitutional population levels at the jail [would] be effective without . . . a prisoner release mechanism.").

Finally, the Sheriff has had a reasonable time to comply with this court's orders under these unprecedented circumstances. As of the date of this filing, the Sheriff has had 10 days to comply with the court's TRO order. In ordinary times, the Sheriff might reasonably insist on more time for compliance with changes in jail conditions. But as courts have acknowledged, "the *status quo* of a mere few weeks ago no longer applies. Our world has been altered with lightning speed, and the results are both unprecedented and ghastly." *Thakker v. Doll*, 2020 WL 1671563, at *9 (M.D. Pa. Mar. 31, 2020). Each day the number of confirmed COVID-19 cases in the country and the state grows larger, and despite the Sheriff's unilateral and unsupported assertion that COVID-19 cases at the Jail are under control, the medical and statistical evidence—including the 78.5% positive rate of detainees at the Jail who are being tested, Ex. C (Rasmussen-Torvik Decl.)—suggests that the outbreak is far greater than the Sheriff claims, and the rate of infection remains uncontrolled. *See also* Doc. No. 55-4 (Ex. D to Pl.'s Mot. for Prelim. Inj.) at 6 (projecting that 1,240 detainees will have contracted COVID-19 in one week's time).

In these extraordinary times, with death and severe illness so imminent if social distancing does not *immediately* occur, 10 days is a "reasonable amount of time to comply" with this Court's orders for purposes of Section 3626(a)(3)(A)(ii). *Coleman*, 2020 WL 1675775, at *4 n.9 ("We recognize that what is reasonable in ordinary times may be quite different from what is reasonable in these extraordinary times."); *id.* at *9 (Mueller, C.J., concurring) (concurring that plaintiffs must seek precedent injunctive relief before a three-judge panel is convened, but emphasizing "the availability of expedited proceedings . . . to *immediately* exhaust" the precedent relief).

In sum, Plaintiffs have demonstrated that the conditions precedent to convening a three-judge panel are met. The situation is emergent, and the time for convening such a panel is now.

B. An Injunction Should Issue Mandating Social Distancing in the Jail.

While the court is processing the request for a three-judge panel, it should simultaneously order the Sheriff to mandate all possible social distancing throughout the Jail. Social distancing is required to remedy the ongoing constitutional violation suffered by Plaintiffs. Nothing in the PLRA prohibits this court from continuing to enter remedial orders while the process for convening a three-judge panel is ongoing. To the contrary, the Supreme Court has determined that the PLRA permits such an approach because a contrary reading of the statute "would in effect require district courts to impose a moratorium on new remedial orders before issuing a population limit." *Brown*, 563 U.S. at 516. So long as the Sheriff has had a reasonable time to comply with the Court's social-distancing order by the time a three-judge panel enters a prisoner release order (which, as explained above will be inherently satisfied given what constitutes a "reasonable time" in these extraordinary circumstances and the Sheriff's concession regarding its ability to effectively socially distance at the Jail with the current population), Section 3626's requirements will be satisfied. *Id.*

An injunction mandating social distancing would meet the need-narrowness-intrusiveness criteria required by the PLRA. As discussed in Plaintiffs' April 6 brief on the applicability of the PLRA to Plaintiffs' requests for relief, Section 3626(a)(1)-(2) requires the Court to make findings that any preliminary injunction orders are "narrowly drawn, extend no further than necessary to correct the harm the court finds requires preliminary relief, and be the least intrusive means necessary to correct that harm." 18 U.S.C. § 3626(a)(2); *Fields v. Smith*, 653 F.3d 550, 558 (7th Cir. 2011). The Court must also give substantial weight to any adverse impact on public safety or

the operation of a criminal justice system. *Id.* § 3626(a)(1). The need-narrowness-intrusiveness inquiry is case-specific, and "must be undertaken in light of both the magnitude of existing constitutional violations and the available alternative remedies." *Morales Feliciano v. Rullan*, 378 F.3d 42, 54 (1st Cir. 2004).

In this case, the evidence is clear and it is one-sided: social distancing is the *only* way to meaningfully reduce rampant transmission of the virus inside the Jail. This Court's prior, less drastic, injunctive orders have not sufficed. *Plata v. Schwarzenegger*, 603 F.3d 1088, 1097-98 (9th Cir. 2010) (affirming court's injunctive order based, in part, on the failure of less intrusive injunctive orders). The Sheriff's own submission, arguing that he is objectively reasonable because he has made efforts to implement social distancing, acknowledges that social distancing is required in order to protect detainees' Fourteenth Amendment rights. Doc. No. 62 at 6; *see also Braggs v. Dunn*, 383 F. Supp. 3d 1218, 1253 (M.D. Ala. 2019) (agreements between the parties are "compelling evidence" that the injunctive relief request satisfies the need-narrowness-intrusiveness criteria). And the Sheriff has proposed no alternative relief that he contends would be less intrusive or more narrowly tailored, suggesting that there is no other relief that would suffice. *Plata v. Schwarzenegger*, 2008 WL 4847080, at *8 (N.D. Cal. Nov. 7, 2008) (noting that, despite objecting to the proposed injunctive relief, "[d]efendants have not once—even in these contempt proceedings—suggested any relief that would be less intrusive").

The Sheriff contends that the PLRA bars an order mandating social distancing because it "would impede the Sheriff's ability to address security and medical issues that may arise." Doc. No. 62 at 12. But the Sheriff offers no support for or explanation of this contention. To the contrary, the definition of social distancing proposed by Plaintiffs—an order requiring the Sheriff to permit detainees to socially distance from one another by at least six feet, except in an emergency—will

provide all of the leeway necessary for the Sheriff and his employees to break up fights or escort detainees for medical attention, as alluded to in the Sheriff's brief. *Id*.

And such an order could also permit the Sheriff to have maximum discretion in determining *how* to effect social distancing, given the physical layout of the Jail, and the number of staff and detainees. *See Pierce v. County of Orange*, 761 F. Supp. 2d 915, 947-48 (C.D. Cal. 2011) ("With regard to intrusiveness, the Court must take care not to enmesh [itself] in the minutiae of prison operations . . . and the Court satisfies the intrusiveness prohibition by ordering a defendant to draft and promulgate a plan, which leaves to the defendant discretion to determine the details of how to deliver the relief ordered." (internal quotation marks omitted)).

In sum, consistent with the PLRA, the court should (1) convene a three-judge panel immediately and (2) enter an injunctive order at this time to require the Sheriff to implement and maintain social distancing throughout the Jail. No further hearing is necessary on this question because the record is uncontested on the medical and scientific need for social distancing.

III. THE COURT MAY ORDER THE RELEASE OF VULNERABLE PRETRIAL DETAINEES THROUGH HABEAS CORPUS.

Plaintiffs seek writs of habeas corpus for the members of subclass A—those who are particularly vulnerable to COVID-19 because of their age or underlying medical problems. Elderly and medically vulnerable individuals are particularly in need of the court's intervention. They are at heightened risk of contracting serious COVID-19 and experiencing excruciating illness when they do. And yet, the Sheriff admits that he has yet even to identify them. In the Sheriff's view, he is "under no constitutional obligation to affirmatively identify and 'triage' certain detainees based on their health condition." Doc. No. 62 at 23. This is untrue. When state officials "strip [prisoners] of virtually every means of self-protection and foreclose[] their access to outside aid, [they] are not free to let the state of nature take its course." *Farmer v. Brennan*, 511 U.S. 825, 833 (1994).

For the Sheriff to fail even to *identify* the vulnerable in his care in this time of crisis defies accepted medical correctional standards and deviates from general practice for correctional facilities nationwide.[15] Ex. A (Venters Decl.) ¶¶ 25, 28(b).

Bearing in mind the constitutional protections owed prisoners in the wake of the COVID pandemic, federal courts across the country have granted emergency relief brought on behalf of vulnerable individuals in custody. *See, e.g., Thakker*, 2020 WL 1671563; *Coronel v. Decker,* ___ F.Supp.3d ___, 2020 WL 1487274 (S.D.N.Y. Mar. 27, 2020); *see also Basank, et al. v. Decker, et al.*, No. 20 C 2518, Doc. No. 11 (S.D.N.Y. Mar. 26, 2020); *Flores, et al. v. Barr, et al.*, No. 85 C 4544, Doc. No. 740 (Mar. 28, 2020) (attached as Group Ex. E). The court *in Thakker* noted that "the status quo of a mere few weeks ago no longer applies. Our world has been altered with lightning speed, and the results are both unprecedented and ghastly . . . . The choice we now make must reflect this new reality." *Thakker*, 2020 WL 1671563, at *9. It held that even though the

[15] The Sheriff argues that it is impossible for his Office to identify the vulnerable under his current procedures, since the health alerts placed on detainees (presumably at intake when detainees are screened by the Jail) do not provide specific medical information but only operational information related to detainees' health conditions. This procedural failure to share vital information between the Sheriff and his contracted medical provider does not somehow prevent this court from ordering a remedy. Fundamentally, a Sheriff cannot contract away his constitutional obligations to protect the medically vulnerable, for instance, by shifting the onus of care to contracted healthcare entities. *But see* Doc. No. 62 at 24 ("Cermak Health Service, the proper entity to monitor detainees with any medical issues, continues to provide full care for all detainees at the Jail."). *See, e.g., Leach v. Shelby Cty. Sheriff*, 891 F.2d 1241, 1250 (6th Cir. 1989) ("[S]ince the Sheriff is here in his official capacity . . . the Sheriff is not excused from liability due to having contracted out the medical care."). And the fact that Cermak, and not the Sheriff, may be the relevant covered entity under HIPAA has no bearing at all on Plaintiffs' constitutional rights. In any event, a court order mandating the identification of medically vulnerable individuals in the Jail cures any potential privacy or regulatory objections. *See National Abortion Federation v. Ashcroft*, 2004 WL 292079, at *3 (N.D. Ill. Feb. 6, 2004) (citing 45 C.F .R. § 164.512(e)(1)(i)*)* ("HIPAA allows a hospital such as Northwestern to disclose patient medical records subject to a court order."); *see also United States v. James*, 2007 WL 914242, at *30 (Mar. 21, 2007) ("[T]he government raises concerns concerning disclosure of these records under the Privacy Act, 5 U.S.C. § 552a(b) . . . and HIPAA regulations. However, the Staff Attorney for the Bureau of Prisons himself concedes that 'a Court order is sufficient to overcome these obstacles,' noting that such an Order 'requires the Court to weigh the public interest in the information sought against the privacy interests affected by their release.'").

conditions in the local federal detention facilities were not insufficient because of intent or malice, "should we fail to afford relief" to medically vulnerable prisoners "we will be a party to an unconscionable and possibly barbaric result." *Id.*; *see also id*. ("Our Constitution and laws apply equally to the most vulnerable among us, particularly when matters of public health are at issue."). The district court accordingly granted a temporary restraining order requiring the immediate release of 11 prisoners in federal custody who suffered from chronic medical conditions and who faced a serious threat of injury or death if exposed to COVID-19. *Id*. at 2, 24–25.

Here, the members of subclass A should be released via writs of habeas corpus. The Sheriff does not quarrel with Plaintiffs' ability, as a general matter, to seek habeas relief in a representative action. He does not challenge the reasoning of *Bijeol v. Benson*, 513 F.3d 965, 968 (7th Cir. 1975), which authorizes such an action. *See also U.S. ex rel. Morgan v. Sielaff*, 546 F.2d 218, 221 (7th Cir. 1976); *U.S. ex rel. Green v. Peters,* 153 F.R.D. 615, 617 (N.D. Ill. 1994). Nor does the Sheriff dispute the proposition that habeas is an appropriate vehicle to litigate the question of whether a confined person must be released because the conditions of his confinement are unconstitutional. *See, e.g., Glaus v. Anderson*, 408 F.3d 382, 387 (7th Cir. 2005).

The Sheriff opposes habeas relief for two reasons. *First,* he claims that a representative habeas action in this particular case is inappropriate because of the need for individual determinations of whether the release of each class member is warranted. *Second,* he urges dismissal of the habeas claim on the theory that, even those class members who availed themselves of the Judge Martin procedure should be barred by the exhaustion doctrine. Neither argument defeats this habeas claim.

A. The Common Questions in this Case Should Be Decided Together.

There is a set of common questions in this case that are well suited to resolution on a class wide basis.[16] Fundamental among these questions is whether detainees in the Jail, as a matter of due process, are entitled to an opportunity to practice social distancing consistent with those in the community at large. There are a number of subsidiary questions: (1) what risks are associated with the failure to socially distance in the Jail?; (2) what has been the effect, in terms of spread of the coronavirus, of the Jail's inability to provide social distance for detainees and Jail staff?; (3) to what extent can the remedy of release reduce risk of serious illness or death for detainees, staff and the public?; (4) are there improvements to the conditions in the Jail, short of enabling social distancing, that might be sufficient to comport with due process?

---

[16] It is unclear whether the Sheriff's contentions regarding the unsuitability of the case to class resolution are intended to apply only to Plaintiffs' habeas claim or whether those arguments are directed against the Section 1983 claims as well. If the latter, they would also fail for the reasons stated in this section and an additional reason: the "inherently individualized" process the Sheriff references will not play into this Court's factual findings or legal conclusions on the Section 1983 claims. This is a textbook prison-conditions class action in which Plaintiffs challenge the circumstances under which they are confined. Claims challenging jail-wide conditions are paradigmatic class actions. *See Postawko v. Missouri Dep't of Corr.*, 2017 WL 3185155, at *14 (W.D. Mo. July 26, 2017), aff'd, 910 F.3d 1030 (8th Cir. 2018) (citing 1 H. Newberg & A. Conte, Newberg on Class Actions § 4.34 (5th ed. 2016 update)) ("For example, if a prisoner in a prison conditions lawsuit secures a ruling that a prison policy violates the Constitution, the court-ordered injunctive relief will necessarily apply to all other prisoners."); *Id.* (citing Charles Alan Wright, et al., 7AA Fed. Prac. & Proc. Civ. § 1776 (3d ed. 2017 update)) ("[I]t should be noted that a common use of Rule 23(b)(2) is in prisoner actions brought to challenge various practices or rules in the prisons on the ground that they violate the constitution. For example, Rule 23(b)(2) class actions have been utilized to challenge prison policies or procedures alleged to . . . violate the prisoners' Eighth Amendment rights to be free from cruel and unusual punishment."); *see also Holmes v. Godinez*, 311 F.R.D. 177, 219 (N.D. Ill. 2015) (granting class certification in prison-conditions case "is consistent with numerous other courts that have found, after *Wal-Mart*, that the commonality requirement was met in cases where prisoners alleged system-wide practices and/or failures resulting in constitutional and statutory violations" and collecting cases). And if indeed this case proceeds to a three-judge court and release is determined to be necessary, a class action again is appropriate and perhaps even mandatory. A resulting order will require the Sheriff to reduce the population in his custody, and *he* can choose whom to release; the *court* will not be asked to resolve a single individualized question regarding health or safety. *See Brown*, 563 U.S. at 502 (2011).

These are complicated factual questions. The record of this case already includes voluminous evidence regarding conditions in the Jail, the nature and scope of the Jail's response to the pandemic, medical and epidemiological evaluations of the quality and effect of the Jail's response and, more broadly, the threat posed by the coronavirus and the interventions that will mitigate spread, among other things. All of this evidence is necessary to "generate common answers" to the question of whether due process permits the vulnerable members of subclass A to remain in the Jail. *Wal-Mart v. Dukes,* 564 U.S. 338, 360 (2011).

Moreover, there are critical common legal issues, such as the availability of habeas corpus as a remedy when immediate circumstances render it impossible to safely confine a person; the applicability of the exhaustion doctrine to the subclass's claims under the circumstances; and the constitutional merits of whether it is "objectively unreasonable" for a medically vulnerable person to be exposed on an ongoing basis to a serious risk of contracting a potentially deadly virus.

The Sheriff would prefer scores of individual habeas petitions in which the declarations, the medical and epidemiological expertise, and the Jail records would be separately assembled (if, indeed, each of the individual class members individually had the resources to do so) and then would be evaluated separately for each class member. The process would not just be massively wasteful and cumbersome; it would needlessly risk the safety of class members, jail staff, and the public as the virus continues to spread while different judges are forced to churn through the same complex and voluminous material. It would also require the Sheriff and his lawyers to separately brief the same dispositive legal issues before several courts, each of which may come to different legal conclusions.

Clearly, the preferable approach is class-wide resolution of the factual and legal questions on which the due process rights of the members of subclass A depend. To be sure, there are

individual questions that bear on the circumstances and conditions under which the members of the class would be released: individuals with documented exposure to COVID-19 should be released with assurance that they will be medically monitored and will socially isolate; individuals whose charges and/or criminal backgrounds suggest public safety concerns should be released subject to conditions, such as electronic monitoring; individuals at particularly elevated risk of contracting serious COVID-19 should be prioritized for prompt release.

These questions can and should appropriately be resolved via brief, individual proceedings. Such an approach—class-wide determination of the broad, central legal and factual questions that drive the class's entitlement to relief followed by individual assessments of the particular remedy—have long been commonplace in class litigation. *See, e.g., Barnes v. District of Columbia*, 278 F.R.D. 14, 18 (D.D.C. 2011) (approving class action where liability and "general" damages were to be resolved on class-wide basis but individual damages may remain); *Dunn v. City of Chicago*, 231 F.R.D. 367, 370 (N.D. Ill. 2005) (same). It is therefore appropriate for Plaintiffs' habeas claim to proceed on a class wide basis.

B. The Habeas Claim Is Not Barred by the Exhaustion Doctrine.

Plaintiff Foster availed himself of the special bond review procedure that Judge Martin established in response to the pandemic. He was denied relief. The Sheriff nonetheless insists that Foster did not sufficiently exhaust State remedies because he did not pursue "reconsideration" or appeal of the ruling denying reduction of the financial conditions of his pretrial release made in his case on April 2. The argument should be rejected.

Plaintiffs have provided uncontested facts demonstrating the futility in this emergency context of pursuing the full panoply of available appeals with respect to an unsuccessful motion for bond review. An appeal pursuant to Illinois Supreme Court Rule 604(c) takes time to prepare

and for the Appellate Court to consider; such claims will not be resolved for weeks. *See* Doc. No. 55 at 15; Doc. No. 55-3 (Decl. of Lester Finkle). With the death toll from COVID-19 climbing hourly and daily, these appellate remedies are not available in practice to the medically vulnerable whose risk is ongoing and escalating.

This court based its April 9 ruling on Plaintiff Foster having made "no effort to initiate" the special Judge Martin bail review procedure. Plaintiffs have corrected the record; Foster *did* initiate the procedure, and was denied. The Sheriff offers no argument to refute Plaintiffs' demonstration that appeals and petitions to the Illinois Appellate and Supreme Courts would entail delay that would necessarily force Foster to suffer at length the very constitutional violation he seeks to avoid. The Sheriff does not dispute the factual or legal demonstration Plaintiffs have made on this point in their earlier filings. *See* Doc. No. 62 at 6-7.

The Sheriff's argument inadvertently highlights an independent dispositive point on exhaustion: the state court "bond review" proceedings are not a forum in which to decide the federal claim brought by class members in *this* case. In addition to the practical inability to offer the kind of evidentiary record requiring release as a matter of due process in an individual state-court bond review hearing, there is a more central legal obstacle to doing so: Illinois statutory law governing bail provides consideration of 37 factors when determining conditions of pretrial release; a detainee's medical health is not one of them. 725 ILCS 5/110-5. Whatever the public health impetus behind Judge Martin convening special proceedings to reconsider financial conditions of release, those proceedings (and any appeals that flow from them) were neither required nor expected to rule on medical conditions inside the jail.

The Sheriff himself makes the crucial point. He explains that state court defendants like Foster were denied reduction in monetary bond because "the assessment of risk to the public

evidently outweighed any perceived risk to their health." Doc. 62 at 25. Thus, the Sheriff concedes, the state court applied Illinois law to reject pretrial release (or reduced monetary bond) based on factors *other than* medical need, such as predictions of a person's future dangerousness. *Id*. That is the essential legal difference between the legal questions decided in the state court bond hearing and the federal habeas proceedings here: even if a person proved in a state court bond proceeding that the jail poses unreasonable risk to their health, the state court may still weigh the Illinois state law factors and order pretrial detention in the County Jail.

But that is not the case for Foster's claims *in this court*. For the due process claims brought in this *federal* case, the remedy is categorical: if Foster proves that his ongoing detention inside the Cook County Jail is a serious and unreasonable risk to his health and life, then habeas relief will ultimately be granted. Whether the Sheriff chooses to release him from the Cook County Jail to lockdown at a local hotel, to electronic home confinement, or with other conditions that the Court deems reasonable, some form of release from his custody would be required if a medically vulnerable person prevails on his federal due process claim that pretrial detention threatens his life under current conditions in the Cook County Jail.

Thus, for the purposes of the unique, narrow due process claim raised here, even if exhaustion of the existing state court procedures were not futile because of their timing (which it is), the Sheriff agrees that the state court is actually not legally competent—much less required—to resolve that freestanding federal question in the context of following the Illinois bond statute.

C. This Court Should Also Exercise Its Authority to Release Medically Vulnerable Subclass Members on Unsecured or Non-Monetary Bail Conditions Pending Review of Their Request for Habeas Relief Under § 2241.

Courts of equity operate with flexibility, especially in emergencies of great consequence. Plaintiffs recognize the unprecedented nature of this request for federal habeas relief for Foster

and the other medically vulnerable people confined with him. But the events unfolding around us are unprecedented. This court has the power to protect the lives and constitutional rights of the subclass. Foster sets forth below how this Court could vindicate these rights in practical terms.

First, in the TRO context, the Court must weigh the "public interest" in vindicating the constitutional rights at issue, *Lawson Prods., Inc. v. Avnet, Inc*., 782 F.2d 1429, 1433 (7th Cir. 1986), and so the court could order immediate release of certain categories of subclass members temporarily, even if concluding that public safety precluded the emergency release of other subclass members.

Second, a federal court has the authority to grant bail to habeas petitioners who are properly before it. *See Cherek v. United States*, 767 F.2d 335, 337 (7th Cir. 1985) (holding that, even in post-conviction habeas proceedings that involve those already convicted of state offenses, "federal district judges in habeas corpus and Section 2255 proceedings have inherent power to admit applicants to bail pending the decision."); *Bolante v. Keisler*, 506 F.3d 618, 620 (7th Cir. 2007) ("Inherent judicial authority to grant bail to persons who have asked for relief in an application for habeas corpus is a natural incident of habeas corpus, the vehicle by which a person questions the government's right to detain him."); *Swanson v. United States*, 2016 WL 5422048, at *1 (C.D. Ill. Sept. 28, 2016) (granting bail pending Section 2255 proceedings).

As least in post-conviction proceedings where principles of comity and finality are at their zenith, to be released on bail pending habeas review the petitioner must demonstrate a high probability of success on the merits and "extraordinary or exceptional circumstances … which make the grant of bail necessary to make the habeas remedy effective." *Swanson*, 2016 WL 5422048, at *1; *see also Abdullah v. Obama*, 753 F.3d 193 (D.C. Cir. 2014); *Landano v. Rafferty*, 970 F.2d 1230, 1239 (3d Cir. 1992); *cf. Johnston v. Marsh*, 227 F.2d 528, 529-32 (3d Cir. 1955)

(finding that a district court had the power to grant of bail pending habeas consideration where the petitioner, "an advanced diabetic, was, under conditions of confinement, rapidly progressing toward total blindness," comparing this authority to a judge's power to issue a "stay of execution" while a petition is pending). Under this "exceptional circumstances" evaluation, courts also consider a person's characteristics. *See, e.g.*, *Swanson*, 2016 WL 5422048, at *1 (finding that petitioner was a "good candidate for bond").

Based on these considerations, a federal court for the District of Massachusetts has released (and continues to release) numerous civil immigration detainees on non-monetary bond conditions while their class action habeas petition is pending. *See Savino v. Souza*, 2020 WL 1703844, at *8-9 (Apr. 8, 2020) (explaining its decision to grant bail pending habeas). In that case, named petitioners and class members include all immigration detainees held at two facilities in Massachusetts. *Id.* at *1. The *Savino* petitioners seek habeas relief because those facilities are too cramped and unsanitary to protect them from contracting COVID-19. *Id.* at *1-3.[17] Finding "extraordinary circumstances" in "this nightmarish pandemic," the court opted to "diligently entertain[] bail applications while the petitions for habeas corpus are pending." *Id.* at *9. The district court requested and rapidly considered an initial list of 50 detainees for bail, and has since considered class members' bail applications in groups of 10. Order, *Savino v. Souza*, No. 20-10617-WGY, Doc. No. 44, at 3 (Apr. 4, 2020); *see id.*, Doc. No. 45 at 1-3 (listing class members in groups of 10 for bail consideration); *id.*, Doc. No.77 at 1-3 (Apr. 10, 2020) (same) (attached as Group Ex. F). On April 15, 2020, the Court denied the government's request to stay the releases. In its Order, the Court explained: "We are in the midst of a pandemic unprecedented in our lifetime. . . . [T]he Court will continue, on an individual basis, to work through the difficult issues of bail

[17] Unlike in this case, the *Savino* class is not limited to detainees who are medically vulnerable. *Savino*, No. 20-10617-WGY, 2020 WL 1703844, at *1.

in the present crisis. . . . Moreover, compelling issues of individual, institutional, and community health preclude the luxury of a stay so counsel can 'consider their appellate options.'" Doc. No. 86 at 1-3 (Apr. 15, 2020).

Other courts have also found that the risks imposed by COVID-19 warranted release on bail while a habeas action was pending. *See Avendano Hernandez v. Decker*, 2020 WL 1547459, at *3 (S.D.N.Y. Mar. 31, 2020) (releasing § 2241 habeas petitioner challenging unconstitutional conditions of confinement—"specifically, continued risk of exposure to COVID-19"—because his continued detention would expose him to the infection he seeks habeas relief to avoid and, thus, "immediately release [wa]s necessary to 'make the habeas remedy effective'" (quoting *Mapp*, 241 F.3d at 230)); *Jiminez v. Wolf*, No. 18-10225-MLW, Doc. No. 507-1 at 3-4 (D. Mass. Mar. 26, 2020) (concluding that release of habeas petitioner on bail was "necessary to … make the habeas remedy effective" because "we're living in the midst of a coronavirus pandemic," "being in a jail enhances risk," and "[i]f the petitioner is infected and dies …. [t]he habeas remedy will be ineffective").

Here too, this court could exercise equitable flexibility. For example, the court could release on bail every medically vulnerable pretrial detainee charged with an offense that does not have as an element the use or threatened use of violence or unwanted sexual touching of another person. Similarly, the court could release every pretrial detainee who would be eligible for release if they paid $10,000 or less. Both of these filters would aid the Sheriff in achieving the social distancing required (and may avert the need for the three-judge tribunal to act), and both are very reasonable proxies for public safety under these extraordinary circumstances. The Sheriff does not even attempt to justify why Foster is so dangerous that he must be detained when any person could walk to a Cook County window, hand over $5,000, and Foster would be released immediately.

The court could also order that any and all non-financial conditions of release already ordered by a state court in any person's case remain the same. This approach would help ensure that any intrusion on state court proceedings is minimal and targeted only at terminating pretrial detention of presumptively innocent people in dangerous conditions. Indeed, this court could even convert the *secured* bail amount to an *unsecured* bond amount, meaning that the *same financial condition of release remains in each person's case*, but merely removing the obligation to pay prior to release. *See ODonnell v. Harris Cty*., Texas, 251 F. Supp. 3d 1052, 1144 (S.D. Tex. 2017), *aff'd as modified sub nom. ODonnell v. Harris Cty*., 892 F.3d 147 (5th Cir. 2018) ("[T]he record evidence shows that secured money bail is not more effective at increasing the likelihood of appearance or law-abiding behavior before trial than release on an unsecured or nonfinancial condition.").

These proxies and solutions are neither perfect nor common in federal court habeas cases, but these are extraordinary times and petitioners lives are at stake.

IV. THE COURT MAY ORDER THE TRANSFER OF SOME DETAINEES TO A SAFE LOCATION WITHIN THE SHERIFF'S CUSTODY.

It would also be proper for this court, on the present record and without need for a further hearing, to enter an order directing the Sheriff to transfer detainees who have been exposed to the coronavirus (the subclass B Plaintiffs) to "a safe facility or form of custody of [the sheriff's] choosing." Doc. No. 55 at 15.

That transfer could be to any safe location in which the detainee may remain confined within the Sheriff's custody, including, for instance, to another correctional space, a hospital or medical facility, a clinic, home confinement, administrative furlough, or electronic home monitoring. Such an order would not require the *release* of any detainee and therefore would not involve the three judge panel procedure of Section 3626(a)(3)(A).

The Sheriff states that transfer outside the Jail would be "widely impractical if not impossible." Doc. No. 61 at 9. To the contrary, the Sheriff is empowered under the County Jail Act to transfer detainees—including to home confinement—in a health emergency. *See* Doc. No. 26-1 (Pls.' Resp. to Court's Apr. 3 Order) at 19; Doc. No. 42 (Pls.' Suppl. Br. in Support of TRO) at 17-19 (discussing County Jail Act, 730 ILCS 125/14, and how electronic monitoring constitutes confinement in accordance with the statutory mandate).

Using this authority, the Sheriff has previously opened clinical facilities in the County, in order to house detainees who the Sheriff believed were better suited to detention outside the physical Jail plant. For example, in 2015, the Sheriff began operating a mental health clinic in the south suburbs of Cook County. The clinic, run in collaboration with Adler Community Health Services, served as a transfer site for mentally ill detainees in the jail (without court order). The Sheriff has also historically run a program of administrative furlough, by which detainees remain in the Sheriff's custody but outside the walls of the Jail. *See People v. Campa*, 353 Ill.App.3d 178, 179-80 (1st Dist. 2004) (detainee was "in custody" of Sheriff for purposes of Illinois' speedy trial statute, where detainee was placed by the Sheriff on "the Cook County Department of Corrections administrative furlough, and the Department of Community Supervision and Intervention, Day Reporting Program"); *People v. Smith*, 2014 IL App (3d) 130548, ¶ 27 (noting that detainee who was admitted into Sheriff's day reporting program was subject to lesser protection than detainee released on bond on home monitoring; as Sheriff had no need to obtain a warrant prior to defendant's re-arrest, there was no way to challenge selection of defendants for entry into Sheriff's program, and defendant "must simply adhere to the sheriff's unilaterally imposed conditions of participation."). Electronic monitoring, furlough, and the use of outside facilities to house

detainees are all available transfers that the Sheriff could employ. They are neither impractical nor impossible.

Plaintiffs' transfer request also meets the requirements of the PLRA. First, and contrary to Defendant's claims, Doc. No. 61 at 9, there is a clear fit between the violations at stake (the exposure of incarcerated individuals to conditions of confinement that threaten their health and safety), and the requested remedy (an order requiring the Sheriff transfer prisoners from the physical facility where those conditions exist). *See* Doc. No. 26-1 at 24-25.

Second, there is no evidence that transfer would have an adverse impact on public safety. The Sheriff claims that ordering more detainees on electronic monitoring "would have the risk of overloading the Sheriff's electronic monitoring system," which would thereby endanger the public. Doc. No. 61 at 11. But since Plaintiffs have not requested that all or indeed any of the transfers be done via electronic home monitoring, the Sheriff retains leeway to address any operational concerns in the implementation of the requested court order (for instance, by initiating transfers to other facilities or using administrative furlough).

Third, as made clear in prior briefing, based on the statutory construction of the PLRA, the statute's legislative history, and the practical effect of the requested relief, a transfer in which detainees remain in the Sheriff's custody is not a prisoner release order under 18 U.S.C. § 3626(a)(3). *See* Doc. No. 26-1 at 20-23; Doc. No. 55 at 16-17. This is true *even where* the effect of the order is to reduce the prison population. *See Plata v. Brown*, 2013 WL 3200587, at *8 (N.D. Cal. June 24, 2013); *Doe*, No. 91-187 (Doc. No. 26-3) at 10-12; *Reaves v. Dep't of Correction*, 404 F. Supp. 3d 520, 523 (D. Mass. 2019); *see also Gray v. County of Riverside*, Doc. No. 56 at 4-5 (recently recognizing that an order directing a sheriff to transfer detainees to a safer location

is not a "prisoner release order" and therefore not subject to the requirements of 18 U.S.C. § 3626(a)(3)).

The Sheriff's cited case of *United States v. Cook County*, 761 F. Supp. 2d 794 (N.D. Ill. 2000) does not suggest otherwise. There, a three-judge panel ordered the release of detainees from the Jail to address the facility's "excess population" after finding that overcrowding was the "primary cause of unconstitutional conditions at the Jail." *Id*. at 796, 797 (interpreting 18 U.S.C. § 3626(a)(3)(E)(i)). Population cap litigation, stemming from capacity overcrowding (as in *Cook County*), was what motivated the drafters of the PRLA to circumscribe relief available to prisoners in overpopulated facilities by instituting the three-judge panel requirements. *See* Doc. No. 26-1 at 20-23. The statute was not designed to limit remedies available to address violations that were not explicitly related to population caps, like those presented here. *See id.*; *see also Plata*, 2013 WL 3200587, at *9 ("[A]dopting Defendants' interpretation of 'prisoner release order' would mean that a court could only order that prisoners be transferred from one prison to another if overcrowding were the primary cause of the violation of those prisoners' rights, and not if any other reason were causing the violation. Defendants have failed to point to anything in the legislative history that indicates an intent to limit the protection of inmates' constitutional rights in this manner . . . .").

Fourth and finally, the PLRA does not limit where a prisoner may be transferred while remaining in a warden's custody. Citing *Plata*, the Sheriff states that transfer is only permitted under the PLRA to another *jail* facility. Doc. No. 61 at 10-11. But the statute has no such requirement. The plaintiff in *Reaves*, for instance, won transfer to a non-correctional hospital on the same grounds as the *Plata* plaintiffs. *Reaves* was in keeping with other judicial orders finding that a person constitutes a "prisoner" even outside the four walls of the prison building, where she

otherwise remains in custodial confinement. *See Jackson v. Johnson*, 475 F.3d 261, 265-66 (5th Cir. 2007) (holding that a person subjected to confinement in a halfway house counts as a "prisoner" under the PLRA) ("[A]lthough Jackson has been released from confinement in prison, his release was not to the general public but was rather to a different form of confinement, albeit with certain additional liberties. It is clear that Jackson is being 'detained in any facility' since he is locked up in the halfway house 16 to 24 hours a day and since he may leave the halfway house only for very limited purposes." (citing *Witzke v. Femal*, 376 F.3d 744, 752 (7th Cir. 2004) (determining that halfway-house resident who could leave the facility only during the day and was locked inside at night was confined for PLRA purposes)).

Plaintiffs seek a remedy for subclass B that allows the continued confinement of class members, but outside the physical plant of the Jail, which is so hazardous to their health and well-being.

V. EVEN AS NECESSARY DETAINEE RELEASES ARE IN PROCESS, THE COURT SHOULD CONVERT THE APRIL 9 ORDER TO A PRELIMINARY INJUNCTION (OR EXTEND THE TRO), AND CONTINUE TO ENFORCE IT.

Release from the Jail of the medically vulnerable and to permit social distancing is the essential remedy to cure the violations here, as Plaintiffs have explained above. But the requirements of the court's April 9 Order must remain in force to protect the health and well-being of all those who will necessarily remain incarcerated in the Jail.

The Order has made a difference in how the Jail operates, as evidenced by the Sheriff's compliance report, particularly as to intake procedures, Doc. No. 51 at 2-7, and by the declarations on behalf of detainees from April 14 onward. It was only after the entry of the Order that detainees began receiving free soap, some cleaning supplies and facemasks in most tiers. Ex. D (Detainee Decl.).

There is also evidence that the Sheriff is not in full compliance with the Order. *First*, there is a reason to doubt that all symptomatic detainees are being tested for COVID-19, as the court's order required. Given the high positive rate and the Sheriff's own published numbers, the answer is almost certainly no. Ex. C (Rasmussen-Torvik Decl.) ¶ 4 ("Per the Cook County Sheriff's website on April 18, it appears that cumulatively 445 detainees have been tested for COVID-19 and 350 have tested positive—a positive test result rate of over 78%. . . . Michael Ryan, executive director of the WHO Health Emergencies Program, stated that "If 80-90% of the people test positive, you are probably missing a lot of cases[.]"). And no one who is living in quarantine is being tested, by the Sheriff's own admission. Doc. No. 51 at 12. Detainee declarations further demonstrate the Jail's failure to provide testing even to symptomatic detainees. Ex. D. In this regard, it is notable that since March 22, the Sheriff has tested a total of 445 detainees,[18] for an average of 17.8 detainees per day. By contrast, since at least April 7, the Sheriff appears to have been testing 100 Sheriff's employees per day, on a first-come, first-served basis.[19]

Second, while many detainees speak of receiving soap, many simultaneously profess a lack of cleaning supplies for individual cells, the use of watered down bleach for the common areas, and a lack of compliance and monitoring as to whether areas are in fact being cleaned. Ex. D.

Third, other components of the Sheriff's COVID response are troubling; for example, detainees report that Division 4, where many have been moved, appears not to have been lived in for years, is filthy, there are limited cleaning supplies, and it has no heat. Indeed, although water

---

[18] *See* https://www.cookcountysheriff.org/covid-19-cases-at-ccdoc/ (last visited Apr. 19, 2020) (171 positive tests, 176 detainees in "recovery," 3 deaths, and 95 negative tests).

[19] *See* April 6, 2020 Email from "CCSO Administration" to "Cook County Sheriff's Employees" ("The Sheriff is pleased to announce that . . . the CCDOC is now able to serve as a testing site. . . . . is available to all CCSO staff. . . . The first 100 people will be tested. Additionally, testing of 100 staff will continue each day until everyone that wants to be tested has had the opportunity."). Doc. No. 31.-3, Curry Group Ex. 1, at 150.

coolers have been provided to detainees, they are located in dayrooms, where detainees are only allowed a few hours every day.

Given these circumstances, the court should convert the April 9 Order to a preliminary injunction (or if there are factual disputes, extend the TRO for good cause before a hearing) and grant Plaintiffs the right to continue to monitor the Sheriff's compliance, with the Court's oversight, while litigation of the release and transfer issues.

To this end, Plaintiffs maintain their request for leave to issue expedited discovery, *see* Doc. No. 55-1, but with further refinements. The Sheriff's response brief has changed the state of play in some key respects. Since the Sheriff is not contesting that social distancing is impossible in the Jail, Plaintiffs no longer seek updates of the exhibits to the Michael Miller declaration, or a deposition from Michael Miller.

To address ongoing compliance with the April 9 Order, Plaintiffs seek the following:

- An inspection by a corrections expert to assess the condition of the tiers to which detainees are being moved (and which were previously closed because of poor conditions), the actual regimen of cleaning, and the provision of supplies;

- CCTV video from various tiers, which Plaintiffs understand is digitally available, to provide real time evidence of what is happening on the ground as to cleaning and tier conditions;

- A deposition of Dr. Menella, for the limited purpose of ascertaining how many total tests have been administered to detainees since the outbreak of the pandemic, the parameters that render a detainee "symptomatic" such that he is eligible for testing by Cermak, how convalescence is defined by Cermak and the Sheriff, and how many detainees are hospitalized in the Jail, as opposed to at Stroger, and the general condition of the detainees who are in each medical facility, *see* Ex. C (Rasmussen-Torvik Decl.) ¶ 8.

CONCLUSION

For the foregoing reasons and for the reasons stated in Plaintiffs' renewed motion for preliminary injunction, this court should enter such orders as are necessary to effectuate the relief requested in Plaintiff's renewed preliminary injunction motion and in this reply brief.

Respectfully submitted,

/s/ Sarah Grady
Sarah Grady
Attorney for Plaintiffs

Sarah Grady
Stephen H. Weil
LOEVY & LOEVY
311 North Aberdeen St., 3rd Fl.
Chicago, IL 60607
Tel: 312-243-5900
weil@loevy.com
sarah@loevy.com

Charles Gerstein
Alec Karakatsanis
Civil Rights Corps
1601 Connecticut Ave NW, Suite 800
Washington, DC 20009
charlie@civilrightscorps.org
alec@civilrightscorps.org
Tel: 202-894-6128

Locke E. Bowman
Alexa A. Van Brunt
Roderick and Solange MacArthur Justice Center
Northwestern Pritzker School of Law
375 E. Chicago Avenue, Chicago, IL 60611
Tel: 312-503-0884
l-bowman@law.northwestern.edu
a-vanbrunt@law.northwestern.edu

Steve Grimes
Thomas F. McAndrew
Winston & Strawn LLP
35 W. Wacker Drive
Chicago, IL 60601-9703
Tel: 852-2292-2138
SGrimes@winston.com
TMcAndrew@winston.com

CERTIFICATE OF SERVICE

I, Sarah C. Grady, an attorney, hereby certify that on April 19, 2020 before 12 p.m., I caused a copy of the foregoing to be filed using the Court's CM/ECF system and served upon all counsel who have filed appearances in the above-captioned matter.

/s/ Sarah Grady
Sarah Grady
Attorney for Plaintiffs

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

ANTHONY MAYS, Individually and on behalf of a class of similarly situated persons; and JUDIA JACKSON, as next friend of KENNETH FOSTER, Individually and on behalf of a class of similarly situated persons,	)	
Plaintiffs-Petitioners,	)	Case No. 1:20-cv-2134
v.	)	The Hon. Matthew F. Kennelly Emergency Judge
THOMAS J. DART, Sheriff of Cook County,	)	The Hon. Robert Gettleman Presiding Judge
Defendant-Respondent.	)	

Exhibit	Description
A	Declaration of Dr. Homer Venters
B	Declaration of Dr. Amir Moheb Mohareb
C	Declaration of Dr. Laura Rasmussin-Torvik
D	Declarations of Cook County Jail Detainees Bryant Blake, Kevin Watson, Charles Bocock, Javier Montanez, Jeffrey Ferguson, Dominick Wing, Lamonte Powell, Dante McGee, Eric Blake, Deon Baker, Michael Jorgensen, Isaac Correcillias-Correa, and Joshua Barbee
E	*Basank, et al. v. Decker, et al.*, No. 20 C 2518, Dkt. 11 (S.D.N.Y. Mar. 26, 2020); and *Flores, et al. v. Barr, et al.*, No. 85 C 4544, Dkt. 740 (C.D. Cal. Mar. 28, 2020)
F	*Savino, et al. v. Souza*, No. 20 C 10617, Dkt. 44-45 (D. Mass. Apr. 4, 2020); Dkt. 77 (D. Mass. Apr. 10, 2020); and Dkt. 86 (D. Mass. Apr. 15, 2020)

EXHIBIT A

DECLARATION OF DR. HOMER VENTERS

I, Dr. Homer Venters, hereby declare the following under penalty of perjury pursuant to 28 U.S.C. § 1746:

1. I am a physician, internist and epidemiologist with over a decade of experience in providing, improving and leading health services for incarcerated people. My clinical training includes residency training in internal medicine at the Albert Einstein/Montefiore Medical Center (2007) and a fellowship in public health research at the New York University School of Medicine (2009). My experience in correctional health includes two years visiting detention centers and conducting analyses of physical and mental health policies and procedures for persons detained in federal facilities. This work included and resulted in collaboration with federal detention administrators on numerous individual cases of medical release, formulation of health-related policies, and testimony before U.S. Congress regarding mortality inside detention facilities.

2. After my fellowship training, I became the Deputy Medical Director of the New York City Jail Correctional Health Service. This position included both direct care to persons held in NYC's 12 jails, as well as oversight of medical policies for their care. This role included oversight of chronic care, sick call, specialty referral and emergency care.

3. I subsequently was promoted to the positions of Medical Director, Assistant Commissioner, and Chief Medical Officer of NYC Jail Correctional Health Services. We operated one of the largest correctional health care systems in the nation, with over 43,000 annual admissions in jails across the city. In the latter two roles, I was responsible for all aspects of health services including physical and mental health, addiction, quality improvement, re-entry, morbidity and mortality reviews, as well as all training and oversight of physicians, nursing and

pharmacy staff. In these roles, I was also responsible for evaluating and making recommendations on the health implications of numerous security policies and practices.

4. During this time, I managed multiple communicable disease outbreaks in our facilities, including H1N1 in 2009, which impacted almost one third of housing areas inside the adolescent jail, multiple seasonal influenza outbreaks, a recurrent legionella infection and several other smaller outbreaks. To manage all of these outbreaks, I worked closely with management at the facilities, including security and health staff, developed policies and procedures to manage the outbreaks, and oversaw training and implementation of those policies and procedures. Central aspects of my roles in these outbreak responses included the identification and protection of high-risk patient cohorts, development of infection control plans that integrated all levels of staff and detained people in mitigating the impact of the outbreak. I also led inspections of housing areas with teams of health, security, engineering and hygiene experts and developed and conducted orientations and trainings for correctional staff, health professionals and detained people. I also developed data dashboards that were updated on a daily basis and shared with local and state public health partners to integrate jail outbreak management with community efforts.

5. In March 2017, I left Correctional Health Services of NYC to become the Director of Programs for Physicians for Human Rights. In this role, I oversaw all programs of Physicians for Human Rights, including training of physicians, judges and law enforcement staff on forensic evaluation and documentation, analysis of mass graves and mass atrocities, documentation of torture and sexual violence, and analysis of attacks against healthcare workers.

6. In December 2018, I became the Senior Health and Justice Fellow for Community Oriented Correctional Health Services (COCHS), a nonprofit organization that promotes evidence-based improvements to correctional practices across the U.S. In January 2020, I

became the president of COCHS. I also work as a medical expert in cases involving correctional health and I wrote a book on the health risks of jail (*Life and Death in Rikers Island*) which was published in early 2019 by Johns Hopkins University Press. A copy of my curriculum vitae is attached to this report, which includes my publications, a list of cases in which I have been involved and a statement of my compensation.

7. Since January 2020, I have been engaged in numerous activities in response to COVID-19 infection in detention settings. I have published two articles on COVID-19 behind bars[1] and participated in over 70 interviews on the need for systematic and evidence-based practices in jails, prisons and other detention settings to both prevent deaths among incarcerated people, and flatten the overall outbreak curve in in the community from COVID-19.[2] I am also scheduled to conduct a court-ordered inspection of the Metropolitan Detention Center in Brooklyn NY, which is in the throws of a COVID-19 outbreak and provide my findings to the court. I was invited by the National Association of Counties and Fair and Just Prosecution, a national convening of elected prosecutors, The Stanford Law School and the University of Southern California School of Medicine to provide guidance on COVID-19 response in detention settings, and I have provided similar guidance on multiple other webinars and presentations.

[1] Dr. Homer Venters, "4 ways to protect our jails and prisons from coronavirus," The Hill (Feb. 29, 2020), https://thehill.com/opinion/criminal-justice/485236-4-ways-to-protect-our-jails-and-prisons-from-coronavirus; Dr. Homer Venters, "Coronavirus behind bars: 4 priorities to save the lives of prisoners," The Hill (Mar. 23, 2020), https://thehill.com/opinion/criminal-justice/488802-coronavirus-behind-bars-4-priorities-to-save-the-lives-of-prisoners.

[2] For example: Jean Casella& Katie Rose Quandt, "US jails will become death traps in the coronavirus pandemic," The Guardian (Mar. 30, 2020), https://www.theguardian.com/commentisfree/2020/mar/30/jails-coronavirus-us-rikers-island; Erin Doherty & Kelly Cannon, "'We need help': Inmates describe prison system unprepared for coronavirus," ABC News (Apr. 5, 2020), https://abcnews.go.com/Politics/inmates-describe-prison-system-unprepared-coronavirus/story?id=69980790.

8. I have been retained by counsel for the plaintiffs in this case to provide opinions about the actions that should be taken at the Cook County Jail in light of the current COVID-19 outbreak. As part of my work in this case, I have been provided the following documents:

- Amended Sanitation Policy
- Referral for Medical Care Policy
- Outbreak Prevention Policy
- CCSO Operational Briefing 4/4/20
- Sanitation Plans
- Intake Photos
- Declarations of Concetta Menella (2), Rebecca Levin, Henriette Gratteau, Michael Miller, Ronald Lankah, Patricia Horne, Elizabeth Scannell, Sonjourner Colbert, Matthew Burke, Jane Gubser, Brad Curry (2), and Peter Orris
- Plaintiff's Complaint and Exhibits
- Sheriff's 4/6/20 Response to the Plaintiff's Emergency Motion and Exhibits
- Sheriff's 4/13/20 Status Report and Exhibits
- Plaintiff's Motion for Preliminary Injunction and Exhibits
- 4/15/20 Hearing Transcript

All of the opinions set forth in this declaration are offered to a reasonable degree to medical certainty based on my training, experience, and review of the relevant literature, and national and international data and guidance.

9. Coronavirus disease of 2019 (COVID-19) is a viral pandemic.[3] This is a novel virus for which there is no established curative medical treatment and no vaccine. COVID-19 is different than all previous infectious disease outbreaks faced in our lifetime because of the speed and extent of spread throughout the globe, and how quickly it has overwhelmed healthcare systems. Infection control and social distancing represent the most evidence-based and critical interventions being utilized to slow the spread of COVID-19. Unlike many other viral outbreaks, it now appears that significant transmission of COVID-19 occurs before infected people become

[3] In the name COVID-19, 'CO' stands for 'corona,' 'VI' for 'virus,' and 'D' for disease.

symptomatic, which underscores the need for heavy focus on social distancing as a means to prevent transmission.

10. The Centers for Disease Control and Prevention (CDC) has identified many particularly vulnerable populations who are at increased risk of having severe outcomes from COVID-19.[4] These include:

- People with chronic lung disease or moderate to severe asthma
- People who have serious heart conditions
- People who are immunocompromised[5]
- People with severe obesity (body mass index [BMI] of 40 or higher)
- People with diabetes
- People with chronic kidney disease undergoing dialysis
- People with liver disease
- People who are smokers
- People who are pregnant or post-partum

11. In addition, data shows that African-Americans are experiencing disproportionate rates of death from COVID-19.[6]

12. For vulnerable individuals, social distancing and infection control play an even more central role in protecting against severe negative outcomes, there is no treatment or cure that has been identified to lessen their greater risk of harm after contracting the virus.[7]

13. Fatality is clearly the worst outcome of COVID-19 infection, but many who contract the illness and "recover" are irreparably damaged. This cannot be understated. The

[4] "At Risk for Severe Illness," CDC, https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/groups-at-higher-risk.html.
[5] Including but not limited to cancer treatment, smoking, bone marrow or organ transplantation, immune deficiencies, HIV/AIDS, and prolonged use of corticosteroids and other immune-weakening medications.
[6] Reis Thebault, Andrew Ba Tran, & Vanessa Williams, "The coronavirus is infecting and killing black Americans at an alarmingly high rate," The Washington Post (Apr. 7, 2020), https://www.washingtonpost.com/nation/2020/04/07/coronavirus-is-infecting-killing-black-americans-an-alarmingly-high-rate-post-analysis-shows/?arc404=true.
[7] "What You Can Do," CDC, https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/what-you-can-do.html ("**Stay home and avoid close contact**"); "How to Protect Yourself and Others," CDC, https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html ("**The best way to prevent illness is to avoid being exposed to this virus.**").

respiratory damage associated with severe COVID-19 infection causes long term decreases in lung function, and it is likely that among the 10-20% of people who require hospitalization, most will experience long-term effects on their lungs, heart, kidneys, eyes, central nervous system and other major organs.[8]

14. COVID-19 infection rates have grown exponentially in the U.S. The CDC now reports COVID-19 cases and deaths in all 50 states.[9] When COVID-19 impacts a community, it will also impact the community's detention facilities. Federal and local correctional facilities will not be able to stop the entry of COVID-19 into their facilities: the reality is that the infection is inside many facilities already. It is inevitable and is not preventable. Numerous county jails, like Cook County Jail, have already reported hundreds of COVID-19 infections among staff and inmates. On March 31, 2020, the medical leadership in the NYC jail system announced that they would be unable to stop COVID from entering their facility and called for release as the primary response to this crisis.[10] Since that time, over 800 staff and inmates have tested positive in the NYC jail system.

15. Once a virus enters a facility, detention settings promote the spread of the virus to the wider community. The constant flow of staff in and out of detention facilities only increases the spread of the virus beyond the walls of the facility itself.

---

[8] Melissa Healy, "Coronavirus infection may cause lasting damage throughout the body, doctors fear," L.A. Times (Apr. 10, 2020), https://www.latimes.com/science/story/2020-04-10/coronavirus-infection-can-do-lasting-damage-to-the-heart-liver; Judith Graham, "What Does Recovery From COVID-19 Look Like? It Depends. A Pulmonologist Explains." Kaiser Health News (Apr. 9, 2020), https://khn.org/news/what-does-recovery-from-covid-19-look-like-it-depends-a-pulmonologist-explains/; Alexander Freund, "COVID-19: Recovered patients have partially reduced lung function," DW (Mar. 20, 2020), https://www.dw.com/en/covid-19-recovered-patients-have-partially-reduced-lung-function/a-52859671.

[9] Coronavirus Disease 2019 (COVID-19) Cases in US, CDC (last visited April 10, 2020), https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html.

[10] Meagan Flynn, "Top doctor at Rikers' Island calls the hail a public health disaster unfolding before our eyes," The Washington Post (Mar. 31, 2020), https://www.washingtonpost.com/nation/2020/03/31/rikers-island-coronavirus-spread/.

16. Prisoners in general have poorer health and more underlying medical conditions than those in the community.[11] Over half of prisoners have serious physical or behavioral health problems, and incarcerated people have statistically higher rates of smoking, cardiovascular disease, infectious diseases and cancer. Additionally, the leading cause of death in U.S. jails is suicide, which reflects a toxic overlap between untreated mental health and substance use problems.[12]

17. The CDC and other organizations have issued recommendations on how to prevent or decrease the spread of COVID-19. It is important for jails to comply with the CDC guidance on management of COVID-19 in detention facilities. But it is also important to understand that compliance with these recommendations alone is not enough to create a setting that sufficiently protects the health and safety of individuals detained and working at the jail. The CDC, a federal agency, could not impose mandatory requirements on state or local officials, even when evidence-based medicine would support such requirements. The CDC guidelines are more appropriately considered a "harm reduction" approach, which is a common practice in public health, where organizations offer recommendations on how to reduce a risk of harm even when the subject is not following the appropriate practices.

18. The unanimous consensus from the CDC, and medical and public health experts, is that social distancing and infection control are imperative to decrease rampant spread of COVID-19 and protect people's health. The fact that the CDC adds the phrase "if possible" or "if

[11] Laura M. Maruschak & Marcus Berzofsky, "Medical Problems of State and Federal Prisoners and Jail Inmates, 2011-12," BJS (Feb. 5, 2015), https://www.bjs.gov/index.cfm?ty=pbdetai l&iid=5219.
[12] Laura Maruschak, "Medical Problems of Prisoners, BJS (Apr. 19, 2020), https://www.bjs.gov/content/pub/html/mpp/mpp.cfm; Ann Caron, "Mortality in Local Jails, 2000-2016 – Statistical Tables," BJS (Feb. 12, 2020), https://www.bjs.gov/index.cfm?ty=pbdetail&iid=6767; National Commission on Correctional Health Care, "Suicide Prevention Resource Guide," https://www.ncchc.org/filebin/Publications/Suicide_Prevention_Resource_Guide_2.pdf

space allows" in its guidance specifically directed at detention centers it does not control, does not alter the clear medical consensus on social distancing.[13]

19. In my opinion, based on my correctional and epidemiological training as well as a review of the literature surrounding COVID-19, mandating that staff and detainees be kept six feet apart from each other at all times, absent life-threatening emergencies such as use of force and fire evacuation, in addition to robust sanitation, testing, and infection control, is essential to preventing a widespread outbreak of this disease in a custodial setting.

20. I have been inside numerous state and federal detention facilities, including the Cook County Jail. In a detention facility, social distancing can be challenging and requires close attention to all aspects of operations among both staff and detained people.[14] The typical design and operation of correctional settings, including densely packed areas for housing, health services, food services, recreation, bathroom and shower facilities for detained people, as well as the entry points, locker rooms, meal areas, and control rooms for staff, all contribute to the spread of infectious disease. Detention facilities are typically operated in a way that forces close contact between people and relies on massive amounts of movement every day from one part of the facility to another, e.g., for programming, access to cafeterias, commissary, medical, just to name a few. This movement is required of detained people as well as staff. This normal level of movement requires that correctional settings design and implement detailed plans and policies to both reduce the amount of movement, and immediately change housing operations to permit

[13] "Interim Guidance on Management of Coronavirus Disease 2019 (COVID-19) in Correctional and Detention Facilities," CDC, https://www.cdc.gov/coronavirus/2019-ncov/downloads/guidance-correctional-detention.pdf ("Although social distancing is challenging to practice in correctional and detention environments, it is a **cornerstone** of reducing transmission of respiratory diseases such as COVID-19.").

[14] State of Illinois, Executive Order 2020-13 (Mar. 26, 2020), https://www2.illinois.gov/Documents/ExecOrders/2020/ExecutiveOrder-2020-13.pdf.

detainees to socially distance from one another in order to control the spread of a highly communicable disease, such as COVID-19.

21. The sally-port is one of the most ubiquitous aspects of detention, and is a place that requires special attention. The sally-port, or control port, is a series of two locked gates that bring every staff member and detained person past a windowed control room as they stop in a room between locked gates. The normal functioning of detention centers demands that during shift change for staff, or as the security count approaches for detained people, large numbers of people press into sally-ports as they move into or out of other areas of the facility. This process creates close contact, and the sally port windows that are used to hand out radios, keys and other equipment to staff ensure efficient passage of communicable disease from the control rooms into the sally port areas on a regular basis. But like other aspects of detention settings, passage of staff and detained people through sally-ports can be monitored and regulated in a way that promotes six feet of separation between people. Other areas similarly require special attention, including analysis of existing workflows and honest assessment of the operational and staffing implications, including housing areas, meal spaces, medication administration, sick call, bathroom and day room access, etc.

22. Solitary confinement is not medical isolation.[15] Simply locking detained people into cells will worsen, not improve, efforts to curb infection rates. When people are locked into cells alone, for most of the day, they quickly experience psychological distress that manifests in self-harm and suicidality, which requires rapid response and intensive care outside the facility for mental and physical health emergencies. In addition, units that are comprised of locked cells may require additional staff to escort people to and from their cells for showers, telephone calls, and

[15] David Cloud, Dallas Augustine & Brie Williams, "The Ethical Use of Medical Isolation," Amend (Apr. 9, 2020), https://amend.us/wp-content/uploads/2020/04/Medical-Isolation-vs-Solitary_Amend.pdf.

other encounters, and medical, pharmacy and nursing staff must move on and off these units daily to assess the welfare and health needs of these people, creating the same spread of the virus from the community into the facilities as if detained people were not locked down. In addition, locking two people into a cell increases the risk of transmission of COVID-19 from one of them to the other. This risk is especially harmful in facilities, like the Cook County Jail, that have failed to create special protections for people with known risk factors for serious illness and death from COVID-19 infection, and hold these high-risk patients in locked cells with other lower-risk patients.

23. The documents I have reviewed in this case fail to establish a comprehensive approach to social distancing at the Cook County Jail and must be quickly integrated into a single COVID-19 emergency response plan that not only mandates in a detailed fashion, but also supports and monitors implementation of, social distancing. The deficiencies I have noted include:

a. Lack of clarity for how detainees will be maintained with 6 feet of separation in day rooms, hallways, sally-ports, medication lines, bathrooms and showers, medical clinics, transport, and recreation spaces.

b. Lack of detail on how staff will engage in social distancing as they enter the facilities and are screened, pass through sally-ports, hallways, to and from their security posts, clinic assignments, administrative office, and during meals and breaks.

c. Lack of assessment of staffing requirements to implement social distancing among staff and detained people.

24. Mandating social distancing for detainees is critical to protect against uncontrolled spread of COVID-19. However, there are other actions that should be taken. In addition to social distancing, Cook County Jail must engage in adequate infection control. My experience managing smaller outbreaks is that an additional challenge in correctional settings is

to apply hospital-level infection control measures on security staff. Ongoing, effective training is crucial to implement as many measures as possible. In a hospital or nursing home, staff may move up and down a single hallway over their shift, and they may interact with one patient at a time. In detention settings, officers move great distances, are asked to shout or yell commands to large numbers of people, routinely apply handcuffs and operate heavy doors/gates, operate large correctional keys and are trained in the use of force. These basic duties cause the personal protective equipment they are given to quickly break and become useless, and even when in good working order, may impede their ability talk and be understood, as in the case of masks. As a result, implementation of infection control measures requires a significant amount of training and supervision. It cannot be implemented through email or signage alone, but requires active role modeling, supervision and support of staff. One of the most ubiquitous examples of this challenge is the now common observation that many correctional staff who have been issued N95 masks in the past two weeks at the Cook County Jail are currently not wearing them, or may be wearing them around their necks or on their heads.

25. Another critical task for any detention setting responding to a COVID-19 outbreak is to identify all of the people held in their custody who are particularly vulnerable. This task is critical for several reasons, and the daily updating of the list and locations of high-risk patients is critical to basic outbreak management. Creating a real-time list of high-risk patients allows for:

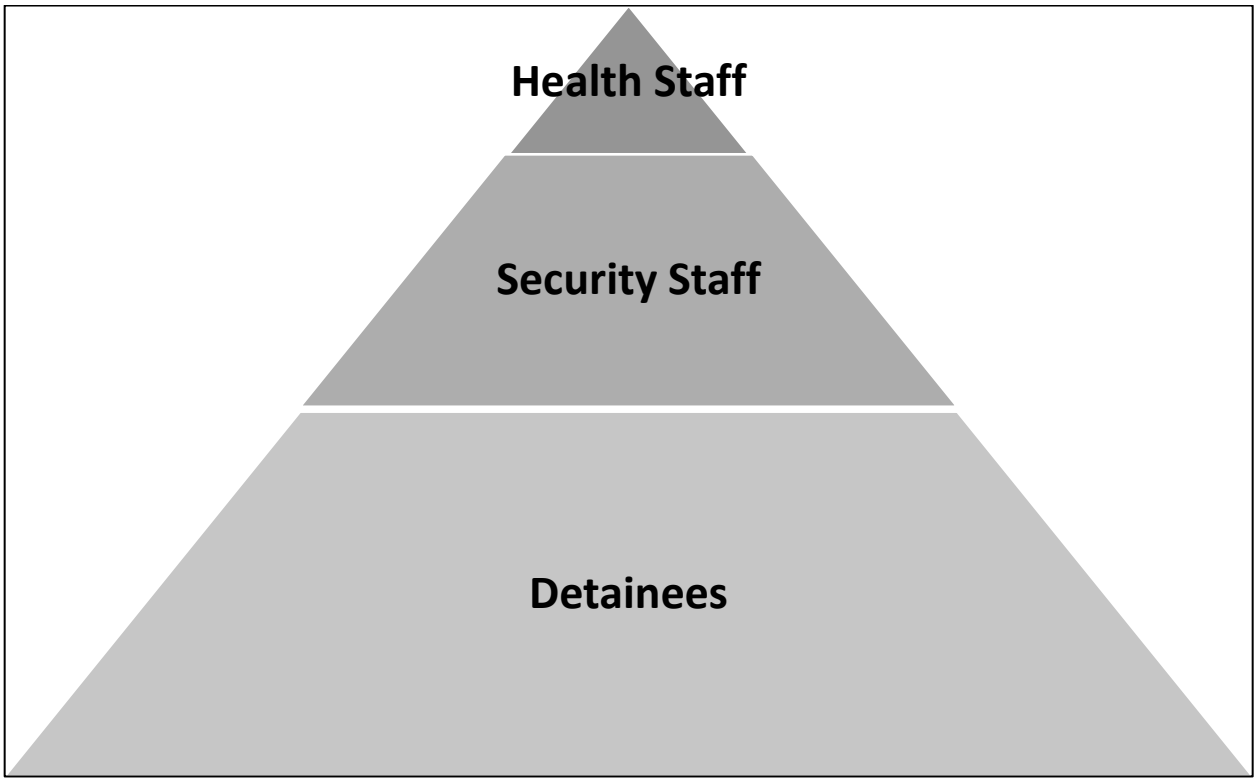
- Identification of high-risk patients who are eligible for release from detention
- Implementing of active surveillance, special housing arrangements, and other protective measures for high-risk patients who are not ill
- Implementing enhanced surveillance and protective measures for high-risk patients who are in a quarantine setting, or who develop symptoms of COVID-19

- Development and implementation of re-entry plans of care and support with community partners for high-risk patients

26. Hand-washing and good hygiene practices are also important. Access to hand washing is limited in detention settings as compared to the community. Many common areas lack operable sinks with access to soap and paper hand towels. In addition, many of the sinks utilized in correctional settings do not operate with a faucet that can be turned and left on, but rather rely on pushing a button which provides a limited amount of water over a limited amount of time. These metered faucets are designed to save water by limiting the amount of time water flows, but make adequate hand washing with soap for at least 20 seconds very difficult, if not impossible.

27. Infection control policies and procedures in detention settings are often at odds with basic CDC guidance. The CDC guidelines for infection control regarding COVID-19 make clear the need to aggressively prepare for, and intervene in, the spread of this virus throughout correctional settings. One of the most serious deficiencies in correctional practices involves the failure to appropriately train and equip correctional staff and inmate workers in the disinfection of the physical plant, and enable all people inside the facility to engage on social distancing and hand washing. When security staff and detainees are given masks without any guidance about their use, or when they should be replaced, or what scenarios in their environment represent higher risk of COVID-19 infection, the net effect is to decrease attention to infection control. Similarly, when inconsistent strengths of cleaning solution, or inadequate access to clean paper towels or other products used to wipe down surfaces are utilized, the net effect is also to decrease the level of infection control and increase the risk of rapid COVID-19 spread throughout the facility. When no special effort is made to use more highly trained or equipped cleaning

personnel with protective equipment to clean and handle the effects of staff or detainees who exhibit signs and symptoms of COVID-19, an especially egregious breach in infection control has occurred. Because security staff and inmates far outnumber health staff in correctional settings, they must be trained, equipped and engaged as the first responders for infection control. Failure to take this approach significantly increases the risk of rapid COVID-19 spread throughout the facility and increases the risk of preventable illness and death. The Cook County Jail's failure to have implemented adequate infection control policies before COVID-19 appeared within the facility is likely part of the reason why the outbreak quickly became so large. But as described above, even the perfect implementation of an adequate infection control policy would be insufficient to protect against uncontrolled spread of COVID-19 in the absence of social distancing at the jail.



28. Security staff represent the front-line infection control force inside correctional settings, and evidence-based infection control plans cannot be implemented without active training of staff that is also ongoing. This training should include formal training on the protective equipment, environmental cleaning and health service activities that security staff will participate in or support. These trainings should span every tour and day of service so that every staff member is trained, and should be conducted in both dedicated 15-30 minute sessions and also in more brief venues, such as roll call.

29. My review of the Cook County Jail's policies and other materials additionally leads me to have the following other specific concerns and recommendations about the health status of staff and detained people inside Cook County Jail regarding COVID-19 response:

a. **Lack of a Covid-19 plan.** It appears that CSCSO does not yet have a single COVID-19 response plan, and is instead relying on an amalgam of pre-existing policies, individual protocols and other directives to manage their response to COVID-19. I have reviewed an outbreak management policy from 2017 that covers numerous types of infectious disease concerns, and has a half page amendment relating to COVID-19 testing on the last of 15 pages. I have also reviewed a separate sanitation policy that appears specific to COVID-19 and a 21-page operational briefing from April 4, 2020 that appears to include several pages of general occupational guidance relating to COVID-19 that is not jail-specific and targeted towards "maintaining a healthy business. This lack of a single COVID-19 emergency response plan is a glaring deficiency, and at odds with good correctional practice. Large systems such as CCSO employ and care for several thousands of individuals and it is not possible to respond to a large-scale emergency without a single, coordinated plan. This is even more pressing for the COVID-19 response, because the public health directives for management change every week, sometimes

daily, and thus, CCSO must have one unified plan that can be updated and reliably utilized by all security, health and administrative staff, and which partners in public health organizations can review and support. If it has not already occurred, CCSO must combine all of the existing protocols and procedures into one COVID-19 emergency response plan, as is mandated in other detention settings.[16]

b. **Lack of identification or tracking of high-risk patients.** The correctional health staff, and their electronic medical records, are very sophisticated, and the identity and location of people with CDC identified risk factors for serious illness and death from COVID-19 infection is known to the health service. In an outbreak that targets a subset of the incarcerated population, it is critical to create special protections for these individuals, which may include consideration for release, as well as active surveillance with twice daily symptom and temperature checks during incarceration, and additional support during re-entry. This requires that CCSO create a management plan that identifies these high-risk patients for specialized management and protection, which does not exist according to the statements by General Counsel for the Sheriff.

c. **Lack of infection control practices consistent with CDC guidelines**. The sanitation and other policies I have reviewed fail to address or ensure basic infection control measures that are critical to the CDC guidelines on COVID-19 response in detention settings. Specifically:

- The sanitation policy fails to identify any special measures taken to clean or disinfect the living spaces and personal effect of people who become symptomatic for COVID-19 and are taken to medical isolation. This is an extremely high-risk scenario that has played out numerous times already in the Cook County Jail, and I fear that lack of attention to this high-risk setting has contributed to the substantial outbreak already present. The CDC gives clear guidance on this matter, including letting confined spaces sit for one day before entering/cleaning, and use of PPE for anyone engaged in cleaning.

[16] ICE ERO 4/10/20 mandates that all facilities housing ICE detainees must have such a plan.

- The sanitation policy leaves all communication regarding infection control to the housing area officer, but my experience during outbreaks is that detained people have numerous questions about infection control and sanitation that housing area officers are not trained to respond to. There must be regular engagement between infection control nursing or medical staff, and both staff and detained people in each housing area for implementation of effective infection control during an outbreak.

d. **Lack of re-entry planning for detained people leaving Cook County Jail**. Part of an integrated plan for COVID-19 response in detention settings is the need to plan for safe re-entry for people leaving jail. This critical requirement is outlined in CDC recommendations and must be developed as a section in a unified COVID-19 emergency plan. The CDC makes clear recommendations on this process:[17]

- If an individual does not clear the screening process, follow the protocol for a suspected COVID-19 case – including putting a face mask on the individual, immediately placing them under medical isolation, and evaluating them for possible COVID-19 testing.

- If the individual is released before the recommended medical isolation period is complete, discuss release of the individual with state, local, tribal, and/or territorial health departments to ensure safe medical transport and continued shelter and medical care, as part of release planning. Make direct linkages to community resources to ensure proper medical isolation and access to medical care.

- Before releasing an incarcerated/detained individual with COVID-19 symptoms to a community-based facility, such as a homeless shelter, contact the facility's staff to ensure adequate time for them to prepare to continue medical isolation, or contact local public health to explore alternate housing options.

30. These steps are important to improve conditions at the Cook County Jail that help to prevent detainees and staff from contracting COVID-19. The failures outlined above have contributed to the rapid spread of COVID-19 in Cook County Jail, and to the health consequences suffered by detained people and staff alike. As noted above, however, they alone

[17] "Interim Guidance on Management of Coronavirus Disease 2019 (COVID-19) in Correctional and Detention Facilities," CDC, https://www.cdc.gov/coronavirus/2019-ncov/downloads/guidance-correctional-detention.pdf.

are insufficient to meaningfully reduce the rate of spread if social distancing at the jail is not immediately implemented. I believe that it is possible to make a significant difference in the number and severity of COVID-19 cases that ensue going forward, but significant work is required by the Cook County Sheriff's Office to enact social distancing and basic infection control measures for people held in detention and staff who work in this setting.

Signature: Homer Venters

Date: 4/19/2020

Location: Port Washington, NY

Dr. Homer D. Venters

10 ½ Jefferson St., Port Washington, NY, 11050
hventers@gmail.com, Phone: 646-734-5994

HEALTH ADMINISTRATOR PHYSICIAN EPIDEMIOLOGIST

Professional Profile

- International leader in provision and improvement of health services to patients with criminal justice involvement.
- Innovator in linking care of the incarcerated to Medicaid, health homes, DSRIPs.
- Successful implementer of nations' first electronic health record, performance dashboards and health information exchange among pre-trial patients.
- Award winning epidemiologist focused on the intersection of health, criminal justice and human rights in the United States and developing nations.
- Human rights leader with experience using forensic science, epidemiology and public health methods to prevent and document human rights abuses.

Professional Experience

President, Community Oriented Correctional Health Services (COCHS), 1/1/2020-present.

- Lead COCHS efforts to provide technical assistance, policy guidance and research regarding correctional health and justice reform.
- Oversee operations and programmatic development of COCHS
- Serve as primary liaison between COCHS board, funders, staff and partners.

Senior Health and Justice Fellow, Community Oriented Correctional Health Services (COCHS), 12/1/18-12/31/2018

- Lead COCHS efforts to expand Medicaid waivers for funding of care for detained persons relating to Substance Use and Hepatitis C.
- Develop and implement COCHS strategy for promoting non-profit models of diversion and correctional health care.

Medical/Forensic Expert, 3/2016-present

- Provide expert input, review and testimony regarding health care, quality improvement, electronic health records and data analysis in detention settings.

Director of Programs, Physicians for Human Rights, 3/16-11/18.

- Lead medical forensic documentation efforts of mass crimes against Rohingya and Yazidi people.
- Initiate vicarious trauma program.
- Expand forensic documentation of mass killings and war crimes.
- Develop and support sexual violence capacity development with physicians, nurses and judges.
- Expand documentation of attacks against health staff and facilities in Syria and Yemen.

Chief Medical Officer/Assistant Vice President, Correctional Health Services, NYC Health and Hospitals Corporation 8/15-3/17.

- Transitioned entire clinical service (1,400 staff) from a for-profit staffing company model to a new division within NYC H + H.
- Developed new models of mental health and substance abuse care that significantly lowered morbidity and other adverse events.
- Connected patients to local health systems, DSRIP and health homes using approximately $5 million in external funding (grants available on request).
- Reduced overall mortality in the nation's second largest jail system.
- Increased operating budget from $140 million to $160 million.
- Implemented nation's first patient experience, provider engagement and racial disparities programs for correctional health.

Assistant Commissioner, Correctional Health Services, New York Department of Health and Mental Hygiene, 6/11-8/15.

- Implemented nation's first electronic medical record and health information exchange for 1,400 staff and 75,000 patients in a jail.
- Developed bilateral agreements and programs with local health homes to identify incarcerated patients and coordinate care.
- Increased operating budget of health service from $115 million to $140 million.
- Established surveillance systems for injuries, sexual assault and mental health that drove new program development and received American Public Health Association Paper of the Year 2014.
- Personally care for and reported on over 100 patients injured during violent encounters with jail security staff.

Medical Director, Correctional Health Services, New York Department of Health and Mental Hygiene, 1/10-6/11.

- Directed all aspects of medical care for 75,000 patients annually in 12 jails, including specialty, dental, primary care and emergency response.
- Direct all aspects of response to infectious outbreaks of H1N1, Legionella, Clostridium Difficile.
- Developed new protocols to identify and report on injuries and sexual assault among patients.

Deputy Medical Director, Correctional Health Services, New York Department of Health and Mental Hygiene, 11/08-12/09.

- Developed training program with Montefiore Social internal medicine residency program.
- Directed and delivered health services in 2 jails.

Clinical Attending Physician, Bellevue/NYU Clinic for Survivors of Torture, 10/07-12/11.

Clinical Attending Physician, Montefiore Medical Center Bronx NY, Adult Medicine, 1/08-11/09.

Education and Training

Fellow, Public Health Research, New York University 2007-2009. MS 6/2009
Projects: Health care for detained immigrants, Health Status of African immigrants in NYC.
Resident, Social Internal Medicine, Montefiore Medical Center/Albert Einstein University7/2004- 5/2007.
M.D., University of Illinois, Urbana, 12/2003.
M.S. Biology, University of Illinois, Urbana, 6/03.
B.A. International Relations, Tufts University, Medford, MA, 1989**.**

Academic Appointments, Licensure

Clinical Associate Professor, New York University College of Global Public Health, 5/18-present.

Clinical Instructor, New York University Langone School of Medicine, 2007-2018.

M.D. New York (2007-present).

Media

TV
i24 Crossroads re Suicide in U.S. Jails 8/13/19.

i24 Crossroads re re *Life and Death in Rikers Island* 6/13/19.

Amanpour & Company, NPR/PBS re *Life and Death in Rikers Island* 4/15/19.

CNN, Christiane Amanpour re Forensic documentation of mass crimes against Rohingya. 7/11/18.

i24 Crossroads with David Shuster re health crisis among refugees in Syria. 7/6/18.

Canadian Broadcasting Corporation TV with Sylvie Fournier (in French) re crowd control weapons. 5/10/18

i24 Crossroads with David Shuster re Cholera outbreak in Yemen. 2/15/18.

China TV re WHO guidelines on HIV medication access 9/22/17.

Radio/Podcast
Morning Edition, NPR re Health Risks of Criminal Justice System. 8/9/19.

Fresh Air with Terry Gross, NPR re *Life and Death in Rikers Island*, 3/6/19.

Morning Edition, NPR re *Life and Death in Rikers Island*, 2/22/19.

LeShow with Harry Sherer re forensic documentation of mass crimes in Myanmar, Syria,

Iraq. 4/17/18.

Print articles and public testimony
Oped: Four ways to protect our jails and prisons from coronavirus. The Hill 2/29/20.

Oped: It's Time to Eliminate the Drunk Tank. The Hill 1/28/20.

Oped: With Kathy Morse. A Visit with my Incarcerated Mother. The Hill 9/24/19.

Oped: With Five Omar Muallim-Ak. The Truth about Suicide Behind Bars is Knowable. The Hill 8/13/19.

Oped: With Katherine McKenzie. Policymakers, provide adequate health care in prisons and detention centers. CNN Opinion, 7/18/19.

Oped: Getting serious about preventable deaths and injuries behind bars. *The Hill*, 7/5/19.

Testimony: Access to Medication Assisted Treatment in Prisons and Jails, New York State Assembly Committee on Alcoholism and Drug Abuse, Assembly Committee on Health, and Assembly Committee on Correction**.** NY, NY, 11/14/18.

Oped: Attacks in Syria and Yemen are turning disease into a weapon of war, *STAT News*, 7/7/17.

Testimony: Connecticut Advisory Committee to the U.S. Commission on Civil Rights: Regarding the use of solitary confinement for prisoners. Hartford CT, 2/3/17.

Testimony: Venters HD, New York Advisory Committee to the U.S. Commission on Civil Rights: Regarding the use of solitary confinement for juveniles in New York. July 10, 2014. NY NY.

Testimony: New York State Assembly Committee on Correction with the Committee on Mental Health: Regarding Mental Illness in Correctional Settings. November 13, 2014. Albany NY.
Testimony: New York State Assembly Committee on Correction with the Committee on Mental Health: Regarding Mental Illness in Correctional Settings. November 13, 2014. Albany NY.

Oped: Venters HD and Keller AS, The Health of Immigrant Detainees. Boston Globe, April 11, 2009.

Testimony: U.S. House of Representatives, House Judiciary Committee's Subcommittee on Immigration, Citizenship, Refugees, Border Security, and International Law: Hearing on Problems with Immigration Detainee Medical Care, June 4, 2008.

Peer Reviewed Publications

Parmar PK, Leigh J, **Venters H**, Nelson T. Violence and mortality in the Northern Rakhine State of Myanmar, 2017: results of a quantitative survey of surviving community leaders in Bangladesh. Lancet Planet Health. 2019 Mar;3(3):e144-e153.

Venters H. Notions from Kavanaugh hearings contradict medical facts. *Lancet.* 10/5/18.

Taylor GP, Castro I, Rebergen C, Rycroft M, Nuwayhid I, Rubenstein L, Tarakji A, Modirzadeh N, **Venters H**, Jabbour S. Protecting health care in armed conflict: action towards accountability. *Lancet.* 4/14/18.

Katyal M, Leibowitz R, **Venters H**. IGRA-Based Screening for Latent Tuberculosis Infection in Persons Newly Incarcerated in New York City Jails. *J Correct Health Care.* 2018 4/18.

Harocopos A, Allen B, Glowa-Kollisch S, **Venters H**, Paone D, Macdonald R. The Rikers Island Hot Spotters: Exploring the Needs of the Most Frequently Incarcerated.
J Health Care Poor Underserved. 4/28/17.

MacDonald R, Akiyama MJ, Kopolow A, Rosner Z, McGahee W, Joseph R, Jaffer M, **Venters H**. Feasibility of Treating Hepatitis C in a Transient Jail Population.
Open Forum Infect Dis. 7/7/18.

Siegler A, Kaba F, MacDonald R, **Venters H**. Head Trauma in Jail and Implications for Chronic Traumatic Encephalopathy. *J Health Care Poor and Underserved.* In Press (May 2017).

Ford E, Kim S, **Venters H**. Sexual abuse and injury during incarceration reveal the need for re-entry trauma screening. *Lancet.* 4/8/18.

Alex B, Weiss DB, Kaba F, Rosner Z, Lee D, Lim S, **Venters H,** MacDonald R. Death After Jail Release. *J Correct Health Care*. 1/17.

Akiyama MJ, Kaba F, Rosner Z, Alper H, Kopolow A, Litwin AH, **Venters H**, MacDonald R. Correlates of Hepatitis C Virus Infection in the Targeted Testing Program of the New York City Jail System. *Public Health Rep.* 1/17.

Kalra R, Kollisch SG, MacDonald R, Dickey N, Rosner Z, **Venters H**. Staff Satisfaction, Ethical Concerns, and Burnout in the New York City Jail Health System. *J Correct Health Care.* 2016 Oct;22(4):383-392.

Venters H. A Three-Dimensional Action Plan to Raise the Quality of Care of US Correctional Health and Promote Alternatives to Incarceration. *Am J Public Health*. April 2016.104.

Glowa-Kollisch S, Kaba F, Waters A, Leung YJ, Ford E, **Venters H**. From Punishment to Treatment: The "Clinical Alternative to Punitive Segregation" (CAPS) Program in New York City Jails. *Int J Env Res Public Health.* 2016. 13(2),182.

Jaffer M, Ayad J, Tungol JG, MacDonald R, Dickey N, Venters H. Improving Transgender Healthcare in the New York City Correctional System. *LGBT Health.* 2016 1/8/16.

Granski M, Keller A, Venters H. Death Rates among Detained Immigrants in the United States. *Int J Env Res Public Health.* 2015. 11/10/15.

Michelle Martelle, Benjamin Farber, Richard Stazesky, Nathaniel Dickey, Amanda Parsons, **Homer Venters**. Meaningful Use of an Electronic Health Record in the NYC Jail System. *Am J Public Health*. 2015. 8/12/15.

Fatos Kaba, Angela Solimo, Jasmine Graves, Sarah Glowa-Kollisch, Allison Vise, Ross MacDonald, Anthony Waters, Zachary Rosner, Nathaniel Dickey, Sonia Angell, **Homer Venters**. Disparities in Mental Health Referral and Diagnosis in the NYC Jail Mental Health Service. *Am J Public Health.* 2015. 8/12/15.

Ross MacDonald, Fatos Kaba, Zachary Rosner, Alison Vise, Michelle Skerker, David Weiss, Michelle Brittner, Nathaniel Dickey, **Homer Venters**. The Rikers Island Hot Spotters. *Am J Public Health*. 2015. 9/17/15.

Selling Molly Skerker, Nathaniel Dickey, Dana Schonberg, Ross MacDonald, **Homer Venters**. Improving Antenatal Care for Incarcerated Women: fulfilling the promise of the Sustainable Development Goals. *Bulletin of the World Health Organization*.2015.

Jasmine Graves, Jessica Steele, Fatos Kaba, Cassandra Ramdath, Zachary Rosner, Ross MacDonald, Nathanial Dickey, **Homer Venters**. Traumatic Brain Injury and Structural Violence among Adolescent males in the NYC Jail System *J Health Care Poor Underserved.* 2015;26(2):345-57.

Glowa-Kollisch S, Graves J, Dickey N, MacDonald R, Rosner Z, Waters A, **Venters H**. Data-Driven Human Rights: Using Dual Loyalty Trainings to Promote the Care of Vulnerable Patients in Jail. *Health and Human Rights*. Online ahead of print, 3/12/15.

Teixeira PA[1], Jordan AO, Zaller N, Shah D, **Venters H**. Health Outcomes for HIV-Infected Persons Released From the New York City Jail System With a Transitional Care-Coordination Plan. 2014. *Am J Public Health*. 2014 Dec 18.

Selling D, Lee D, Solimo A, **Venters H.** A Road Not Taken: Substance Abuse Programming in the New York City Jail System. *J Correct Health Care.* 2014 Nov 17.

Glowa-Kollisch S, Lim S, Summers C, Cohen L, Selling D, **Venters H**. Beyond the Bridge: Evaluating a Novel Mental Health Program in the New York City Jail System. *Am J Public Health*. 2014 Sep 11.

Glowa-Kollisch S, Andrade K, Stazesky R, Teixeira P, Kaba F, MacDonald R, Rosner Z, Selling D, Parsons A, **Venters H**. Data-Driven Human Rights: Using the Electronic Health Record to Promote Human Rights in Jail. *Health and Human Rights*. 2014. Vol 16 (1): 157-165.

MacDonald R, Rosner Z, **Venters H**. Case series of exercise-induced rhabdomyolysis in the New York City Jail System. *Am J Emerg Med*. 2014. Vol 32(5): 446-7.

Bechelli M, Caudy M, Gardner T, Huber A, Mancuso D, Samuels P, Shah T, **Venters H.** Case Studies from Three States: Breaking Down Silos Between Health Care and Criminal Justice. *Health Affairs*. 2014. Vol. 3. 33(3):474-81.

Selling D, Solimo A, Lee D, Horne K, Panove E, **Venters H**. Surveillance of suicidal and non-suicidal self-injury in the new York city jail system. *J Correct Health Care*. 2014. Apr:20(2).

Kaba F, Diamond P, Haque A, MacDonald R, **Venters H**. Traumatic Brain Injury Among Newly Admitted Adolescents in the New York City Jail System. *J Adolesc Health*. 2014. Vol 54(5): 615-7.

Monga P, Keller A, **Venters H**. Prevention and Punishment: Barriers to accessing health services for undocumented immigrants in the United States. *LAWS*. 2014. 3(1).

Kaba F, Lewsi A, Glowa-Kollisch S, Hadler J, Lee D, Alper H, Selling D, MacDonald R, Solimo A, Parsons A, **Venters H**. Solitary Confinement and Risk of Self-Harm Among Jail Inmates. *Amer J Public Health*. 2014. Vol 104(3):442-7.

MacDonald R, Parsons A, **Venters H.** The Triple Aims of Correctional Health: Patient safety, Population Health and Human Rights. *Journal of Health Care for the Poor and Underserved*. 2013. 24(3).

Parvez FM, Katyal M, Alper H, Leibowitz R, **Venters H.** Female sex workers incarcerated in New York City jails: prevalence of sexually transmitted infections and associated risk behaviors. *Sexually Transmitted Infections*. 89:280-284. 2013.

Brittain J, Axelrod G, **Venters H.** Deaths in New York City Jails: 2001 – 2009. *Am J Public Health*. 2013 103:4.

Jordan AO, Cohen LR, Harriman G, Teixeira PA, Cruzado-Quinones J, **Venters H.** Transitional Care Coordination in New York City Jails: Facilitating Linkages to Care for People with HIV Returning Home from Rikers Island. *AIDS Behav. Nov.* 2012.

Jaffer M, Kimura C, **Venters H.** Improving medical care for patients with HIV in New York City jails. *J Correct Health Care*. 2012 Jul;18(3):246-50.

Ludwig A, Parsons, A, Cohen, L, **Venters H.** Injury Surveillance in the NYC Jail System, *Am J Public Health* 2012 Jun;102(6).

Venters H, Keller, AS. *Psychiatric Services*. (2012) Diversion of Mentally Ill Patients from Court-ordered care to Immigration Detention. Epub. 4/2012.

Venters H, Gany, F. *Journal of Immigrant and Minority Health* (2011) Mental Health Concerns Among African Immigrants. 13(4): 795-7.

Venters H, Foote M, Keller AS. *Journal of Immigrant and Minority Health.* (2010) Medical Advocacy on Behalf of Detained Immigrants. 13(3): 625-8.

Venters H, McNeely J, Keller AS. *Health and Human Rights.* (2010) HIV Screening and Care for Immigration Detainees. 11(2) 91-102.

Venters H, Keller AS. *Journal of Health Care for the Poor and Underserved*. (2009) The Immigration Detention Health Plan: An Acute Care Model for a Chronic Care Population. 20:951-957.

Venters H, Gany, F. *Journal of Immigrant and Minority Health* (2009) African Immigrant Health. 4/4/09.

Venters H, Dasch-Goldberg D, Rasmussen A, Keller AS, *Human Rights Quarterly* (2009) Into the Abyss: Mortality and Morbidity among Detained Immigrant. 31 (2) 474-491.

Venters H, *The Lancet* (2008) Who is Jack Bauer? 372 (9653).

Venters H, Lainer-Vos J, Razvi A, Crawford J, Shaf'on Venable P, Drucker EM, *Am J Public Health* (2008) Bringing Health Care Advocacy to a Public Defender's Office. 98 (11).

Venters H, Razvi AM, Tobia MS, Drucker E. *Harm Reduct J.* (2006) The case of Scott Ortiz: a clash between criminal justice and public health. Harm Reduct J. 3:21

Cloez-Tayarani I, Petit-Bertron AF, **Venters HD**, Cavaillon JM (2003) *Internat. Immunol.* Differential effect of serotonin on cytokine production in lipopolysaccharide-stimulated human peripheral blood mononuclear cells.15,1-8.

Strle K, Zhou JH, Broussard SR, **Venters HD**, Johnson RW, Freund GG, Dantzer R, Kelley KW, (2002) *J. Neuroimmunol.* IL-10 promotes survival of microglia without activating Akt. 122, 9-19.

Venters HD, Broussard SR, Zhou JH, Bluthe RM, Freund GG, Johnson RW, Dantzer R, Kelley KW, (2001) *J. Neuroimmunol.* Tumor necrosis factor(alpha) and insulin-like growth factor-I in the brain: is the whole greater than the sum of its parts? 119, 151-65.

Venters HD, Dantzer R, Kelley KW, (2000) *Ann. N. Y. Acad. Sci.* Tumor necrosis factor-alpha induces neuronal death by silencing survival signals generated by the type I insulin-like growth factor receptor. 917, 210-20.

Venters HD, Dantzer R, Kelley KW, (2000) *Trends. Neurosci.* A new concept in neurodegeneration: TNFalpha is a silencer of survival signals. 23, 175-80.

Venters HD, Tang Q, Liu Q, VanHoy RW, Dantzer R, Kelley KW, (1999) *Proc. Natl. Acad. Sci. USA.* A new mechanism of neurodegeneration: A proinflammatory cytokine inhibits receptor signaling by a survival peptide, 96, 9879-9884.

Venters HD, Ala TA, Frey WH 2nd , (1998) Inhibition of antagonist binding to human brain muscarinic receptor by vanadium compounds. *Recept. Signal. Transduct.* 7, 137-142.

Venters HD, Tang Q, Liu Q, VanHoy RW, Dantzer R, Kelley KW, (1999) *Proc. Natl. Acad. Sci. USA.* A new mechanism of neurodegeneration: A proinflammatory cytokine inhibits receptor signaling by a survival peptide, 96, 9879-9884.

Venters HD, Ala TA, Frey WH 2nd , (1998) Inhibition of antagonist binding to human brain muscarinic receptor by vanadium compounds. *Recept. Signal. Transduct.* 7, 137-142**.**

Venters HD, Bonilla LE, Jensen T, Garner HP, Bordayo EZ, Najarian MM, Ala TA, Mason RP, Frey WH 2nd, (1997) Heme from Alzheimer's brain inhibits muscarinic receptor binding via thiyl radical generation. *Brain. Res.* 764, 93-100.

Kjome JR, Swenson KA, Johnson MN, Bordayo EZ, Anderson LE, Klevan LC, Fraticelli AI, Aldrich SL, Fawcett JR, **Venters HD**, Ala TA, Frey WH 2nd (1997) Inhibition of antagonist and agonist binding to the human brain muscarinic receptor by arachidonic acid. *J. Mol. Neurosci.* 10, 209-217.

Honors and Presentations (past 10 years)

Keynote Address, Academic Correctional Health Conference, April 2020, Chapel Hill, North Carolina.

TedMed Presentation, Correctional Health, Boston MA, March 2020.

Finalist, Prose Award for Literature, Social Sciences category for *Life and Death in Rikers Island*, February, 2020.

Keynote Address, John Howard Association Annual Benefit, November 2019, Chicago IL.

Keynote Address, Kentucky Data Forum, Foundation for a Healthy Kentucky, November 2019, Cincinnati Ohio.

Oral Presentation, Dual loyalty and other human rights concerns for physicians in jails an prisons. Association of Correctional Physicians, Annual meeting. 10/16, Las Vegas.

Oral Presentation, Clinical Alternatives to Punitive Segregation: Reducing self-harm for incarcerated patients with mental illness. American Public Health Association Annual Meeting, November 2015, Chicago IL.

Oral Presentation, Analysis of Deaths in ICE Custody over 10 Years . American Public Health Association Annual Meeting, November 2015, Chicago IL.

Oral Presentation, Medication Assisted Therapies for Opioid Dependence in the New York City Jail System. American Public Health Association Annual Meeting, November 2015, Chicago IL.

Oral Presentation, Pathologizing Normal Human Behavior: Violence and Solitary Confinement in an Urban Jail. American Public Health Association Annual Meeting, November 2014, New Orleans, LA.

Training, International Committee of the Red Cross and Red Crescent, Medical Director meeting 10/15, Presentation on Human Rights and dual loyalty in correctional health.

Paper of the Year, American Public Health Association. 2014. (Kaba F, Lewis A, Glowa-Kollisch S, Hadler J, Lee D, Alper H, Selling D, MacDonald R, Solimo A, Parsons A, Venters H. Solitary Confinement and Risk of Self-Harm Among Jail Inmates. *Amer J Public Health*. 2014. Vol 104(3):442-7.)

Oral Presentation, Pathologizing Normal Human Behavior: Violence and Solitary Confinement in an Urban Jail. *American Public Health Association* Annual Meeting, New Orleans LA, 2014.

Oral Presentation, Human rights at Rikers: Dual loyalty among jail health staff. American Public Health Association Annual Meeting, New Orleans LA, 2014.

Poster Presentation, Mental Health Training for Immigration Judges. American Public Health

Association Annual Meeting, New Orleans LA, 2014.

Distinguished Service Award; Managerial Excellence. Division of Health Care Access and Improvement, NYC DOHMH. 2013.

Oral Presentation, Solitary confinement in the ICE detention system. American Public Health Association Annual Meeting, Boston MA, 2013.

Oral Presentation, Self-harm and solitary confinement in the NYC jail system. American Public Health Association Annual Meeting, Boston MA, 2013.

Oral Presentation, Implementing a human rights practice of medicine inside New York City jails. American Public Health Association Annual Meeting, Boston MA, 2013.

Poster Presentation, Human Rights on Rikers: integrating a human rights-based framework for healthcare into NYC's jail system. *American Public Health Association* Annual Meeting, Boston MA, 2013.

Poster Presentation, Improving correctional health care: health information exchange and the affordable care act. *American Public Health Association* Annual Meeting, Boston MA, 2013.

Oral Presentation, Management of Infectious Disease Outbreaks in a Large Jail System. American Public Health Association Annual Meeting, Washington DC, 2011.

Oral Presentation, Diversion of Patients from Court Ordered Mental Health Treatment to Immigration Detention. *American Public Health Association* Annual Meeting, Washington DC, 2011.

Oral Presentation, Initiation of Antiretroviral Therapy for Newly Diagnosed HIV Patients in the NYC Jail System. *American Public Health Association* Annual Meeting, Washington DC, 2011.

Oral Presentation, Medical Case Management in Jail Mental Health Units. *American Public Health Association* Annual Meeting, Washington DC, 2011.

Oral Presentation, Injury Surveillance in New York City Jails. *American Public Health Association* Annual Meeting, Washington DC, 2011.

Oral Presentation, Ensuring Adequate Medical Care for Detained Immigrants. Venters H, Keller A, American Public Health Association Annual Meeting, Denver, CO, 2010.

Oral Presentation, HIV Testing in NYC Correctional Facilities. Venters H and Jaffer M, *American Public Health Association,* Annual Meeting, Denver, CO, 2010.

Oral Presentation, Medical Concerns for Detained Immigrants. Venters H, Keller A, *American Public Health Association* Annual Meeting, Philadelphia, PA, November 2009.

Oral Presentation, Growth of Immigration Detention Around the Globe. Venters H, Keller A, *American Public Health Association* Annual Meeting, Philadelphia, PA, November 2009.

Oral Presentation, Role of Hospital Ethics Boards in the Care of Immigration Detainees. Venters H, Keller A, *American Public Health Association* Annual Meeting, Philadelphia, PA,

November 2009.

Oral Presentation, Health Law and Immigration Detainees. Venters H, Keller A, *American Public Health Association* Annual Meeting, Philadelphia, PA, November 2009.

Bro Bono Advocacy Award, Advocacy on behalf of detained immigrants. Legal Aid Society of New York, October 2009.

Oral Presentation, Deaths of immigrants detained by Immigration and Customs Enforcement. Venters H, Rasmussen A, Keller A, *American Public Health Association* Annual Meeting, San Diego CA, October 2008.

Poster Presentation, Death of a detained immigrant with AIDS after withholding of prophylactic Dapsone. Venters H, Rasmussen A, Keller A, *Society of General Internal Medicine* Annual Meeting, Pittsburgh PA, April 2008.

Poster Presentation, Tuberculosis screening among immigrants in New York City reveals higher rates of positive tuberculosis tests and less health insurance among African immigrants. *Society of General Internal Medicine* Annual Meeting, Pittsburgh PA, April 2008.

Daniel Leicht Award for Achievement in Social Medicine, Montefiore Medical Center, Department of Family and Social Medicine, 2007.

Poster Presentation, Case Findings of Recent Arestees. Venters H, Deluca J, Drucker E. *Society of General Internal Medicine* Annual Meeting, Toronto Canada, April 2007.

Poster Presentation, Bringing Primary Care to Legal Aid in the Bronx. Venters H, Deluca J, Drucker E. *Society of General Internal Medicine* Annual Meeting, Los Angeles CA, April 2006.

Poster Presentation, A Missed Opportunity, Diagnosing Multiple Myeloma in the Elderly Hospital Patient. Venters H, Green E., *Society of General Internal Medicine* Annual Meeting, New Orleans LA, April 2005.

Grants: Program

San Diego County: Review of jail best practices (COCHS), 1/2020, $90,000.

Ryan White Part A - Prison Release Services (PRS). From HHS/HRSA to Correctional Health Services (NYC DOHMH), 3/1/16-2/28/17 (Renewed since 2007). Annual budget $ 2.7 million.

Ryan White Part A - Early Intervention Services- Priority Population Testing. From HHS/HRSA to Correctional Health Services (NYC DOHMH), 3/1/16-2/28/18 (Renewed since 2013). Annual budget $250,000.

Comprehensive HIV Prevention. From HHS to Correctional Health Services (NYC DOHMH), 1/1/16-12/31/16. Annual budget $500,000.

HIV/AIDS Initiative for Minority Men. From HHS Office of Minority Health to Correctional Health Services (NYC DOHMH), 9/30/14-8/31/17. Annual budget $375,000.

SPNS Workforce Initiative, From HRSA SPNS to Correctional Health Services (NYC DOHMH), 8/1/14-7/31/18. Annual budget $280,000.

SPNS Culturally Appropriate Interventions. From HRSA SPNS to Correctional Health Services (NYC DOHMH), 9/1/13-8/31/18. Annual budget $290,000.

Residential substance abuse treatment. From New York State Division of Criminal Justice Services to Correctional Health Services (NYC DOHMH), 1/1/11-12/31/17. Annual budget $175,000.

Community Action for Pre-Natal Care (CAPC). From NY State Department of Health AIDS Institute to Correctional Health Services (NYC DOHMH), 1/1/05-12/31/10. Annual budget $290,000.

Point of Service Testing. From MAC/AIDS, Elton John and Robin Hood Foundations to Correctional Health Services (NYC DOHMH), 11/1/09-10/31/12. Annual budget $100,000.

Mental Health Collaboration Grant. From USDOJ to Correctional Health Services (NYC DOHMH), 1/1/11-9/30/13. Annual budget $250,000.

Teaching

Instructor, Health in Prisons Course, Bloomberg School of Public Health, Johns Hopkins University, June 2015, June 2014, April 2019.

Instructor, Albert Einstein College of Medicine/Montefiore Social Medicine Program Yearly lectures on Data-driven human rights, 2007-present.

Other Health & Human Rights Activities

DIGNITY Danish Institute Against Torture, Symposium with Egyptian correctional health staff regarding dual loyalty and data-driven human rights. Cairo Egypt, September 20-23, 2014.

Doctors of the World, Physician evaluating survivors of torture, writing affidavits for asylum hearings, with testimony as needed, 7/05-11/18.

United States Peace Corps, Guinea Worm Educator, Togo West Africa, June 1990- December 1991.

-*Primary Project;* Draconculiasis Eradication. Activities included assessing levels of infection in 8 rural villages and giving prevention presentations to mothers in Ewe and French
-*Secondary Project;* Malaria Prevention.

Books

Venters H. *Life and Death in Rikers Island*. Johns Hopkins University Press. 2/19.

Chapters in Books

Venters H. Mythbusting Solitary Confinement in Jail. In Solitary Confinement Effects, Practices, and Pathways toward Reform. Oxford University Press, 2020.

MacDonald R. and **Venters H.** Correctional Health and Decarceration. In Decarceration. Ernest Drucker, New Press, 2017.

Membership in Professional Organizations

American Public Health Association

Foreign Language Proficiency

French	Proficient
Ewe	Conversant

Prior Testimony and Deposition

Benjamin v. Horn, 75 Civ. 3073 (HB) (S.D.N.Y.) as expert for defendants, 2015

Rodgers v. Martin 2:16-cv-00216 (U.S.D.C. N.D.Tx) as expert for plaintiffs, 10/19/17

Fikes v. Abernathy, 2017 7:16-cv-00843-LSC (U.S.D.C. N.D.AL) as expert for plaintiffs 10/30/17.

Fernandez v. City of New York, 17-CV-02431 (GHW)(SN) (S.D.NY) as defendant in role as City Employee 4/10/18.

Charleston v. Corizon Health INC, 17-3039 (U.S.D.C. E.D. PA) as expert for plaintiffs 4/20/18.

Gambler v. Santa Fe County, 1:17-cv-00617 (WJ/KK) as expert for plaintiffs 7/23/18.

Hammonds v. Dekalb County AL, CASE NO.: 4:16-cv-01558-KOB as expert for plaintiffs 11/30/2018.

Mathiason v. Rio Arriba County NM, No. D-117-CV-2007-00054, as expert for plaintiff 2/7/19.

Hutchinson v. Bates et. al. AL, No. 2:17-CV-00185-WKW- GMB, as expert for plaintiff 3/27/19.

Lewis v. East Baton Rouge Parish Prison LA, No. 3:16-CV-352-JWD-RLB, as expert for plaintiff 6/24/19.

Belcher v. Lopinto, No No. 2:2018cv07368 - Document 36 (E.D. La. 2019) as expert for plaintiffs 12/5/2019.

Fee Schedule

Case review, reports, testimony $500/hour.
Site visits and other travel, $2,500 per day (not including travel costs).

EXHIBIT B

DECLARATION OF AMIR MOHEB MOHAREB, M.D.

I, Amir Mohareb, hereby declare the following under penalty of perjury pursuant to 28 U.S.C. § 1746:

I am an Infectious Diseases physician in Massachusetts. I completed my medical degree in Johns Hopkins University School of Medicine, my training in Internal Medicine at Yale-New Haven Hospital, and my Infectious Diseases fellowship in the joint program of Brigham & Women's Hospital and Massachusetts General Hospital. I am board-certified in both Internal Medicine and Infectious Diseases. I practice in Massachusetts General Hospital and am an Instructor in Harvard Medical School. I am a member of the Biothreats Response Team at Massachusetts General Hospital, a position which has required me to take a leading role in infection control measures during the 2019 Coronavirus Disease (COVID-19) outbreak.

I have been retained by the plaintiffs in this case to provide statements and testimony about COVID-19, its clinical presentation and course, and the medical evidence regarding its transmission. I am not charging the plaintiffs for the time that I spend on this case. A copy of the documents I received as part of my work on this case is appended to the end of my report. My opinions are set forth to a reasonable degree of medical certainty based on my education, training, experience, and familiarity with the authoritative literature on the subjects discussed below.

COVID-19 Background. COVID-19 is the disease caused by a novel respiratory virus, SARS-CoV-2, identified in late 2019 in Wuhan, China.[1] The name of the virus is SARS-CoV-2, and the name of the disease caused by this virus is COVID-19. This disease primarily manifests as influenza-like illness. A fraction of patients with COVID-19 in all age groups go on to develop severe respiratory disease. A patient with the severe form of COVID-19 is unable to breathe effectively to provide enough oxygen for their body's vital organs ("hypoxia"). Hypoxia causes organ failure and will lead to death if it progresses. Patients with hypoxia from severe COVID-19 uniformly feel an intense and frightening degree of shortness of breath. Medical treatment for hypoxia involves provision of supplemental oxygen, which can be done non-invasively in mild cases and by ventilator in severe cases. In the United States, these patients remain connected to the ventilator for a median of 10 days.[2] The mortality rate is highest among those of advanced age and those with other medical conditions. Of those who recover to the point of being liberated from mechanical ventilation, these patients commonly need several more days of hospitalization and then weeks of rehabilitation. Aside from hypoxia, COVID-19 has been observed to cause several other complications in hospitalized patients, including blood clots, strokes, liver damage, kidney damage, irregular heart rhythms, and heart failure. Hospitalized patients with COVID-19 are also

[1] Wei-jie Guan et al., "Clinical Characteristics of Coronavirus Disease 2019 in China," *New England Journal of Medicine*, February 28, 2020, https://doi.org/10.1056/NEJMoa2002032.
[2] Pavan K. Bhatraju et al., "Covid-19 in Critically Ill Patients in the Seattle Region — Case Series," *New England Journal of Medicine*, March 30, 2020, https://doi.org/10.1056/NEJMoa2004500.

at risk of superimposed bacterial infections, such as pneumonia and bloodstream infections.

SARS-CoV-2 is spread easily between humans. There is no effective therapy. There is no effective intervention to prevent disease in a person exposed to someone with COVID-19. There is no effective vaccine or medication that prevents COVID-19. Therefore, the only effective means of addressing the threat of COVID-19 are in behavioral strategies of prevention. Persons who have COVID-19 must be immediately isolated to prevent transmission to others. Persons who are exposed to COVID-19 must be immediately quarantined. Persons who are susceptible to COVID-19 must maintain social distancing from others.

Diagnosis. The most common means of confirming COVID-19 diagnosis is through detection of SARS-CoV-2 by nasopharyngeal testing. In this test, a swab of the nasopharynx of the patient is obtained and a molecular identification of the SARS-CoV-2 virus is conducted using a method called polymerase chain reaction (PCR). Concerns have been raised about the sensitivity of the nasopharyngeal SARS-CoV-2 PCR, meaning that a number of patients suspected of having COVID-19 may indeed have the infection despite a negative nasopharyngeal SARS-CoV-2 PCR test.[3] The sensitivity of nasopharyngeal testing by all commercial testing platforms declines several days after the onset of symptoms, even though patients may still have clinical illness and may still be able to transmit the virus. Because of this, many clinical settings use two serial negative tests to “rule out” patients for the virus. The Abbott "ID Now" SARS-CoV-2 test is one type of PCR test, which can deliver rapid results, but has a particularly high false negative rate. In patients with a compatible clinical syndrome, I would not rely on a negative PCR test from the Abbott "ID Now" SARS-CoV-2 test. Indeed, in my hospital, patients with typical clinical signs and symptoms of COVID-19 who are at epidemiological risk for the infection (such as from an exposure to a jail) are presumed to have COVID-19 even if they have two negative SARS-CoV-2 nasopharyngeal PCR tests. I did not see any indication in the materials that I reviewed that individuals at Cook County Jail receive two negative tests before COVID-19 is considered ruled out or that individuals with compatible clinical syndromes are presumed to have COVID-19 despite negative PCR testing. This suggests to me that some people in Cook County Jail who initially test negative may in fact have COVID-19.

Transmission. Based on a framework followed by the World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC), there are three possible ways that a respiratory virus can potentially spread:[4]

---

[3] J Zhao et al., “Antibody Responses to SARS-CoV-2 in Patients of Novel Coronavirus Disease 2019,” *Clinical Infectious Diseases*, March 28, 2020, https://doi.org/10.1093/cid/ciaa344; Li Guo et al., “Profiling Early Humoral Response to Diagnose Novel Coronavirus Disease (COVID-19),” *Clinical Infectious Diseases*, March 21, 2020, https://doi.org/10.1093/cid/ciaa310; Tao Ai et al., “Correlation of Chest CT and RT-PCR Testing in Coronavirus Disease 2019 (COVID-19) in China: A Report of 1014 Cases,” *Radiology*, February 26, 2020, 200642, https://doi.org/10.1148/radiol.2020200642.

[4] Chad J. Roy and Donald K. Milton, “Airborne Transmission of Communicable Infection — The Elusive Pathway,” *New England Journal of Medicine* 350, no. 17 (April 22, 2004): 1710–12, https://doi.org/10.1056/NEJMp048051.

1. Fomite transmission: virus particles remain viable on environmental surfaces. When people touch these surfaces and then touch their face, they can contract the virus.
2. Droplet transmission: virus particles in large respiratory droplets (≥5micrometres) that are emitted by an infected person can be inhaled by a susceptible person in close contact. These large droplets can travel up to six feet. Healthcare workers protect themselves against droplet transmission by wearing "routine" surgical or procedural masks, gowns, and gloves, and practicing hand hygiene before and after each patient encounter.
3. Airborne, or aerosolized, transmission: virus particles in small respiratory droplets (<5micrometres) that are emitted by an infected person can remain suspended in the air and remain infective over several hours and over long distances. Pathogens that travel via airborne transmission can infect persons even if they are wearing surgical or procedural masks. Healthcare workers protect themselves against airborne transmission by wearing specialized masks (N95 masks or Powered Air-Purifying Respirators) and by isolating infected persons in closed rooms with negative-pressure ventilation. Buildings or facilities with other forms of ventilation may spread aerosolized pathogens between rooms.

It is well-known that SARS-CoV-2 is spread by fomite and droplet transmission. Researchers in the National Institute of Allergy and Infectious Diseases recently sought to determine whether SARS-CoV-2 can remain viable via airborne transmission.[5] They aerosolized virus in small droplets (<5micrometres) at quantities that would be typically found from the respiratory tract of infected humans. They then spread the virus across different environmental conditions. They found that SARS-CoV-2 virus remained viable in aerosols (small droplets) for the entire duration of their experiment (3 hours). SARS-CoV-2 also remained viable on various surfaces (e.g., plastic and stainless steel) for up to 72 hours. This leads medical experts to conclude that SARS-CoV-2 is predominantly transmitted by fomite and droplet transmission, but airborne transmission is possible when aerosols are generated.

This is consistent with clinical experience with SARS-CoV-1, a closely related virus that was the cause of the 2003 SARS outbreak in China, Hong Kong, and Canada. While the dominant form of transmission was through fomites and droplets, SARS-CoV-1 was also capable of being aerosolized and remained infective over time and space via airborne transmission. This virus was transmitted to several healthcare workers via droplet transmission. During the course of aerosol-generating medical procedures, SARS-CoV-1 was transmitted to healthcare workers via airborne transmission even if they were wearing surgical masks.[6] Aerosols can be generated by a number of common

[5] Neeltje van Doremalen et al., "Aerosol and Surface Stability of SARS-CoV-2 as Compared with SARS-CoV-1," *New England Journal of Medicine* 382, no. 16 (April 16, 2020): 1564–67, https://doi.org/10.1056/NEJMc2004973.
[6] Damon C. Scales et al., "Illness in Intensive Care Staff after Brief Exposure to Severe Acute Respiratory Syndrome," *Emerging Infectious Diseases* 9, no. 10 (October 2003): 1205–10, https://doi.org/10.3201/eid0910.030525; Yee-Chun Chen et al., "SARS in Hospital Emergency Room," *Emerging Infectious Diseases* 10, no. 5 (May 2004): 782–88, https://doi.org/10.3201/eid1005.030579.

events, including vigorous coughing, sneezing, use of certain nasal sprays or nebulizer treatments, and toilet flushing.

In addition to respiratory secretions, SARS-CoV-2 virus has been isolated in secretions of the mouth, nose, eyes, blood, stool, and urine. This suggests that respiratory contact is not the only mode of transmission for this virus. There are several reasons to believe that SARS-CoV-2 can be transmitted via fecal-oral contact.[7] First, many viral respiratory infections, including other coronaviruses closely related to SARS-CoV-2, have been shown to also transmit via fecal-oral contact. Second, SARS-CoV-2 has been identified in the stool of many patients with COVID-19.[8] Third, many patients with COVID-19 have nausea, vomiting, and diarrhea, suggesting that the virus has a direct pathogenic effect on the gastrointestinal tract. Finally, even among COVID-19 patients who lack gastrointestinal symptoms, live virus has been isolated in the stool. The identification of viable SARS-CoV-2 in stool of infected persons raises concern of airborne transmission via toilet flushing.[9]

By these mechanisms, SARS-CoV-2 is easily transmitted between humans. There is overwhelming evidence demonstrating that a person can spread SARS-CoV-2 before they develop symptoms or without ever developing symptoms at all.[10] This characteristic is one of the major reasons why it spreads so rapidly. At the time of this writing, there have been more than 700,000 laboratory-confirmed cases of COVID-19 in the U.S. with more than 30,000 deaths. Because of widespread restrictions in laboratory testing, I believe there are many more infected persons in the U.S. than have been confirmed. Rapid transmission of the virus has been noted in congregate settings, including nursing homes, cruise ships, conferences, homeless shelters, and correctional facilities. In many of these settings, infection spread despite the diligent implementation of hygienic measures, including physical separation of individuals within the congregate setting and the use of hand hygiene and personal protective equipment.

In his declaration, Mr. Michael Miller states that when individuals are identified as being symptomatic, they are put into isolation at the Cook County Jail. While this intervention is necessary, it is insufficient to prevent spread of the infection because patients transmit SARS-CoV-2 prior to developing symptoms. It further appears from the materials that I reviewed that the jail is housing persons under investigation (PUIs) of

---

[7] Jinyang Gu, Bing Han, and Jian Wang, "COVID-19: Gastrointestinal Manifestations and Potential Fecal–Oral Transmission," *Gastroenterology*, March 2020, https://doi.org/10.1053/j.gastro.2020.02.054.

[8] Wenling Wang et al., "Detection of SARS-CoV-2 in Different Types of Clinical Specimens," *JAMA*, March 11, 2020, https://doi.org/10.1001/jama.2020.3786.

[9] Sunny H Wong, Rashid NS Lui, and Joseph JY Sung, "Covid-19 and the Digestive System," *Journal of Gastroenterology and Hepatology*, March 25, 2020, https://doi.org/10.1111/jgh.15047.

[10] Yan Bai et al., "Presumed Asymptomatic Carrier Transmission of COVID-19," *JAMA* 323, no. 14 (April 14, 2020): 1406, https://doi.org/10.1001/jama.2020.2565; Kenji Mizumoto et al., "Estimating the Asymptomatic Proportion of Coronavirus Disease 2019 (COVID-19) Cases on Board the Diamond Princess Cruise Ship, Yokohama, Japan, 2020," *Euro Surveillance: Bulletin Europeen Sur Les Maladies Transmissibles = European Communicable Disease Bulletin* 25, no. 10 (2020), https://doi.org/10.2807/1560-7917.ES.2020.25.10.2000180; Hiroshi Nishiura et al., "Estimation of the Asymptomatic Ratio of Novel Coronavirus Infections (COVID-19)," *International Journal of Infectious Diseases*, March 2020, https://doi.org/10.1016/j.ijid.2020.03.020.

having COVID-19 in isolation together while their tests are pending. If this occurs, it represents a grave health risk because it is almost certain to mix positive and negative cases together, thereby increasing the risk that PUIs who were negative before being put into isolation will develop COVID-19.

Hand hygiene and the provision of surgical masks are insufficient to prevent the spread of infection in a congregate setting. A clear demonstration of this is evident in the case of the Diamond Princess cruise ship,[11] which sailed from Japan in January of this year. In the last week of January, a passenger who disembarked from this ship in Hong Kong tested positive for COVID-19. Within days, the cruise ship was quarantined in Japan and strict precautions of hand hygiene and cabin isolation were implemented for all crew and passengers. Despite these measures, more than 700 people were infected with the virus over the following month. By the end of February, the Diamond Princess cruise ship accounted for nearly half of COVID-19 cases outside of China. Several other cruise ships have since had similar experiences with COVID-19. In terms of viral transmission dynamics, in my opinion, a jail constitutes an equal or greater risk setting to that of a cruise ship.

Social Distancing. The recommendation for all persons living in areas of COVID-19 disease activity is to engage in social distancing, hand hygiene, and proper respiratory precautions. Social distancing involves physical separation of individuals by more than six feet, avoidance of public places, and avoidance of congregate habitation. Social distancing is the primary means by which individuals can be safely protected from the threat of COVID-19, and by which public healthcare facilities will be able to withstand the surge in patient volume related to this outbreak. There is ample evidence supporting the use of social distancing as the primary measure of prevention in the COVID-19 outbreak:

- There is a strong biological rationale to containing a respiratory viral illness when susceptible populations stop gathering around persons who are potentially infected.
- When social distancing measures have been implemented in prior outbreaks of respiratory viruses, they have demonstrated moderate success in containing the spread of infection.
- Mathematical modeling studies project that social distancing measures prevent a rapid, overwhelming epidemic of COVID-19 cases.
- Analyses of state-level policies in Hong Kong and in the United States during the COVID-19 outbreak demonstrate that implementation of social distancing measures coincide with a reduced spread of the infection.[12]

[11] Mallapaty, Smriti. "What the Cruise-Ship Outbreaks Reveal about COVID-19," Nature News. accessed April 18, 2020, https://www.nature.com/articles/d41586-020-00885-w.

[12] Benjamin J Cowling et al., "Impact Assessment of Non-Pharmaceutical Interventions against Coronavirus Disease 2019 and Influenza in Hong Kong: An Observational Study," *The Lancet Public Health*, April 2020, https://doi.org/10.1016/S2468-2667(20)30090-6.

Social distancing has been recommended by the CDC, the WHO, the Infectious Diseases Society of America, and numerous other professional organizations and public health entities in response to this outbreak. Social distancing is the officially stated policy of state and federal governments in response to COVID-19. Without social distancing, medical experience demonstrates that the rate of transmission will be rampant and uncontrolled, and will risk overwhelming the healthcare system.

I reviewed the materials from the Sheriff suggesting that the provision of surgical masks alleviates the need for social distancing. This is inconsistent with the position of the CDC, the WHO, and a number of professional and public health organizations with expertise on COVID-19. As I described above, surgical masks do not prevent fomite, airborne transmission, and fecal-oral transmission of the virus. The high rate of infectivity by asymptomatic or mildly symptomatic persons, in concert with the limitations of clinical assessment and PCR testing in identifying positive cases, makes social distancing a necessary intervention to prevent the spread of infection and downstream complications of COVID-19.

I reviewed materials from the Sheriff indicating that the jail considers 170 detainees who have COVID-19 to be medically recovered from the disease. The term "medically recovered" is ambiguous since it can mean either (1) the alleviation of symptoms and clinical resolution of disease in an individual or (2) the inability for a person with COVID-19 to transmit the virus and infect others. The determination of when a COVID-19 patient is unable to transmit the virus and infect others is complex because of the limited data on this issue. In most settings, patients with COVID-19 are considered to be unable to transmit the infection only several days following the resolution of symptoms and with a negative nasopharyngeal SARS-CoV-2 PCR test.

I reviewed materials from the Sheriff stating that individuals who have recovered from COVID-19 have immunity to the virus. While it is hypothesized that most individuals who are infected with COVID-19 develop immunity to the virus, there are many uncertainties to this statement. Durable immunity to COVID-19 after infection has not been proven in large-scale medical studies, though it is inferred from similar coronaviruses. There are several known cases of COVID-19 patients meeting criteria for hospital discharge or discontinuation of quarantine (with stricter criteria than is stipulated in the Sherriff's documentation) who subsequently are found to have a positive nasopharyngeal PCR test.[13]

Amir M. Mohareb, MD
Division of Infectious Diseases
Massachusetts General Hospital
Gray-Jackson 504
55 Fruit Street, Boston, MA 02114
amohareb@mgh.harvard.edu

[13] Lan Lan et al., "Positive RT-PCR Test Results in Patients Recovered From COVID-19," *JAMA*, February 27, 2020, https://doi.org/10.1001/jama.2020.2783.

Materials Provided to Dr. Mohareb

- Concetta Mennella's 4/6/2020 and 4/13/2020 Declarations
- Michael Miller's 4/6/2020 and 4/17/2020 Declarations
- Rebecca Levin's 4/6/2020 Declaration
- Defendant's 4/13/2020 Post-Ruling Report (Dkt. 51)
- Defendant's 4/17/2020 PI Response (Dkt. 62)
- Gregg Gonsalves Declaration (Exhibit G to Plaintiffs' Renewed PI Motion)
- COVID-19 Incarceration Model (Exhibit J to Plaintifs' Renewed PI Motion)
- Sarah Grady Declaration (Exhibit D to Plaintiffs' Renewed PI Motion)
- Dr. Puisis's Declaration (Exhibit B to Plaintiffs' Complaint)

EXHIBIT C

Declaration of Laura Rasmussen-Torvik, PhD, MPH

1. My name is Laura Rasmussen-Torvik. I am the Chief of Epidemiology in the Department of Preventive Medicine at Northwestern University. I have a PhD in Epidemiology and have held a faculty position at Northwestern for over 10 years. My CV is attached to this declaration.

2. I was asked by Plaintiffs' counsel in *Mays v. Dart* to review daily counts of positive COVID-19 detainees in isolation and convalescent detainees in recovery at the Cook County jail to comment on COVID-19 transmission and trends at the Cook County jail. However, I am unable to comment on these topics based on these statistics alone.

3. We cannot truly understand trends only by looking at daily cumulative confirmed case counts—which are typically presented in aggregate and not broken down into those in isolation and recovery (or positive and "no longer positive" as presented on the Cook County Sheriff's office website https://www.cookcountysheriff.org/covid-19-cases-at-ccdoc/). In order to begin to understand trends in COVID-19 in a location, we need to understand how many tests are conducted each day, and how many of these tests are positive each day. The less testing you do on a given day, the fewer positive tests you will have; however, this does not necessarily indicate that there are fewer cases of disease presenting in the population on that day.

4. For the Cook County Jail, it is important to provide this information both for detainees and correctional officers. Per the Cook County Sheriff's website on April 18, it appears that cumulatively 445 detainees have been tested for COVID-19 and 350 have tested positive—a positive test result rate of over 78%. Per the Illinois Department of Health on April 18 in all of Illinois (https://www.dph.illinois.gov/covid19/covid19-statistics), 137,404 COVID-19 tests had been performed with 29,160 results—a positive rate of 21%.

5. At a press conference about COVID-19 on March 30th, Michael Ryan, executive director of the WHO Health Emergencies Program, stated that "If 80-90% of the people test positive, you are probably missing a lot of cases," and "we would certainly like to see countries testing at the level of ten negative tests to one positive, as a general benchmark of a system that's doing enough testing to pick up all cases."

6. To understand the trends at the Cook County Jail, it is also necessary to understand how "no longer positive" detainees or "convalescent" detainees are classified. The CDC does not use the terms "no longer positive" or "convalescent", but instead provides guidance about when people who have tested positive can discontinue isolation based on a) test based or b) symptom based strategy. https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-in-home-patients.html

7. Because of both widespread issues with access to testing and the lengthy clinical course of COVID-19 (particularly in more severe cases), in addition to daily tests and positive tests, health departments are tracking the number of COVID-19+ patients (as well as

COVID-19 "persons under investigation" or PUI) who are (1) hospitalized but not in the ICU and (2) who are hospitalized in the ICU, in order to understand disease trends.

8. On April 18, the Illinois Department of Health reported 3,148 total COVID + PUI in hospitals but not in the ICU, and 1,192 COVID + PUI patients in the ICU (https://www.dph.illinois.gov/covid19/hospitalization-utilization) across Illinois. To understand COVID-19 trends at the Cook County Jail it would be important to know daily counts of the number of detainees hospitalized (including in the hospital facilities on the premises of the Jail) and the number requiring ICU care.

9. Given recent evidence of spread of COVID-19 from people without any symptoms (https://www.cdc.gov/mmwr/volumes/69/wr/mm6914e1.htm) it is critical that all Illinoisans continue to practice social distancing, remaining 6 feet apart, practicing appropriate hand hygiene, and utilizing cloth masks whenever possible in order to control the spread of this disease.

I declare under penalty of perjury that the foregoing information I have provided is true and correct to the best of my knowledge, information, memory, and belief.

April 19, 2020
Evanston, Illinois

/s/ Laura Rasmussen-Torvik
Laura Rasmussen-Torvik

1/2/20

Laura J. Rasmussen-Torvik, PhD, MPH, FAHA

Business Address: 680 N. Lake Shore Drive, Suite 1400, Chicago, IL, 60611
Business Phone: 312-503-3596
Email: ljrtorvik@northwestern.edu

EDUCATION

College

- AB, Dartmouth College, Biogenetics (History minor), 2000

TRAINING

- MPH, University of Minnesota School of Public Health, Epidemiology, 2004
- PhD, University of Minnesota, Epidemiology (Genetics minor), 2007
- Post-Doctoral Fellowship, University of Minnesota, Cardiovascular Disease Epidemiology, 2010

ACADEMIC APPOINTMENTS

- Chief, Division of Epidemiology, Department of Preventive Medicine, Northwestern University Feinberg School of Medicine, 2019-present
- Associate Professor, Department of Preventive Medicine, Northwestern University Feinberg School of Medicine, 2019-present
    - Division of Epidemiology (primary appointment)
    - Division of Health and Biomedical Informatics (secondary appointment)
    - Division of Public Health Practice (secondary appointment)
- Assistant Professor, Department of Preventive Medicine, Northwestern University Feinberg School of Medicine, 2010-2019
    - Division of Epidemiology (primary appointment)
    - Division of Health and Biomedical Informatics (secondary appointment)
    - Division of Public Health Practice (secondary appointment)
- Member, Center for Genetic Medicine, Northwestern University Feinberg School of Medicine, 2010-present
- MPH Concentration Director, Northwestern University Feinberg School of Medicine, 2015-2017
- Member, Center for Education in the Health Sciences, Northwestern University Feinberg School of Medicine, 2015-present

HONORS AND AWARDS

A. Elected Society Memberships

- Phi Beta Kappa, Dartmouth College, 2000
- FAHA, American Heart Association, 2014

B. International/National/Regional

- US Public Health Service Traineeship, 2002-2003

C. University

- Center for Diabetes Research Travel Award, University of Minnesota, 2008
- Feinberg School of Medicine, Outstanding Teacher, 2017
- Program in Public Health, Teaching Excellence Award, 2017 and 2018

INSTITUTIONAL SERVICE (Committees, Councils, Task Forces)

A. University

- KL2 Training Grant Executive Committee, Northwestern University, 2015-present

B. School

- NUgene Core Committee, Northwestern University Feinberg School of Medicine, 2010-present
- Junior Faculty Research Advisory Council, Northwestern University Feinberg School of Medicine 2011-2015
- MSEB Evaluation and Examination Committee, Northwestern University Feinberg School of Medicine 2011-2017 (co-chair 2011-2014)
- Research Cores Committee, Northwestern University Feinberg School of Medicine 2013-2016
- MPH Executive Committee, Northwestern University Feinberg School of Medicine, 2014-present

C. Department

- Department Executive Committee, Northwestern University Feinberg School of Medicine Department of Preventive Medicine, 2019-present

COMMUNITY / PUBLIC SERVICE

- Northwestern Medicine Scholars Program at Westinghouse Prep, 2012
- Jump Rope for Heart (AHA), Evanston, IL, 2016

PARTICIPATION IN PROFESSIONAL SOCIETIES AND EXTRAMURAL ORGANIZATIONS

A. Professional Society Memberships

- AHA, Council on Epidemiology and Prevention, 2005-present
- AHA, Council in Functional Genomics and Translational Biology, 2010-present
- Society for Epidemiologic Research, 2012-present
- International Genetic Epidemiology Society, 2016-present

B. Leadership and Service (leadership positions held, committee service, etc.)

- Member, Early Career Committee of the AHA Epidemiology and Prevention, 2012-2014
- Early Career Representative, AHA Epidemiology and Prevention Council Publications Committee, 2012-2014
- Member, Molecular Determinants of Cardiovascular Health Joint Committee of the Functional Genomics and Translational Biology and Epidemiology and Prevention Councils, 2015-present
- Member, AHA Epidemiology and Prevention Council Membership Committee, 2016-present

EDITORIAL AND MANUSCRIPT REVIEW RESPONSIBILITIES

- Journal Statistics and Methods Reviewer*: JAMA Open*
- Journal Manuscript Reviewer: *Circulation, Annals of Human Genetics, American Journal of Cardiology, Obesity, Arthritis and Rheumatism, Metabolism: Clinical and Experimental, Translational Research, Cancer Epidemiology, Biomarkers, and Prevention, JAMA, American Journal of Epidemiology, Circulation: Cardiovascular Genetics, Diabetes, Cardiology, Hypertension, International Journal of Obesity, PLOS Genetics, PLOS Medicine, PLOS One, BMC Medical Genomics, Diabetes Care*
- Internal Manuscript Reviewer: ARIC, MESA, CARDIA, and CHS Studies
- Abstract Reviewer: American Heart Association, Society for Epidemiologic Research, American Diabetes Association, Association for Clinical and Translational Science

GRANT REVIEW RESPONSIBILITIES

- Early Career Reviewer, NIH CASE Study Section, February 2014
- Study Section Member, AHA GTOE Pop1 Study Section, 2016
- Study Section Member, AHA, Precision Medicine Artificial Intelligence and Machine Learning, 2019

GRANT AWARDS AND CLINICAL TRIALS

A. Current

- Agency: American Heart Association

ID: 19SFRN34850101
Title: Integration of genomics into clinical care for SCD
PI: Rasmussen-Torvik
Effort: 1.8 Calendar
Current Year Direct Cost: $181,890
Project Total Costs: $880,000
Project Period: 07/01/2019 - 06/30/2023

- Agency: National Center for Chronic Disease Prev. and Health Promotion

ID: U18DP006120
Title: Effect of ACA Medicaid Expansion on Diabetes: Diagnosis, Treatment, Patient compliance, and Health Outcomes
PI: Black
Role: Co-I
Effort: 1.8 Calendar
Current Year Direct Cost: $376,223
Project Total Costs: $2,191,533
Project Period: 09/30/15 – 09/29/20

- Agency: National Center for Advancing Translational Sciences

ID: 5UL1TR001422
Title: Northwestern University Clinical and Translational Science Institute (NUCATS)
PI: Lloyd-Jones
Role: Co-Director RAMP
Effort: 0.9 Calendar
Current Year Direct Cost: $4,891,236
Project Period: 07/15/19 – 06/30/24

- Agency: National Human Genome Research Institute

ID: U01HG008673
Title: Genomic Medicine at Northwestern: Discovery and Implementation
PI: Chisholm
Role: Co-I
Effort: 1.2 Calendar
Current Year Direct Cost: $539,021
Project Total Costs: $3,403,555
Project Period: 09/01/15 – 05/31/20

- Agency: National Inst. of Child Health & Human Development

ID: U54HD085601
Title: Optimizing Medication Management for Mothers with Depression during Pregnancy (OPTI-MOM)
PI: Wisner
Role: Co-I and Pilot PI
Effort: 2.1 Calendar
Current Year Direct Cost: $476,122
Project Total Costs: $3,772,069

Project Period: 08/01/15 – 06/30/20

- Agency: National Heart Lung and Blood Institute

ID: 2R01HL107577
Title: Determinants, Trajectories, and Consequences of Abnormal Cardiac Mechanics
PI: Shah
Role: Co-I
Effort: 0.6 Calendar
Current Year Direct Cost: $482,548
Project Total Costs: $2,745,518
Project Period: 07/05/16 – 04/30/20

- Agency: National Institute of Child Health and Development

ID: 1R01HD089455-01-A1
Title: Molecular Basis of Altered Drug Metabolism During Pregnancy
PI: Wisner
Role: Co-I
Effort: 0.6 Calendar
Current Year Direct Cost: $236,680
Project Total Costs: $1,495,316
Project Period: 08/10/17 – 06/30/22

- Agency: National Institute of Neurological Disorders and Stroke

ID: U54NS108874
Title: Channelopathy-Associated Epilepsy Research Center
PI: George
Role: Co-I
Effort: 0.6 Calendar
Current Year Direct Cost: $112,247
Project Total Costs: $2,542,337
Project Period: 09/30/18 – 05/31/19

- Agency: National Heart, Lung, and Blood Institute

ID: 75N92020D00004
Title: Multi-Ethnic Study of Atherosclerosis (MESA) - Field Center
PI: Allen
Role: Co-I
Effort: 0.35 Calendar
Current Year Direct Cost: $441,894
Project Period: 12/19/19 – 12/18/24

- Agency: National Heart, Lung, and Blood Institute

ID: 1U01HL146408-01
Title: The American Lung Association (ALA) Cohort
PI: Kalhan
Role: Co-I
Effort: 0.6 Calendar
Current Year Direct Cost: $2,633,107
Project Total Costs: $ 24,800,693.00
Project Period: 06/15/2019 – 04/30/2020

B. Pending

- Agency: National Human Genome Research Institute

ID: U01HG011169
Title: Northwestern Genomic Risk Assessment and Management Program
MPI: Rasmussen-Torvik
Effort: 4.0 Calendar
Current Year Direct Cost: $680,000
Project Total Costs: $5,632,301
Project Period: 04/01/2020-03/31/2025

C. Past

- Agency: NMH/Friends of Prentice Foundation

ID: Agmt 12/13/17
Title: Elucidating Neonatal Discontinuation Syndrome in Infants Exposed to Antidepressants
PI: Rasmussen-Torvik
Effort: 0 Calendar
Project Total Costs: $50,000
Project Period: 09/01/17-08/31/19
Agency: PCORI via Chicago Community Trust

- Agency: PCORI

ID: PCORI-PFA-2015
Title: PCORnet Bariatric Surgery
PI: Arterburn
Role: Subcontract PI
Effort: 0.60 Calendar
Current Year Direct Cost: $16,344
Project Total Costs: $47,294
Project Period: 02/01/16-01/31/18

- Agency: National Institute on Minority Health and Health Disparities

ID: U54MD010723
Title: African American Cardiovascular pharmacogenetic CONsorTium (ACCOuNT): discovery and translation
PI: Perera
Role: Co-I
Effort: 0.6 Calendar
Current Year Direct Cost: $1,178,917
Project Total Costs: $9,525,128
Project Period: 8/19/2016 – 5/31/2021

- Agency: National Center for Advancing Translational Sciences

ID: UL1TR000150
Title: NU Multidiciplinary Clinical and Translational Science Scholar Program (KL2)
PI: Lloyd-Jones KL2: Scholar Rasmussen-Torvik

Role: KL2 Scholar
Effort: 9.0 Calendar
Project Total Costs: $4,195,948
Project Period: 05/01/12-04/30/14

- Agency: National Human Genome Research Institute

ID: U01HG006388
Title: eMERGE2-PGx Supplement
PI: Chisholm
Role: Co-I
Effort: 1.2 Calendar
Project Total Costs: $590,560
Project Period: 08/01/12 – 07/31/15

- Agency: National Human Genome Research Institute

ID: U01HG006388
Title: A Personalized Genomic Medicine Pilot Program Using NUgene eMERGE Experience
PI: Chisholm
Role: Co-I
Effort: 0.6 Calendar
Project Total Costs: $3,528,143
Project Period: 08/15/11 – 07/31/15

- Agency: PCORI via Chicago Community Trust

ID: CDRN-1306-04737
Title: Chicago Area Patient Centered Outcomes Research Network (CAPriCORN)
PI: Mazany
Role: Co-I
Effort: 0.6 Calendar
Project Total Costs: $6,615,576
Project Period: 03/01/14 – 8/31/15

- Agency: National Heart Lung and Blood Institute

ID: 1R01HL107577
Title: Study of Cardiac Mechanics in Systemic Hypertension
PI: Shah
Role: Co-I
Effort: 0.6 Calendar
Project Total Costs: $1,395,162
Project Period: 05/21/11 – 03/31/16

- Agency: American Heart Association

ID: 15CVGPSD27260148
Title: Molecular Determinants of Hypertensive Heart Failure with preserved ejection fraction (HFpEF): Genomics, Transcriptomics, and Proteomics
PI: Shah
Role: Co-I
Effort: 0.6 Calendar
Project Total Costs: $159,990
Project Period: 12/01/15 – 11/30/16

- Agency: National Human Genome Research Institute

ID: U01HG004609
Title: Genome-wide Studies from the NUgene Biorespository
PI: Chisholm
Role: Co-I
Effort: 2.4 Calendar
Project Total Costs: $4,239,880
Project Period: 9/27/07-7/31/11

- Agency: Northwestern Memorial Foundation

ID: 2013 DGTRI
Title: The association of targeted exonic variants and post-surgical weight loss
PI: Rasmussen-Torvik
Effort: 0.12 Calendar
Project Total Costs: $25,000
Project Period: 01/01/13 – 12/31/14

- Agency: National Heart Lung and Blood Institute

ID: N01-HC-48049
Title: Longitudinal Studies of Coronary Heart Disease Risk Factor in Young Adults (CARDIA)
PI: Liu
Role: Co-I
Effort: 0.6 Calendar
Project Period: 12/30/83 – 06/30/13

- Agency: National Heart Lung and Blood Institute

ID: N01-HC-95164
Title: Multi-Ethnic Study of Atherosclerosis (MESA): Field Center
PI: Liu
Role: Co-I
Effort: 0.6 Calendar
Project Period: 01/15/99 – 08/14/15

INVITED LECTURES

A. International/National

- CVD Epidemiology and Electronic Health Records, Presented at Tel Aviv University, Tel Aviv, Israel, April 29th, 2014
- Moderator, Jeremiah and Rose Stamler Award for Young Investigators. Presented at American Heart Association 2015 Epidemiology and Lifestyle Council Meeting. Baltimore, MD, March 5th 2015
- Outcomes in eMERGE PGx, Presented at Genomic Medicine Meeting X (Hosted by NHGRI Office of Population Genomics), Silver Spring, Maryland, May 3rd, 2017
- Clinical Translation of NGS, Panel Member: Front Line Genomics Special Interest Group, Boston, MA, 6/12/18
- The PCORnet Bariatric Study: Preliminary Results from a Large PCORnet Demonstration Project, presented at NIH/PCORnet Collaboratory Grand Rounds (webinar), August 17th, 2018.
- Pharmacoepidemiology and Implementation Science Studies: How Can they Guide my Prescribing Practice? Presented at Obstetric-Fetal Pharmacology: Practical Prescribing and Research Methods Update, Chicago, IL, November 2nd, 2018.
- MESA ROR: discussions to date in multi-center study. TOPMed Steering Committee Meeting. Tysons, VA, April 24-25, 2019.

B. Regional

- The eMERGE PGx project: The Northwestern Experience, Presented at the NorthShore Research Bioinformatics Seminar, Evanston, IL March 4th, 2014
- Northwestern EHR/Epidemiology Research, Presented at the Sinai Urban Health Institute Epidemiology Seminar, Chicago, IL, May 26th, 2016

C. Local

- GWAS resources in the Department of Preventive Medicine, Department of Preventive Medicine Cardiovascular Epidemiology Seminar, July 13th, 2012
- Demographic predictors of weight loss after bariatric surgery, Department of Preventive Medicine Cardiovascular Epidemiology Seminar, June 14th, 2013
- eMERGE-PGx: The Northwestern Experience, Department of Preventive Medicine Cardiovascular Epidemiology Seminar March 13th, 2015
- Return of research WGS results to biobank participants: issues and challenges, Department of Preventive Medicine Cardiovascular Epidemiology Seminar June 23rd, 2017

D. Multi-Center Study

- PGx update, eMERGE study steering committee meeting, February 26th, 2013
- PGx update, eMERGE study steering committee meeting, June 3rd, 2013
- PGx update, eMERGE study steering committee meeting, October 7th, 2013
- Clinical and research genotyping in eMERGE, eMERGE III planning meeting, NHGRI, January 22nd, 2014
- PGx update, eMERGE study steering committee meeting, January 23rd, 2014
- PGx update, eMERGE study steering committee meeting, June 23rd, 2014
- Overlap of Diastolic Dysfunction definitions in CARDIA, CARDIA steering committee meeting, Oct 16th, 2014
- PGx update, eMERGE study steering committee meeting, Dec 4th, 2014
- PGx update, eMERGE study steering committee meeting, March 30th, 2015
- PGx update, eMERGE study steering committee meeting, June 29th, 2015
- PGx update, eMERGE study steering committee meeting, September 16th, 2015
- OPTIMOM Pilot Design, OPRC Network steering committee meeting, October 5th, 2015
- PGx update, eMERGE study steering committee meeting, April 4th, 2016
- Sample selection for Northwestern ACA project, NEXT-D2 steering committee meeting, June 28th, 2016
- PGx update, eMERGE study steering committee meeting, October 6th, 2016
- OPTIMOM Pilot Modifications. OPRC Network steering committee meeting, October 20th, 2016
- PGx update, eMERGE study steering committee meeting, Feb 1st, 2017
- Challenges of Diabetes Definitions for Northwestern ACA project, NEXT-D2 steering committee meeting, Sept 7th, 2017
- PGx update, eMERGE study steering committee meeting, Oct 10th, 2017
- PGx update, eMERGE study steering committee meeting, Jan 26th, 2018
- PGx update, eMERGE study steering committee meeting, Oct 26th, 2018
- PGx update, eMERGE study steering committee meeting, Jan 17th, 2019
- Expansion of OPTI-MOM Pilot Study, OPRC Network steering committee meeting, March 5th, 2019

PUBLICATIONS AND SCHOLARLY WORK

A. Peer-reviewed Original Investigations

1. Day JW, Ricker K, Jacobsen JF, **Rasmussen** LJ, Dick KA, Kress W, Schneider C, Koch MC, Beilman GJ, Harrison AR, Dalton JC, Ranum LP. Myotonic dystrophy type 2: molecular, diagnostic and clinical spectrum. Neurology. 2003;60(4):657-64. Epub 2003/02/26. doi: 10.1212/01.wnl.0000054481.84978.f9. PubMed PMID: 12601109.

2. **Rasmussen-Torvik** LJ, North KE, Gu CC, Lewis CE, Wilk JB, Chakravarti A, Chang YP, Miller MB, Li N, Devereux RB, Arnett DK. A population association study of angiotensinogen polymorphisms and haplotypes with left ventricular phenotypes. Hypertension. 2005;46(6):1294-9. Epub 2005/11/16. doi: 10.1161/01.HYP.0000192653.17209.84. PubMed PMID: 16286570.

3. Folsom AR, Cushman M, Heckbert SR, Ohira T, **Rasmussen-Torvik** L, Tsai MY. Factor VII coagulant activity, factor VII -670A/C and -402G/A polymorphisms, and risk of venous thromboembolism. J Thromb Haemost. 2007;5(8):1674-8. Epub 2007/08/01. doi: 10.1111/j.1538-7836.2007.02620.x. PubMed PMID: 17663738.

4. **Rasmussen-Torvik** LJ, Cushman M, Tsai MY, Zhang Y, Heckbert SR, Rosamond WD, Folsom AR. The association of alpha-fibrinogen Thr312Ala polymorphism and venous thromboembolism in the LITE study. Thromb Res. 2007;121(1):1-7. Epub 2007/04/17. doi: 10.1016/j.thromres.2007.02.008. PubMed PMID: 17433418; PMCID: PMC2679171.

5. **Rasmussen-Torvik** LJ, McAlpine DD. Genetic screening for SSRI drug response among those with major depression: great promise and unseen perils. Depress Anxiety. 2007;24(5):350-7. Epub 2006/11/11. doi: 10.1002/da.20251. PubMed PMID: 17096399.

6. **Rasmussen-Torvik** LJ, Pankow JS, Jacobs DR, Steffen LM, Moran AM, Steinberger J, Sinaiko AR. Heritability and genetic correlations of insulin sensitivity measured by the euglycaemic clamp. Diabet Med. 2007;24(11):1286-9. Epub 2007/10/25. doi: 10.1111/j.1464-5491.2007.02271.x. PubMed PMID: 17956454.

7. **Rasmussen-Torvik** LJ, Pankow JS, Jacobs DR, Jr., Sinaiko AR. Preliminary report: No association between TCF7L2 rs7903146 and euglycemic-clamp-derived insulin sensitivity in a mixed-age cohort. Metabolism. 2009;58(10):1369-71. Epub 2009/07/04. doi: 10.1016/j.metabol.2009.04.023. PubMed PMID: 19573884; PMCID: PMC2748141.

8. **Rasmussen-Torvik** LJ, Pankow JS, Jacobs DR, Jr., Steinberger J, Moran A, Sinaiko AR. The association of SNPs in ADIPOQ, ADIPOR1, and ADIPOR2 with insulin sensitivity in a cohort of adolescents and their parents. Hum Genet. 2009;125(1):21-8. Epub 2008/11/28. doi: 10.1007/s00439-008-0595-4. PubMed PMID: 19037660; PMCID: PMC2881545.

9. **Rasmussen-Torvik** LJ, Pankow JS, Jacobs DR, Jr., Steinberger J, Moran AM, Sinaiko AR. Influence of waist on adiponectin and insulin sensitivity in adolescence. Obesity (Silver Spring). 2009;17(1):156-61. Epub 2008/12/25. doi: 10.1038/oby.2008.482. PubMed PMID: 19107128; PMCID: PMC2862502.

10. **Rasmussen-Torvik** LJ, Pankow JS, Peacock JM, Borecki IB, Hixson JE, Tsai MY, Kabagambe EK, Arnett DK. Suggestion for linkage of chromosome 1p35.2 and 3q28 to plasma adiponectin concentrations in the GOLDN Study. BMC Med Genet. 2009;10:39. Epub 2009/05/12. doi: 10.1186/1471-2350-10-39. PubMed PMID: 19426517; PMCID: PMC2691741.

11. Bi M, Kao WH, Boerwinkle E, Hoogeveen RC, **Rasmussen-Torvik** LJ, Astor BC, North KE, Coresh J, Kottgen A. Association of rs780094 in GCKR with metabolic traits and incident diabetes and cardiovascular disease: the ARIC Study. PLoS One. 2010;5(7):e11690. Epub 2010/07/28. doi: 10.1371/journal.pone.0011690. PubMed PMID: 20661421; PMCID: PMC2908550.

12. **Rasmussen-Torvik** LJ, Alonso A, Li M, Kao W, Kottgen A, Yan Y, Couper D, Boerwinkle E, Bielinski SJ, Pankow JS. Impact of repeated measures and sample selection on genome-wide association studies of fasting glucose. Genet

Epidemiol. 2010;34(7):665-73. Epub 2010/09/15. doi: 10.1002/gepi.20525. PubMed PMID: 20839289; PMCID: PMC2964401.

13. **Rasmussen-Torvik** LJ, Yatsuya H, Selvin E, Alonso A, Folsom AR. Demographic and cardiovascular risk factors modify association of fasting insulin with incident coronary heart disease and ischemic stroke (from the Atherosclerosis Risk In Communities Study). Am J Cardiol. 2010;105(10):1420-5. Epub 2010/05/11. doi: 10.1016/j.amjcard.2009.12.065. PubMed PMID: 20451688; PMCID: PMC2883917.

14. Manning AK, LaValley M, Liu CT, Rice K, An P, Liu Y, Miljkovic I, **Rasmussen-Torvik** L, Harris TB, Province MA, Borecki IB, Florez JC, Meigs JB, Cupples LA, Dupuis J. Meta-analysis of gene-environment interaction: joint estimation of SNP and SNP x environment regression coefficients. Genet Epidemiol. 2011;35(1):11-8. Epub 2010/12/25. doi: 10.1002/gepi.20546. PubMed PMID: 21181894; PMCID: PMC3312394.

15. **Rasmussen-Torvik** LJ, Li M, Kao WH, Couper D, Boerwinkle E, Bielinski SJ, Folsom AR, Pankow JS. Association of a fasting glucose genetic risk score with subclinical atherosclerosis: The Atherosclerosis Risk in Communities (ARIC) study. Diabetes. 2011;60(1):331-5. Epub 2010/11/03. doi: 10.2337/db10-0839. PubMed PMID: 21036910; PMCID: PMC3012190.

16. Wassel CL, Pankow JS, **Rasmussen-Torvik** LJ, Li N, Taylor KD, Guo X, Goodarzi MO, Palmas WR, Post WS. Associations of SNPs in ADIPOQ and subclinical cardiovascular disease in the multi-ethnic study of atherosclerosis (MESA). Obesity (Silver Spring). 2011;19(4):840-7. Epub 2010/10/12. doi: 10.1038/oby.2010.229. PubMed PMID: 20930713; PMCID: PMC3510267.

17. Zuvich RL, Armstrong LL, Bielinski SJ, Bradford Y, Carlson CS, Crawford DC, Crenshaw AT, de Andrade M, Doheny KF, Haines JL, Hayes MG, Jarvik GP, Jiang L, Kullo IJ, Li R, Ling H, Manolio TA, Matsumoto ME, McCarty CA, McDavid AN, Mirel DB, Olson LM, Paschall JE, Pugh EW, Rasmussen LV, **Rasmussen-Torvik** LJ, Turner SD, Wilke RA, Ritchie MD. Pitfalls of merging GWAS data: lessons learned in the eMERGE network and quality control procedures to maintain high data quality. Genet Epidemiol. 2011;35(8):887-98. Epub 2011/11/30. doi: 10.1002/gepi.20639. PubMed PMID: 22125226; PMCID: PMC3592376.

18. Bielinski SJ, Pankow JS, **Rasmussen-Torvik** LJ, Bailey K, Li M, Selvin E, Couper D, Vazquez G, Brancati F. Strength of association for incident diabetes risk factors according to diabetes case definitions: the Atherosclerosis Risk in Communities Study. Am J Epidemiol. 2012;175(5):466-72. Epub 2012/01/17. doi: 10.1093/aje/kwr326. PubMed PMID: 22247044; PMCID: PMC3282875.

19. Kho AN, Hayes MG, **Rasmussen-Torvik** L, Pacheco JA, Thompson WK, Armstrong LL, Denny JC, Peissig PL, Miller AW, Wei WQ, Bielinski SJ, Chute CG, Leibson CL, Jarvik GP, Crosslin DR, Carlson CS, Newton KM, Wolf WA, Chisholm RL, Lowe WL. Use of diverse electronic medical record systems to identify genetic risk for type 2 diabetes within a genome-wide association study. J Am Med Inform Assoc. 2012;19(2):212-8. Epub 2011/11/22. doi: 10.1136/amiajnl-2011-000439. PubMed PMID: 22101970; PMCID: PMC3277617.

20. Lutsey PL, **Rasmussen-Torvik** LJ, Pankow JS, Alonso A, Smolenski DJ, Tang W, Coresh J, Volcik KA, Ballantyne CM, Boerwinkle E, Folsom AR. Relation of lipid gene scores to longitudinal trends in lipid levels and incidence of abnormal lipid levels among individuals of European ancestry: the Atherosclerosis Risk in Communities (ARIC) study. Circ Cardiovasc Genet. 2012;5(1):73-80. Epub 2011/11/08. doi: 10.1161/CIRCGENETICS.111.959619. PubMed PMID: 22057756; PMCID: PMC3288431.

21. Prizment AE, Gross M, **Rasmussen-Torvik** L, Peacock JM, Anderson KE. Genes related to diabetes may be associated with pancreatic cancer in a population-based case-control study in Minnesota. Pancreas. 2012;41(1):50-3. Epub 2011/10/22. doi: 10.1097/MPA.0b013e3182247625. PubMed PMID: 22015968; PMCID: PMC3241825.

22. **Rasmussen-Torvik** LJ, Guo X, Bowden DW, Bertoni AG, Sale MM, Yao J, Bluemke DA, Goodarzi MO, Chen YI, Vaidya D, Raffel LJ, Papanicolaou GJ, Meigs JB, Pankow JS. Fasting glucose GWAS candidate region analysis across ethnic groups in the Multiethnic Study of Atherosclerosis (MESA). Genet Epidemiol. 2012;36(4):384-91. Epub 2012/04/18. doi: 10.1002/gepi.21632. PubMed PMID: 22508271; PMCID: PMC3507617.

23. **Rasmussen-Torvik** LJ, Pacheco JA, Wilke RA, Thompson WK, Ritchie MD, Kho AN, Muthalagu A, Hayes MG, Armstrong LL, Scheftner DA, Wilkins JT, Zuvich RL, Crosslin D, Roden DM, Denny JC, Jarvik GP, Carlson CS, Kullo IJ, Bielinski SJ, McCarty CA, Li R, Manolio TA, Crawford DC, Chisholm RL. High density GWAS for LDL cholesterol in African Americans using electronic medical records reveals a strong protective variant in APOE. Clin Transl Sci. 2012;5(5):394-9. Epub 2012/10/17. doi: 10.1111/j.1752-8062.2012.00446.x. PubMed PMID: 23067351; PMCID: PMC3521536.

24. **Rasmussen-Torvik** LJ, Pankow JS, Jacobs DR, Jr., Steinberger J, Moran A, Sinaiko AR. Development of associations among central adiposity, adiponectin and insulin sensitivity from adolescence to young adulthood. Diabet Med. 2012;29(9):1153-8. Epub 2012/06/08. doi: 10.1111/j.1464-5491.2012.03726.x. PubMed PMID: 22672197; PMCID: PMC3418404.

25. **Rasmussen-Torvik** LJ, Wassel CL, Ding J, Carr J, Cushman M, Jenny N, Allison MA. Associations of body mass index and insulin resistance with leptin, adiponectin, and the leptin-to-adiponectin ratio across ethnic groups: the Multi-Ethnic Study of Atherosclerosis (MESA). Ann Epidemiol. 2012;22(10):705-9. Epub 2012/08/30. doi: 10.1016/j.annepidem.2012.07.011. PubMed PMID: 22929534; PMCID: PMC3459265.

26. Vassy JL, Durant NH, Kabagambe EK, Carnethon MR, **Rasmussen-Torvik** LJ, Fornage M, Lewis CE, Siscovick DS, Meigs JB. A genotype risk score predicts type 2 diabetes from young adulthood: the CARDIA study. Diabetologia. 2012;55(10):2604-12. Epub 2012/07/12. doi: 10.1007/s00125-012-2637-7. PubMed PMID: 22782289; PMCID: PMC3434294.

27. Ding K, de Andrade M, Manolio TA, Crawford DC, **Rasmussen-Torvik** LJ, Ritchie MD, Denny JC, Masys DR, Jouni H, Pachecho JA, Kho AN, Roden DM, Chisholm R, Kullo IJ. Genetic variants that confer resistance to malaria are associated with red blood cell traits in African-Americans: an electronic medical record-based genome-wide association study. G3 (Bethesda). 2013;3(7):1061-8. Epub 2013/05/23. doi: 10.1534/g3.113.006452. PubMed PMID: 23696099; PMCID: PMC3704235.

28. **Rasmussen-Torvik** LJ, Shay CM, Abramson JG, Friedrich CA, Nettleton JA, Prizment AE, Folsom AR. Ideal cardiovascular health is inversely associated with incident cancer: the Atherosclerosis Risk In Communities study. Circulation. 2013;127(12):1270-5. Epub 2013/03/20. doi: 10.1161/CIRCULATIONAHA.112.001183. PubMed PMID: 23509058; PMCID: PMC3685848.

29. Raynor LA, Pankow JS, **Rasmussen-Torvik** LJ, Tang W, Prizment A, Couper DJ. Pleiotropy and pathway analyses of genetic variants associated with both type 2 diabetes and prostate cancer. Int J Mol Epidemiol Genet. 2013;4(1):49-60. Epub 2013/04/09. PubMed PMID: 23565322; PMCID: PMC3612454.

30. Vardeny O, Gupta DK, Claggett B, Burke S, Shah A, Loehr L, **Rasmussen-Torvik** L, Selvin E, Chang PP, Aguilar D, Solomon SD. Insulin resistance and incident heart failure the ARIC study (Atherosclerosis Risk in Communities). JACC Heart Fail. 2013;1(6):531-6. Epub 2014/01/24. doi: 10.1016/j.jchf.2013.07.006. PubMed PMID: 24455475; PMCID: PMC3893700.

31. Hughes-Austin JM, Wassel CL, Jimenez J, Criqui MH, Ix JH, **Rasmussen-Torvik** LJ, Budoff MJ, Jenny NS, Allison MA. The relationship between adiposity-associated inflammation and coronary artery and abdominal aortic calcium

differs by strata of central adiposity: The Multi-Ethnic Study of Atherosclerosis (MESA). Vasc Med. 2014;19(4):264-71. Epub 2014/06/08. doi: 10.1177/1358863X14537545. PubMed PMID: 24907349; PMCID: PMC4258162.

32. Muthalagu A, Pacheco JA, Aufox S, Peissig PL, Fuehrer JT, Tromp G, Kho AN, **Rasmussen-Torvik** LJ. A rigorous algorithm to detect and clean inaccurate adult height records within EHR systems. Appl Clin Inform. 2014;5(1):118-26. Epub 2014/04/16. doi: 10.4338/ACI-2013-09-RA-0074. PubMed PMID: 24734128; PMCID: PMC3974252.

33. **Rasmussen-Torvik** LJ, Stallings SC, Gordon AS, Almoguera B, Basford MA, Bielinski SJ, Brautbar A, Brilliant MH, Carrell DS, Connolly JJ, Crosslin DR, Doheny KF, Gallego CJ, Gottesman O, Kim DS, Leppig KA, Li R, Lin S, Manzi S, Mejia AR, Pacheco JA, Pan V, Pathak J, Perry CL, Peterson JF, Prows CA, Ralston J, Rasmussen LV, Ritchie MD, Sadhasivam S, Scott SA, Smith M, Vega A, Vinks AA, Volpi S, Wolf WA, Bottinger E, Chisholm RL, Chute CG, Haines JL, Harley JB, Keating B, Holm IA, Kullo IJ, Jarvik GP, Larson EB, Manolio T, McCarty CA, Nickerson DA, Scherer SE, Williams MS, Roden DM, Denny JC. Design and anticipated outcomes of the eMERGE-PGx project: a multicenter pilot for preemptive pharmacogenomics in electronic health record systems. Clin Pharmacol Ther. 2014;96(4):482-9. Epub 2014/06/25. doi: 10.1038/clpt.2014.137. PubMed PMID: 24960519; PMCID: PMC4169732.

34. Selvaraj S, Aguilar FG, Martinez EE, Beussink L, Kim KY, Peng J, **Rasmussen-Torvik** L, Sha J, Irvin MR, Gu CC, Lewis CE, Hunt SC, Arnett DK, Shah SJ. Association of comorbidity burden with abnormal cardiac mechanics: findings from the HyperGEN study. J Am Heart Assoc. 2014;3(3):e000631. Epub 2014/05/02. doi: 10.1161/JAHA.113.000631. PubMed PMID: 24780206; PMCID: PMC4309045.

35. Vassy JL, Hivert MF, Porneala B, Dauriz M, Florez JC, Dupuis J, Siscovick DS, Fornage M, **Rasmussen-Torvik** LJ, Bouchard C, Meigs JB. Polygenic type 2 diabetes prediction at the limit of common variant detection. Diabetes. 2014;63(6):2172-82. Epub 2014/02/13. doi: 10.2337/db13-1663. PubMed PMID: 24520119; PMCID: PMC4030114.

36. Baldridge AS, Pacheco JA, Aufox SA, Kim KY, Silverstein JC, Denham W, Hungness E, Smith ME, Allen NB, Greenland P, **Rasmussen-Torvik** LJ. Factors Associated With Long-Term Weight Loss Following Bariatric Surgery Using 2 Methods for Repeated Measures Analysis. Am J Epidemiol. 2015;182(3):235-43. Epub 2015/06/21. doi: 10.1093/aje/kwv039. PubMed PMID: 26093003; PMCID: PMC4517695.

37. Bielinski SJ, Pathak J, Carrell DS, Takahashi PY, Olson JE, Larson NB, Liu H, Sohn S, Wells QS, Denny JC, **Rasmussen-Torvik** LJ, Pacheco JA, Jackson KL, Lesnick TG, Gullerud RE, Decker PA, Pereira NL, Ryu E, Dart RA, Peissig P, Linneman JG, Jarvik GP, Larson EB, Bock JA, Tromp GC, de Andrade M, Roger VL. A Robust e-Epidemiology Tool in Phenotyping Heart Failure with Differentiation for Preserved and Reduced Ejection Fraction: the Electronic Medical Records and Genomics (eMERGE) Network. J Cardiovasc Transl Res. 2015;8(8):475-83. Epub 2015/07/22. doi: 10.1007/s12265-015-9644-2. PubMed PMID: 26195183; PMCID: PMC4651838.

38. Dauriz M, Porneala BC, Guo X, Bielak LF, Peyser PA, Durant NH, Carnethon MR, Bonadonna RC, Bonora E, Bowden DW, Florez JC, Fornage M, Hivert MF, Jacobs DR, Jr., Kabagambe EK, Lewis CE, Murabito JM, **Rasmussen-Torvik** LJ, Rich SS, Vassy JL, Yao J, Carr JJ, Kardia SL, Siscovick D, O'Donnell CJ, Rotter JI, Dupuis J, Meigs JB. Association of a 62 Variants Type 2 Diabetes Genetic Risk Score With Markers of Subclinical Atherosclerosis: A Transethnic, Multicenter Study. Circ Cardiovasc Genet. 2015;8(3):507-15. Epub 2015/03/26. doi: 10.1161/CIRCGENETICS.114.000740. PubMed PMID: 25805414; PMCID: PMC4472563.

39. De R, Verma SS, Drenos F, Holzinger ER, Holmes MV, Hall MA, Crosslin DR, Carrell DS, Hakonarson H, Jarvik G, Larson E, Pacheco JA, **Rasmussen-Torvik** LJ, Moore CB, Asselbergs FW, Moore JH, Ritchie MD, Keating BJ, Gilbert-Diamond D. Identifying gene-gene interactions that are highly associated with Body Mass Index using Quantitative Multifactor Dimensionality Reduction (QMDR). BioData Min. 2015;8:41. Epub 2015/12/18. doi: 10.1186/s13040-015-0074-0. PubMed PMID: 26674805; PMCID: PMC4678717.

40. **Rasmussen-Torvik** LJ, Baldridge AS, Pacheco JA, Aufox SA, Kim KY, Silverstein JC, Denham EW, Hungness E, Smith ME, Greenland P. rs4771122 Predicts Multiple Measures of Long-Term Weight Loss After Bariatric Surgery. Obes Surg. 2015;25(11):2225-9. Epub 2015/09/05. doi: 10.1007/s11695-015-1872-7. PubMed PMID: 26337695; PMCID: PMC4598314.

41. Wassel CL, **Rasmussen-Torvik** LJ, Callas PW, Denenberg JO, Durda JP, Reiner AP, Smith NL, Allison MA, Rosendaal FR, Criqui MH, Cushman M. A genetic risk score comprising known venous thromboembolism loci is associated with chronic venous disease in a multi-ethnic cohort. Thromb Res. 2015;136(5):966-73. Epub 2015/10/08. doi: 10.1016/j.thromres.2015.09.016. PubMed PMID: 26442836; PMCID: PMC4718662.

42. Aguilar FG, Selvaraj S, Martinez EE, Katz DH, Beussink L, Kim KY, Ping J, **Rasmussen-Torvik** L, Goyal A, Sha J, Irvin MR, Arnett DK, Shah SJ. Archeological Echocardiography: Digitization and Speckle Tracking Analysis of Archival Echocardiograms in the HyperGEN Study. Echocardiography. 2016;33(3):386-97. Epub 2015/11/04. doi: 10.1111/echo.13095. PubMed PMID: 26525308; PMCID: PMC4775325.

43. Allen NB, Lloyd-Jones D, Hwang SJ, **Rasmussen-Torvik** L, Fornage M, Morrison AC, Baldridge AS, Boerwinkle E, Levy D, Cupples LA, Fox CS, Thanassoulis G, Dufresne L, Daviglus M, Johnson AD, Reis J, Rotter J, Palmas W, Allison M, Pankow JS, O'Donnell CJ. Genetic loci associated with ideal cardiovascular health: A meta-analysis of genome-wide association studies. Am Heart J. 2016;175:112-20. Epub 2016/05/18. doi: 10.1016/j.ahj.2015.12.022. PubMed PMID: 27179730; PMCID: PMC4873714.

44. Avram MJ, Stika CS, **Rasmussen-Torvik** LJ, Ciolino JD, Pinheiro E, George AL, Jr., Wisner KL. Rationale and design for an investigation to optimize selective serotonin reuptake inhibitor treatment for pregnant women with depression. Clin Pharmacol Ther. 2016;100(1):31-3. Epub 2016/04/03. doi: 10.1002/cpt.375. PubMed PMID: 27037844.

45. Bush WS, Crosslin DR, Owusu-Obeng A, Wallace J, Almoguera B, Basford MA, Bielinski SJ, Carrell DS, Connolly JJ, Crawford D, Doheny KF, Gallego CJ, Gordon AS, Keating B, Kirby J, Kitchner T, Manzi S, Mejia AR, Pan V, Perry CL, Peterson JF, Prows CA, Ralston J, Scott SA, Scrol A, Smith M, Stallings SC, Veldhuizen T, Wolf W, Volpi S, Wiley K, Li R, Manolio T, Bottinger E, Brilliant MH, Carey D, Chisholm RL, Chute CG, Haines JL, Hakonarson H, Harley JB, Holm IA, Kullo IJ, Jarvik GP, Larson EB, McCarty CA, Williams MS, Denny JC, **Rasmussen-Torvik** LJ, Roden DM, Ritchie MD. Genetic variation among 82 pharmacogenes: The PGRNseq data from the eMERGE network. Clin Pharmacol Ther. 2016;100(2):160-9. Epub 2016/02/10. doi: 10.1002/cpt.350. PubMed PMID: 26857349; PMCID: PMC5010878.

46. Freed BH, Daruwalla V, Cheng JY, Aguilar FG, Beussink L, Choi A, Klein DA, Dixon D, Baldridge A, **Rasmussen-Torvik** LJ, Maganti K, Shah SJ. Prognostic Utility and Clinical Significance of Cardiac Mechanics in Heart Failure With Preserved Ejection Fraction: Importance of Left Atrial Strain. Circ Cardiovasc Imaging. 2016;9(3). Epub 2016/03/05. doi: 10.1161/CIRCIMAGING.115.003754. PubMed PMID: 26941415; PMCID: PMC4780261.

47. Jackson KL, Mbagwu M, Pacheco JA, Baldridge AS, Viox DJ, Linneman JG, Shukla SK, Peissig PL, Borthwick KM, Carrell DA, Bielinski SJ, Kirby JC, Denny JC, Mentch FD, Vazquez LM, **Rasmussen-Torvik** LJ, Kho AN. Performance of an electronic health record-based phenotype algorithm to identify community associated methicillin-resistant Staphylococcus aureus cases and controls for genetic association studies. BMC Infect Dis. 2016;16(1):684. Epub 2016/11/20. doi: 10.1186/s12879-016-2020-2. PubMed PMID: 27855652; PMCID: PMC5114817.

48. Keaton JM, Hellwege JN, Ng MC, Palmer ND, Pankow JS, Fornage M, Wilson JG, Correa A, **Rasmussen-Torvik** LJ, Rotter JI, Chen YD, Taylor KD, Rich SS, Wagenknecht LE, Freedman BI, Bowden DW. Genome-Wide Interaction with Insulin Secretion Loci Reveals Novel Loci for Type 2 Diabetes in African Americans. PLoS One. 2016;11(7):e0159977. Epub 2016/07/23. doi: 10.1371/journal.pone.0159977. PubMed PMID: 27448167; PMCID: PMC4957757.

49. Kershaw KN, Liu K, Goff DC, Jr., Lloyd-Jones DM, **Rasmussen-Torvik** LJ, Reis JP, Schreiner PJ, Garside DB, Sidney S. Description and initial evaluation of incorporating electronic follow-up of study participants in a longstanding multisite cohort study. BMC Med Res Methodol. 2016;16(1):125. Epub 2016/09/25. doi: 10.1186/s12874-016-0226-z. PubMed PMID: 27664124; PMCID: PMC5035484.

50. **Rasmussen-Torvik** LJ, De Chavez PJD, Kershaw KN, Montag SE, Knutson KL, Kim KA, Zee PC, Carnethon MR. The Mediation of Racial Differences in Hypertension by Sleep Characteristics: Chicago Area Sleep Study. Am J Hypertens. 2016;29(12):1353-7. Epub 2016/08/20. doi: 10.1093/ajh/hpw093. PubMed PMID: 27538722; PMCID: PMC5966848.

51. Van Driest SL, Wells QS, Stallings S, Bush WS, Gordon A, Nickerson DA, Kim JH, Crosslin DR, Jarvik GP, Carrell DS, Ralston JD, Larson EB, Bielinski SJ, Olson JE, Ye Z, Kullo IJ, Abul-Husn NS, Scott SA, Bottinger E, Almoguera B, Connolly J, Chiavacci R, Hakonarson H, **Rasmussen-Torvik** LJ, Pan V, Persell SD, Smith M, Chisholm RL, Kitchner TE, He MM, Brilliant MH, Wallace JR, Doheny KF, Shoemaker MB, Li R, Manolio TA, Callis TE, Macaya D, Williams MS, Carey D, Kapplinger JD, Ackerman MJ, Ritchie MD, Denny JC, Roden DM. Association of Arrhythmia-Related Genetic Variants With Phenotypes Documented in Electronic Medical Records. JAMA. 2016;315(1):47-57. Epub 2016/01/10. doi: 10.1001/jama.2015.17701. PubMed PMID: 26746457; PMCID: PMC4758131.

52. Karavites LC, Kane AK, Zaveri S, Xu Y, Helenowski I, Hansen N, Bethke KP, **Rasmussen-Torvik** LJ, Khan SA. Tamoxifen Acceptance and Adherence among Patients with Ductal Carcinoma In Situ (DCIS) Treated in a Multidisciplinary Setting. Cancer Prev Res (Phila). 2017;10(7):389-97. Epub 2017/06/01. doi: 10.1158/1940-6207.CAPR-17-0029. PubMed PMID: 28559459.

53. Keaton JM, Hellwege JN, Ng MCY, Palmer ND, Pankow JS, Fornage M, Wilson JG, Correa A, **Rasmussen-Torvik** LJ, Rotter JI, Chen YI, Taylor KD, Rich SS, Wagenknecht LE, Freedman BI, Bowden DW. Genome-Wide Interaction with Selected Type 2 Diabetes Loci Reveals Novel Loci for Type 2 Diabetes in African Americans. Pac Symp Biocomput. 2017;22:242-53. Epub 2016/11/30. doi: 10.1142/9789813207813_0024. PubMed PMID: 27896979; PMCID: PMC5146756.

54. Nadkarni GN, Galarneau G, Ellis SB, Nadukuru R, Zhang J, Scott SA, Schurmann C, Li R, **Rasmussen-Torvik** LJ, Kho AN, Hayes MG, Pacheco JA, Manolio TA, Chisholm RL, Roden DM, Denny JC, Kenny EE, Bottinger EP. Apolipoprotein L1 Variants and Blood Pressure Traits in African Americans. J Am Coll Cardiol. 2017;69(12):1564-74. Epub 2017/03/25. doi: 10.1016/j.jacc.2017.01.040. PubMed PMID: 28335839; PMCID: PMC5479565.

55. **Rasmussen-Torvik** LJ, Almoguera B, Doheny KF, Freimuth RR, Gordon AS, Hakonarson H, Hawkins JB, Husami A, Ivacic LC, Kullo IJ, Linderman MD, Manolio TA, Obeng AO, Pellegrino R, Prows CA, Ritchie MD, Smith ME, Stallings SC, Wolf WA, Zhang K, Scott SA. Concordance between Research Sequencing and Clinical Pharmacogenetic Genotyping in the eMERGE-PGx Study. J Mol Diagn. 2017;19(4):561-6. Epub 2017/05/16. doi: 10.1016/j.jmoldx.2017.04.002. PubMed PMID: 28502727; PMCID: PMC5500823.

56. **Rasmussen-Torvik** LJ, Colangelo LA, Lima JAC, Jacobs DR, Rodriguez CJ, Gidding SS, Lloyd-Jones DM, Shah SJ. Prevalence and Predictors of Diastolic Dysfunction According to Different Classification Criteria: The Coronary Artery Risk Development in Young in Adults Study. Am J Epidemiol. 2017;185(12):1221-7. Epub 2017/04/30. doi: 10.1093/aje/kww214. PubMed PMID: 28453616; PMCID: PMC5860331.

57. Safarova MS, Fan X, Jarvik GP, Leppig KA, **Rasmussen-Torvik** LJ, Pendergrass S, Sturm A, Namjou B, Shah A, Carroll R, Chung WK, Wei WQ, Stein M, Williams MS, Roden DM, Denny JC, Kullo IJ. A Phenome-Wide Association Study to Assess Pleiotropic Effects of LPA. Circulation. 2017;136:2. PubMed PMID: WOS:000437035906372.

58. Toh S, **Rasmussen-Torvik** LJ, Harmata EE, Pardee R, Saizan R, Malanga E, Sturtevant JL, Horgan CE, Anau J, Janning CD, Wellman RD, Coley RY, Cook AJ, Courcoulas AP, Coleman KJ, Williams NA, McTigue KM, Arterburn D, McClay

J, Collaborative PCBS. The National Patient-Centered Clinical Research Network (PCORnet) Bariatric Study Cohort: Rationale, Methods, and Baseline Characteristics. JMIR Res Protoc. 2017;6(12):e222. Epub 2017/12/07. doi: 10.2196/resprot.8323. PubMed PMID: 29208590; PMCID: PMC5736875.

59. Yang A, Ciolino JD, Pinheiro E, **Rasmussen-Torvik** LJ, Sit DKY, Wisner KL. Neonatal Discontinuation Syndrome in Serotonergic Antidepressant-Exposed Neonates. J Clin Psychiatry. 2017;78(5):605-11. Epub 2017/06/02. doi: 10.4088/JCP.16m11044. PubMed PMID: 28570796.

60. Hylind R, Smith M, **Rasmussen-Torvik** L, Aufox S. Great expectations: patient perspectives and anticipated utility of non-diagnostic genomic-sequencing results. J Community Genet. 2018;9(1):19-26. Epub 2017/06/29. doi: 10.1007/s12687-017-0314-8. PubMed PMID: 28656483; PMCID: PMC5752650.

61. Keaton JM, Gao C, Guan M, Hellwege JN, Palmer ND, Pankow JS, Fornage M, Wilson JG, Correa A, **Rasmussen-Torvik** LJ, Rotter JI, Chen YI, Taylor KD, Rich SS, Wagenknecht LE, Freedman BI, Ng MCY, Bowden DW. Genome-wide interaction with the insulin secretion locus MTNR1B reveals CMIP as a novel type 2 diabetes susceptibility gene in African Americans. Genet Epidemiol. 2018;42(6):559-70. Epub 2018/04/25. doi: 10.1002/gepi.22126. PubMed PMID: 29691896; PMCID: PMC6160319.

62. Lane-Cordova AD, Tedla YG, Carnethon MR, Montag SE, Dude AM, **Rasmussen-Torvik** LJ. Pre-pregnancy blood pressure and body mass index trajectories and incident hypertensive disorders of pregnancy. Pregnancy Hypertens. 2018;13:138-40. Epub 2018/09/05. doi: 10.1016/j.preghy.2018.06.003. PubMed PMID: 30177041.

63. Liotta EM, Romanova AL, Lizza BD, **Rasmussen-Torvik** LJ, Kim M, Francis B, Sangha RS, Carroll TJ, Ganger D, Ladner DP, Naidech AM, Paparello JJ, Prabhakaran S, Sorond FA, Maas MB. Osmotic Shifts, Cerebral Edema, and Neurologic Deterioration in Severe Hepatic Encephalopathy. Crit Care Med. 2018;46(2):280-9. Epub 2018/01/18. doi: 10.1097/CCM.0000000000002831. PubMed PMID: 29341965; PMCID: PMC5774236.

64. Loomis SJ, Li M, Maruthur NM, Baldridge AS, North KE, Mei H, Morrison A, Carson AP, Pankow JS, Boerwinkle E, Scharpf R, **Rasmussen-Torvik** LJ, Coresh J, Duggal P, Kottgen A, Selvin E. Genome-Wide Association Study of Serum Fructosamine and Glycated Albumin in Adults Without Diagnosed Diabetes: Results From the Atherosclerosis Risk in Communities Study. Diabetes. 2018;67(8):1684-96. Epub 2018/05/31. doi: 10.2337/db17-1362. PubMed PMID: 29844224; PMCID: PMC6054442.

65. Reges O, Greenland P, Dicker D, Leibowitz M, Hoshen M, Gofer I, **Rasmussen-Torvik** LJ, Balicer RD. Association of Bariatric Surgery Using Laparoscopic Banding, Roux-en-Y Gastric Bypass, or Laparoscopic Sleeve Gastrectomy vs Usual Care Obesity Management With All-Cause Mortality. JAMA. 2018;319(3):279-90. Epub 2018/01/18. doi: 10.1001/jama.2017.20513. PubMed PMID: 29340677; PMCID: PMC5833565.

66. Volpi S, Bult CJ, Chisholm RL, Deverka PA, Ginsburg GS, Jacob HJ, Kasapi M, McLeod HL, Roden DM, Williams MS, Green ED, Rodriguez LL, Aronson S, Cavallari LH, Denny JC, Dressler LG, Johnson JA, Klein TE, Leeder JS, Piquette-Miller M, Perera M, **Rasmussen-Torvik** LJ, Rehm HL, Ritchie MD, Skaar TC, Wagle N, Weinshilboum R, Weitzel KW, Wildin R, Wilson J, Manolio TA, Relling MV. Research Directions in the Clinical Implementation of Pharmacogenomics: An Overview of US Programs and Projects. Clin Pharmacol Ther. 2018;103(5):778-86. Epub 2018/02/21. doi: 10.1002/cpt.1048. PubMed PMID: 29460415; PMCID: PMC5902434.

67. Wei WQ, Li X, Feng Q, Kubo M, Kullo IJ, Peissig PL, Karlson EW, Jarvik GP, Lee MTM, Shang N, Larson EA, Edwards T, Shaffer CM, Mosley JD, Maeda S, Horikoshi M, Ritchie M, Williams MS, Larson EB, Crosslin DR, Bland ST, Pacheco JA, **Rasmussen-Torvik** LJ, Cronkite D, Hripcsak G, Cox NJ, Wilke RA, Stein CM, Rotter JI, Momozawa Y, Roden DM, Krauss RM, Denny JC. LPA Variants Are Associated With Residual Cardiovascular Risk in Patients Receiving Statins. Circulation.

2018;138(17):1839-49. Epub 2018/04/29. doi: 10.1161/CIRCULATIONAHA.117.031356. PubMed PMID: 29703846; PMCID: PMC6202211.

68. Barata L, Feitosa MF, Bielak LF, Halligan B, Baldridge AS, Guo X, Yerges-Armstrong LM, Smith AV, Yao J, Palmer ND, VanWagner LB, Carr JJ, Chen YI, Allison M, Budoff MJ, Handelman SK, Kardia SLR, Mosley TH, Jr., Ryan K, Harris TB, Launer LJ, Gudnason V, Rotter JI, Fornage M, **Rasmussen-Torvik** LJ, Borecki IB, O'Connell JR, Peyser PA, Speliotes EK, Province MA. Insulin Resistance Exacerbates Genetic Predisposition to Nonalcoholic Fatty Liver Disease in Individuals Without Diabetes. Hepatol Commun. 2019;3(7):894-907. Epub 2019/07/25. doi: 10.1002/hep4.1353. PubMed PMID: 31334442; PMCID: PMC6601321.

69. Khan SS, Kim KA, Peng J, Aguilar FG, Selvaraj S, Martinez EE, Baldridge AS, Sha J, Irvin MR, Broeckel U, Arnett DK, **Rasmussen-Torvik** LJ, Shah SJ. Clinical correlates and heritability of cardiac mechanics: The HyperGEN study. Int J Cardiol. 2019;274:208-13. Epub 2018/07/27. doi: 10.1016/j.ijcard.2018.07.057. PubMed PMID: 30045819; PMCID: PMC6242726.

70. Rasmussen LV, Smith ME, Almaraz F, Persell SD, **Rasmussen-Torvik** LJ, Pacheco JA, Chisholm RL, Christensen C, Herr TM, Wehbe FH, Starren JB. An ancillary genomics system to support the return of pharmacogenomic results. J Am Med Inform Assoc. 2019;26(4):306-10. Epub 2019/02/20. doi: 10.1093/jamia/ocy187. PubMed PMID: 30778576; PMCID: PMC6402311.

71. **Rasmussen-Torvik** LJ, Reges O, Greenland P, Dicker D, Leibowitz M, Senderey AB, Hoshen M, Balicer RD. All-Cause Mortality Following Bariatric Surgery in Smokers and Non-smokers. Obes Surg. 2019;29(12):3854-9. Epub 2019/07/07. doi: 10.1007/s11695-019-04055-4. PubMed PMID: 31278656.

72. Safarova MS, Satterfield BA, Fan X, Austin EE, Ye Z, Bastarache L, Zheng N, Ritchie MD, Borthwick KM, Williams MS, Larson EB, Scrol A, Jarvik GP, Crosslin DR, Leppig K, **Rasmussen-Torvik** LJ, Pendergrass SA, Sturm AC, Namjou B, Shah AS, Carroll RJ, Chung WK, Wei WQ, Feng Q, Stein CM, Roden DM, Manolio TA, Schaid DJ, Denny JC, Hebbring SJ, de Andrade M, Kullo IJ. A phenome-wide association study to discover pleiotropic effects of PCSK9, APOB, and LDLR. NPJ Genom Med. 2019;4:3. Epub 2019/02/19. doi: 10.1038/s41525-019-0078-7. PubMed PMID: 30774981; PMCID: PMC6370860.

73. Stanaway IB, Hall TO, Rosenthal EA, Palmer M, Naranbhai V, Knevel R, Namjou-Khales B, Carroll RJ, Kiryluk K, Gordon AS, Linder J, Howell KM, Mapes BM, Lin FTJ, Joo YY, Hayes MG, Gharavi AG, Pendergrass SA, Ritchie MD, de Andrade M, Croteau-Chonka DC, Raychaudhuri S, Weiss ST, Lebo M, Amr SS, Carrell D, Larson EB, Chute CG, **Rasmussen-Torvik** LJ, Roy-Puckelwartz MJ, Sleiman P, Hakonarson H, Li R, Karlson EW, Peterson JF, Kullo IJ, Chisholm R, Denny JC, Jarvik GP, e MN, Crosslin DR. The eMERGE genotype set of 83,717 subjects imputed to ~40 million variants genome wide and association with the herpes zoster medical record phenotype. Genet Epidemiol. 2019;43(1):63-81. Epub 2018/10/10. doi: 10.1002/gepi.22167. PubMed PMID: 30298529; PMCID: PMC6375696.

74. Unkart JT, Allison MA, Criqui MH, McDermott MM, Wood AC, Folsom AR, Lloyd-Jones D, **Rasmussen-Torvik** LJ, Allen N, Burke G, Szklo M, Cushman M, McClelland RL, Wassel CL. Life's Simple 7 and Peripheral Artery Disease: The Multi-Ethnic Study of Atherosclerosis. Am J Prev Med. 2019;56(2):262-70. Epub 2018/12/17. doi: 10.1016/j.amepre.2018.09.021. PubMed PMID: 30553692; PMCID: PMC6422346.

75. Zhang X, Veturi Y, Verma S, Bone W, Verma A, Lucas A, Hebbring S, Denny JC, Stanaway IB, Jarvik GP, Crosslin D, Larson EB, **Rasmussen-Torvik** L, Pendergrass SA, Smoller JW, Hakonarson H, Sleiman P, Weng C, Fasel D, Wei WQ, Kullo I, Schaid D, Chung WK, Ritchie MD. Detecting potential pleiotropy across cardiovascular and neurological diseases using univariate, bivariate, and multivariate methods on 43,870 individuals from the eMERGE network. Pac Symp Biocomput. 2019;24:272-83. Epub 2019/03/14. PubMed PMID: 30864329; PMCID: PMC6457436.

A2. Peer-Reviewed Original Investigations (Consortium)

*Some of my work as a genetic epidemiologist has involved participation in the large GWAS-meta analyses required to assemble sufficient sample size for detection of common genetic variants associated with common diseases. I have explained my role in each of these large consortium with an * after the citation.*

1. Billings LK, Hsu YH, Ackerman RJ, Dupuis J, Voight BF, **Rasmussen-Torvik** LJ, Hercberg S, Lathrop M, Barnes D, Langenberg C, Hui J, Fu M, Bouatia-Naji N, Lecoeur C, An P, Magnusson PK, Surakka I, Ripatti S, Christiansen L, Dalgard C, Folkersen L, Grundberg E, Investigators M, Consortium D, Mu TC, Investigators A, Consortium G, Eriksson P, Kaprio J, Ohm Kyvik K, Pedersen NL, Borecki IB, Province MA, Balkau B, Froguel P, Shuldiner AR, Palmer LJ, Wareham N, Meneton P, Johnson T, Pankow JS, Karasik D, Meigs JB, Kiel DP, Florez JC. Impact of common variation in bone-related genes on type 2 diabetes and related traits. Diabetes. 2012;61(8):2176-86. doi: 10.2337/db11-1515. PubMed PMID: 22698912; PMCID: 3402303. **I performed the GWAS analyses in the ARIC study for this paper.*

2. Dastani Z, Hivert MF, Timpson N, Perry JR, Yuan X, Scott RA, Henneman P, Heid IM, Kizer JR, Lyytikainen LP, Fuchsberger C, Tanaka T, Morris AP, Small K, Isaacs A, Beekman M, Coassin S, Lohman K, Qi L, Kanoni S, Pankow JS, Uh HW, Wu Y, Bidulescu A, **Rasmussen-Torvik** LJ, Greenwood CM, Ladouceur M, Grimsby J, Manning AK, Liu CT, Kooner J, Mooser VE, Vollenweider P, Kapur KA, Chambers J, Wareham NJ, Langenberg C, Frants R, Willems-Vandijk K, Oostra BA, Willems SM, Lamina C, Winkler TW, Psaty BM, Tracy RP, Brody J, Chen I, Viikari J, Kahonen M, Pramstaller PP, Evans DM, St Pourcain B, Sattar N, Wood AR, Bandinelli S, Carlson OD, Egan JM, Bohringer S, van Heemst D, Kedenko L, Kristiansson K, Nuotio ML, Loo BM, Harris T, Garcia M, Kanaya A, Haun M, Klopp N, Wichmann HE, Deloukas P, Katsareli E, Couper DJ, Duncan BB, Kloppenburg M, Adair LS, Borja JB, Consortium D, Consortium M, Investigators G, Mu TC, Wilson JG, Musani S, Guo X, Johnson T, Semple R, Teslovich TM, Allison MA, Redline S, Buxbaum SG, Mohlke KL, Meulenbelt I, Ballantyne CM, Dedoussis GV, Hu FB, Liu Y, Paulweber B, Spector TD, Slagboom PE, Ferrucci L, Jula A, Perola M, Raitakari O, Florez JC, Salomaa V, Eriksson JG, Frayling TM, Hicks AA, Lehtimaki T, Smith GD, Siscovick DS, Kronenberg F, van Duijn C, Loos RJ, Waterworth DM, Meigs JB, Dupuis J, Richards JB, Voight BF, Scott LJ, Steinthorsdottir V, Dina C, Welch RP, Zeggini E, Huth C, Aulchenko YS, Thorleifsson G, McCulloch LJ, Ferreira T, Grallert H, Amin N, Wu G, Willer CJ, Raychaudhuri S, McCarroll SA, Hofmann OM, Segre AV, van Hoek M, Navarro P, Ardlie K, Balkau B, Benediktsson R, Bennett AJ, Blagieva R, Boerwinkle E, Bonnycastle LL, Bostrom KB, Bravenboer B, Bumpstead S, Burtt NP, Charpentier G, Chines PS, Cornelis M, Crawford G, Doney AS, Elliott KS, Elliott AL, Erdos MR, Fox CS, Franklin CS, Ganser M, Gieger C, Grarup N, Green T, Griffin S, Groves CJ, Guiducci C, Hadjadj S, Hassanali N, Herder C, Isomaa B, Jackson AU, Johnson PR, Jorgensen T, Kao WH, Kong A, Kraft P, Kuusisto J, Lauritzen T, Li M, Lieverse A, Lindgren CM, Lyssenko V, Marre M, Meitinger T, Midthjell K, Morken MA, Narisu N, Nilsson P, Owen KR, Payne F, Petersen AK, Platou C, Proenca C, Prokopenko I, Rathmann W, Rayner NW, Robertson NR, Rocheleau G, Roden M, Sampson MJ, Saxena R, Shields BM, Shrader P, Sigurdsson G, Sparso T, Strassburger K, Stringham HM, Sun Q, Swift AJ, Thorand B, Tichet J, Tuomi T, van Dam RM, van Haeften TW, van Herpt T, van Vliet-Ostaptchouk JV, Walters GB, Weedon MN, Wijmenga C, Witteman J, Bergman RN, Cauchi S, Collins FS, Gloyn AL, Gyllensten U, Hansen T, Hide WA, Hitman GA, Hofman A, Hunter DJ, Hveem K, Laakso M, Morris AD, Palmer CN, Rudan I, Sijbrands E, Stein LD, Tuomilehto J, Uitterlinden A, Walker M, Watanabe RM, Abecasis GR, Boehm BO, Campbell H, Daly MJ, Hattersley AT, Pedersen O, Barroso I, Groop L, Sladek R, Thorsteinsdottir U, Wilson JF, Illig T, Froguel P, van Duijn CM, Stefansson K, Altshuler D, Boehnke M, McCarthy MI, Soranzo N, Wheeler E, Glazer NL, Bouatia-Naji N, Magi R, Randall J, Elliott P, Rybin D, Dehghan A, Hottenga JJ, Song K, Goel A, Lajunen T, Doney A, Cavalcanti-Proenca C, Kumari M, Timpson NJ, Zabena C, Ingelsson E, An P, O'Connell J, Luan J, Elliott A, McCarroll SA, Roccasecca RM, Pattou F, Sethupathy P, Ariyurek Y, Barter P, Beilby JP, Ben-Shlomo Y, Bergmann S, Bochud M, Bonnefond A, Borch-Johnsen K, Bottcher Y, Brunner E, Bumpstead SJ, Chen YD, Chines P, Clarke R, Coin LJ, Cooper MN, Crisponi L, Day IN, de Geus EJ, Delplanque J, Fedson AC, Fischer-Rosinsky A, Forouhi NG, Franzosi MG, Galan P, Goodarzi MO, Graessler J, Grundy S, Gwilliam R, Hallmans G, Hammond N, Han X, Hartikainen AL, Hayward C, Heath SC, Hercberg S, Hillman DR, Hingorani AD, Hui J, Hung J, Kaakinen M, Kaprio J, Kesaniemi YA, Kivimaki M, Knight B, Koskinen S, Kovacs P, Kyvik KO, Lathrop GM, Lawlor DA, Le Bacquer O, Lecoeur C, Li Y, Mahley R, Mangino M, Martinez-Larrad MT, McAteer JB, McPherson R,

Meisinger C, Melzer D, Meyre D, Mitchell BD, Mukherjee S, Naitza S, Neville MJ, Orru M, Pakyz R, Paolisso G, Pattaro C, Pearson D, Peden JF, Pedersen NL, Pfeiffer AF, Pichler I, Polasek O, Posthuma D, Potter SC, Pouta A, Province MA, Rayner NW, Rice K, Ripatti S, Rivadeneira F, Rolandsson O, Sandbaek A, Sandhu M, Sanna S, Sayer AA, Scheet P, Seedorf U, Sharp SJ, Shields B, Sigurethsson G, Sijbrands EJ, Silveira A, Simpson L, Singleton A, Smith NL, Sovio U, Swift A, Syddall H, Syvanen AC, Tonjes A, Uitterlinden AG, van Dijk KW, Varma D, Visvikis-Siest S, Vitart V, Vogelzangs N, Waeber G, Wagner PJ, Walley A, Ward KL, Watkins H, Wild SH, Willemsen G, Witteman JC, Yarnell JW, Zelenika D, Zethelius B, Zhai G, Zhao JH, Zillikens MC, Consortium D, Consortium G, Global BPC, Borecki IB, Meneton P, Magnusson PK, Nathan DM, Williams GH, Silander K, Bornstein SR, Schwarz P, Spranger J, Karpe F, Shuldiner AR, Cooper C, Serrano-Rios M, Lind L, Palmer LJ, Hu FBs, Franks PW, Ebrahim S, Marmot M, Kao WH, Pramstaller PP, Wright AF, Stumvoll M, Hamsten A, Procardis C, Buchanan TA, Valle TT, Rotter JI, Penninx BW, Boomsma DI, Cao A, Scuteri A, Schlessinger D, Uda M, Ruokonen A, Jarvelin MR, Peltonen L, Mooser V, Sladek R, investigators M, Consortium G, Musunuru K, Smith AV, Edmondson AC, Stylianou IM, Koseki M, Pirruccello JP, Chasman DI, Johansen CT, Fouchier SW, Peloso GM, Barbalic M, Ricketts SL, Bis JC, Feitosa MF, Orho-Melander M, Melander O, Li X, Li M, Cho YS, Go MJ, Kim YJ, Lee JY, Park T, Kim K, Sim X, Ong RT, Croteau-Chonka DC, Lange LA, Smith JD, Ziegler A, Zhang W, Zee RY, Whitfield JB, Thompson JR, Surakka I, Spector TD, Smit JH, Sinisalo J, Scott J, Saharinen J, Sabatti C, Rose LM, Roberts R, Rieder M, Parker AN, Pare G, O'Donnell CJ, Nieminen MS, Nickerson DA, Montgomery GW, McArdle W, Masson D, Martin NG, Marroni F, Lucas G, Luben R, Lokki ML, Lettre G, Launer LJ, Lakatta EG, Laaksonen R, Kyvik KO, Konig IR, Khaw KT, Kaplan LM, Johansson A, Janssens AC, Igl W, Hovingh GK, Hengstenberg C, Havulinna AS, Hastie ND, Harris TB, Haritunians T, Hall AS, Groop LC, Gonzalez E, Freimer NB, Erdmann J, Ejebe KG, Doring A, Dominiczak AF, Demissie S, Deloukas P, de Faire U, Crawford G, Chen YD, Caulfield MJ, Boekholdt SM, Assimes TL, Quertermous T, Seielstad M, Wong TY, Tai ES, Feranil AB, Kuzawa CW, Taylor HA, Jr., Gabriel SB, Holm H, Gudnason V, Krauss RM, Ordovas JM, Munroe PB, Kooner JS, Tall AR, Hegele RA, Kastelein JJ, Schadt EE, Strachan DP, Reilly MP, Samani NJ, Schunkert H, Cupples LA, Sandhu MS, Ridker PM, Rader DJ, Kathiresan S. Novel loci for adiponectin levels and their influence on type 2 diabetes and metabolic traits: a multi-ethnic meta-analysis of 45,891 individuals. PLoS Genet. 2012;8(3):e1002607. doi: 10.1371/journal.pgen.1002607. PubMed PMID: 22479202; PMCID: 3315470. **I performed the GWAS analyses in the MESA study for this paper.*

3. Liu CT, Ng MC, Rybin D, Adeyemo A, Bielinski SJ, Boerwinkle E, Borecki I, Cade B, Chen YD, Djousse L, Fornage M, Goodarzi MO, Grant SF, Guo X, Harris T, Kabagambe E, Kizer JR, Liu Y, Lunetta KL, Mukamal K, Nettleton JA, Pankow JS, Patel SR, Ramos E, **Rasmussen-Torvik** L, Rich SS, Rotimi CN, Sarpong D, Shriner D, Sims M, Zmuda JM, Redline S, Kao WH, Siscovick D, Florez JC, Rotter JI, Dupuis J, Wilson JG, Bowden DW, Meigs JB. Transferability and fine-mapping of glucose and insulin quantitative trait loci across populations: CARe, the Candidate Gene Association Resource. Diabetologia. 2012;55(11):2970-84. doi: 10.1007/s00125-012-2656-4. PubMed PMID: 22893027; PMCID: 3804308. **I was the CARDIA representative for this paper.*

4. Manning AK, Hivert MF, Scott RA, Grimsby JL, Bouatia-Naji N, Chen H, Rybin D, Liu CT, Bielak LF, Prokopenko I, Amin N, Barnes D, Cadby G, Hottenga JJ, Ingelsson E, Jackson AU, Johnson T, Kanoni S, Ladenvall C, Lagou V, Lahti J, Lecoeur C, Liu Y, Martinez-Larrad MT, Montasser ME, Navarro P, Perry JR, **Rasmussen-Torvik** LJ, Salo P, Sattar N, Shungin D, Strawbridge RJ, Tanaka T, van Duijn CM, An P, de Andrade M, Andrews JS, Aspelund T, Atalay M, Aulchenko Y, Balkau B, Bandinelli S, Beckmann JS, Beilby JP, Bellis C, Bergman RN, Blangero J, Boban M, Boehnke M, Boerwinkle E, Bonnycastle LL, Boomsma DI, Borecki IB, Bottcher Y, Bouchard C, Brunner E, Budimir D, Campbell H, Carlson O, Chines PS, Clarke R, Collins FS, Corbaton-Anchuelo A, Couper D, de Faire U, Dedoussis GV, Deloukas P, Dimitriou M, Egan JM, Eiriksdottir G, Erdos MR, Eriksson JG, Eury E, Ferrucci L, Ford I, Forouhi NG, Fox CS, Franzosi MG, Franks PW, Frayling TM, Froguel P, Galan P, de Geus E, Gigante B, Glazer NL, Goel A, Groop L, Gudnason V, Hallmans G, Hamsten A, Hansson O, Harris TB, Hayward C, Heath S, Hercberg S, Hicks AA, Hingorani A, Hofman A, Hui J, Hung J, Jarvelin MR, Jhun MA, Johnson PC, Jukema JW, Jula A, Kao WH, Kaprio J, Kardia SL, Keinanen-Kiukaanniemi S, Kivimaki M, Kolcic I, Kovacs P, Kumari M, Kuusisto J, Kyvik KO, Laakso M, Lakka T, Lannfelt L, Lathrop GM, Launer LJ, Leander K, Li G, Lind L, Lindstrom J, Lobbens S, Loos RJ, Luan J, Lyssenko V, Magi R, Magnusson PK, Marmot M, Meneton P, Mohlke KL, Mooser V, Morken MA, Miljkovic I, Narisu N, O'Connell J, Ong KK, Oostra BA, Palmer LJ, Palotie A, Pankow JS, Peden JF, Pedersen NL, Pehlic M, Peltonen L, Penninx B, Pericic M, Perola M, Perusse L, Peyser PA, Polasek O, Pramstaller PP, Province MA, Raikkonen K, Rauramaa R, Rehnberg E, Rice K, Rotter JI, Rudan I, Ruokonen A, Saaristo T, Sabater-Lleal M, Salomaa V, Savage DB, Saxena R, Schwarz P, Seedorf U, Sennblad B, Serrano-Rios M, Shuldiner AR, Sijbrands EJ, Siscovick DS, Smit JH, Small KS,

Smith NL, Smith AV, Stancakova A, Stirrups K, Stumvoll M, Sun YV, Swift AJ, Tonjes A, Tuomilehto J, Trompet S, Uitterlinden AG, Uusitupa M, Vikstrom M, Vitart V, Vohl MC, Voight BF, Vollenweider P, Waeber G, Waterworth DM, Watkins H, Wheeler E, Widen E, Wild SH, Willems SM, Willemsen G, Wilson JF, Witteman JC, Wright AF, Yaghootkar H, Zelenika D, Zemunik T, Zgaga L, Replication DIG, Meta-analysis C, Multiple Tissue Human Expression Resource C, Wareham NJ, McCarthy MI, Barroso I, Watanabe RM, Florez JC, Dupuis J, Meigs JB, Langenberg C. A genome-wide approach accounting for body mass index identifies genetic variants influencing fasting glycemic traits and insulin resistance. Nat Genet. 2012;44(6):659-69. doi: 10.1038/ng.2274. PubMed PMID: 22581228; PMCID: 3613127. **I performed the GWAS analyses in the ARIC study for this paper and was part of the primary writing group.*

5. Scott RA, Chu AY, Grarup N, Manning AK, Hivert MF, Shungin D, Tonjes A, Yesupriya A, Barnes D, Bouatia-Naji N, Glazer NL, Jackson AU, Kutalik Z, Lagou V, Marek D, **Rasmussen-Torvik** LJ, Stringham HM, Tanaka T, Aadahl M, Arking DE, Bergmann S, Boerwinkle E, Bonnycastle LL, Bornstein SR, Brunner E, Bumpstead SJ, Brage S, Carlson OD, Chen H, Chen YD, Chines PS, Collins FS, Couper DJ, Dennison EM, Dowling NF, Egan JS, Ekelund U, Erdos MR, Forouhi NG, Fox CS, Goodarzi MO, Grassler J, Gustafsson S, Hallmans G, Hansen T, Hingorani A, Holloway JW, Hu FB, Isomaa B, Jameson KA, Johansson I, Jonsson A, Jorgensen T, Kivimaki M, Kovacs P, Kumari M, Kuusisto J, Laakso M, Lecoeur C, Levy-Marchal C, Li G, Loos RJ, Lyssenko V, Marmot M, Marques-Vidal P, Morken MA, Muller G, North KE, Pankow JS, Payne F, Prokopenko I, Psaty BM, Renstrom F, Rice K, Rotter JI, Rybin D, Sandholt CH, Sayer AA, Shrader P, Schwarz PE, Siscovick DS, Stancakova A, Stumvoll M, Teslovich TM, Waeber G, Williams GH, Witte DR, Wood AR, Xie W, Boehnke M, Cooper C, Ferrucci L, Froguel P, Groop L, Kao WH, Vollenweider P, Walker M, Watanabe RM, Pedersen O, Meigs JB, Ingelsson E, Barroso I, Florez JC, Franks PW, Dupuis J, Wareham NJ, Langenberg C. No interactions between previously associated 2-hour glucose gene variants and physical activity or BMI on 2-hour glucose levels. Diabetes. 2012;61(5):1291-6. doi: 10.2337/db11-0973. PubMed PMID: 22415877; PMCID: 3331745. **I performed the GWAS analyses in the ARIC study for this paper.*

6. Scott RA, Lagou V, Welch RP, Wheeler E, Montasser ME, Luan J, Magi R, Strawbridge RJ, Rehnberg E, Gustafsson S, Kanoni S, **Rasmussen-Torvik** LJ, Yengo L, Lecoeur C, Shungin D, Sanna S, Sidore C, Johnson PC, Jukema JW, Johnson T, Mahajan A, Verweij N, Thorleifsson G, Hottenga JJ, Shah S, Smith AV, Sennblad B, Gieger C, Salo P, Perola M, Timpson NJ, Evans DM, Pourcain BS, Wu Y, Andrews JS, Hui J, Bielak LF, Zhao W, Horikoshi M, Navarro P, Isaacs A, O'Connell JR, Stirrups K, Vitart V, Hayward C, Esko T, Mihailov E, Fraser RM, Fall T, Voight BF, Raychaudhuri S, Chen H, Lindgren CM, Morris AP, Rayner NW, Robertson N, Rybin D, Liu CT, Beckmann JS, Willems SM, Chines PS, Jackson AU, Kang HM, Stringham HM, Song K, Tanaka T, Peden JF, Goel A, Hicks AA, An P, Muller-Nurasyid M, Franco-Cereceda A, Folkersen L, Marullo L, Jansen H, Oldehinkel AJ, Bruinenberg M, Pankow JS, North KE, Forouhi NG, Loos RJ, Edkins S, Varga TV, Hallmans G, Oksa H, Antonella M, Nagaraja R, Trompet S, Ford I, Bakker SJ, Kong A, Kumari M, Gigante B, Herder C, Munroe PB, Caulfield M, Antti J, Mangino M, Small K, Miljkovic I, Liu Y, Atalay M, Kiess W, James AL, Rivadeneira F, Uitterlinden AG, Palmer CN, Doney AS, Willemsen G, Smit JH, Campbell S, Polasek O, Bonnycastle LL, Hercberg S, Dimitriou M, Bolton JL, Fowkes GR, Kovacs P, Lindstrom J, Zemunik T, Bandinelli S, Wild SH, Basart HV, Rathmann W, Grallert H, Replication DIG, Meta-analysis C, Maerz W, Kleber ME, Boehm BO, Peters A, Pramstaller PP, Province MA, Borecki IB, Hastie ND, Rudan I, Campbell H, Watkins H, Farrall M, Stumvoll M, Ferrucci L, Waterworth DM, Bergman RN, Collins FS, Tuomilehto J, Watanabe RM, de Geus EJ, Penninx BW, Hofman A, Oostra BA, Psaty BM, Vollenweider P, Wilson JF, Wright AF, Hovingh GK, Metspalu A, Uusitupa M, Magnusson PK, Kyvik KO, Kaprio J, Price JF, Dedoussis GV, Deloukas P, Meneton P, Lind L, Boehnke M, Shuldiner AR, van Duijn CM, Morris AD, Toenjes A, Peyser PA, Beilby JP, Korner A, Kuusisto J, Laakso M, Bornstein SR, Schwarz PE, Lakka TA, Rauramaa R, Adair LS, Smith GD, Spector TD, Illig T, de Faire U, Hamsten A, Gudnason V, Kivimaki M, Hingorani A, Keinanen-Kiukaanniemi SM, Saaristo TE, Boomsma DI, Stefansson K, van der Harst P, Dupuis J, Pedersen NL, Sattar N, Harris TB, Cucca F, Ripatti S, Salomaa V, Mohlke KL, Balkau B, Froguel P, Pouta A, Jarvelin MR, Wareham NJ, Bouatia-Naji N, McCarthy MI, Franks PW, Meigs JB, Teslovich TM, Florez JC, Langenberg C, Ingelsson E, Prokopenko I, Barroso I. Large-scale association analyses identify new loci influencing glycemic traits and provide insight into the underlying biological pathways. Nat Genet. 2012;44(9):991-1005. doi: 10.1038/ng.2385. PubMed PMID: 22885924; PMCID: 3433394. **I performed the GWAS analyses in the ARIC study for this paper and was part of the primary writing group.*

7. Chen Z, Tang H, Qayyum R, Schick UM, Nalls MA, Handsaker R, Li J, Lu Y, Yanek LR, Keating B, Meng Y, van Rooij FJ, Okada Y, Kubo M, **Rasmussen-Torvik** L, Keller MF, Lange L, Evans M, Bottinger EP, Linderman MD, Ruderfer DM, Hakonarson H, Papanicolaou G, Zonderman AB, Gottesman O, BioBank Japan P, Consortium C, Thomson C, Ziv E, Singleton AB, Loos RJ, Sleiman PM, Ganesh S, McCarroll S, Becker DM, Wilson JG, Lettre G, Reiner AP. Genome-wide association analysis of red blood cell traits in African Americans: the COGENT Network. Hum Mol Genet. 2013;22(12):2529-38. doi: 10.1093/hmg/ddt087. PubMed PMID: 23446634; PMCID: 3658166. *I was the CARDIA representative for this paper.*

8. Liu CT, Monda KL, Taylor KC, Lange L, Demerath EW, Palmas W, Wojczynski MK, Ellis JC, Vitolins MZ, Liu S, Papanicolaou GJ, Irvin MR, Xue L, Griffin PJ, Nalls MA, Adeyemo A, Liu J, Li G, Ruiz-Narvaez EA, Chen WM, Chen F, Henderson BE, Millikan RC, Ambrosone CB, Strom SS, Guo X, Andrews JS, Sun YV, Mosley TH, Yanek LR, Shriner D, Haritunians T, Rotter JI, Speliotes EK, Smith M, Rosenberg L, Mychaleckyj J, Nayak U, Spruill I, Garvey WT, Pettaway C, Nyante S, Bandera EV, Britton AF, Zonderman AB, **Rasmussen-Torvik** LJ, Chen YD, Ding J, Lohman K, Kritchevsky SB, Zhao W, Peyser PA, Kardia SL, Kabagambe E, Broeckel U, Chen G, Zhou J, Wassertheil-Smoller S, Neuhouser ML, Rampersaud E, Psaty B, Kooperberg C, Manson JE, Kuller LH, Ochs-Balcom HM, Johnson KC, Sucheston L, Ordovas JM, Palmer JR, Haiman CA, McKnight B, Howard BV, Becker DM, Bielak LF, Liu Y, Allison MA, Grant SF, Burke GL, Patel SR, Schreiner PJ, Borecki IB, Evans MK, Taylor H, Sale MM, Howard V, Carlson CS, Rotimi CN, Cushman M, Harris TB, Reiner AP, Cupples LA, North KE, Fox CS. Genome-wide association of body fat distribution in African ancestry populations suggests new loci. PLoS Genet. 2013;9(8):e1003681. doi: 10.1371/journal.pgen.1003681. PubMed PMID: 23966867; PMCID: 3744443. **I performed the MESA GWAS analyses for this paper.*

9. Monda KL, Chen GK, Taylor KC, Palmer C, Edwards TL, Lange LA, Ng MC, Adeyemo AA, Allison MA, Bielak LF, Chen G, Graff M, Irvin MR, Rhie SK, Li G, Liu Y, Liu Y, Lu Y, Nalls MA, Sun YV, Wojczynski MK, Yanek LR, Aldrich MC, Ademola A, Amos CI, Bandera EV, Bock CH, Britton A, Broeckel U, Cai Q, Caporaso NE, Carlson CS, Carpten J, Casey G, Chen WM, Chen F, Chen YD, Chiang CW, Coetzee GA, Demerath E, Deming-Halverson SL, Driver RW, Dubbert P, Feitosa MF, Feng Y, Freedman BI, Gillanders EM, Gottesman O, Guo X, Haritunians T, Harris T, Harris CC, Hennis AJ, Hernandez DG, McNeill LH, Howard TD, Howard BV, Howard VJ, Johnson KC, Kang SJ, Keating BJ, Kolb S, Kuller LH, Kutlar A, Langefeld CD, Lettre G, Lohman K, Lotay V, Lyon H, Manson JE, Maixner W, Meng YA, Monroe KR, Morhason-Bello I, Murphy AB, Mychaleckyj JC, Nadukuru R, Nathanson KL, Nayak U, N'Diaye A, Nemesure B, Wu SY, Leske MC, Neslund-Dudas C, Neuhouser M, Nyante S, Ochs-Balcom H, Ogunniyi A, Ogundiran TO, Ojengbede O, Olopade OI, Palmer JR, Ruiz-Narvaez EA, Palmer ND, Press MF, Rampersaud E, **Rasmussen-Torvik** LJ, Rodriguez-Gil JL, Salako B, Schadt EE, Schwartz AG, Shriner DA, Siscovick D, Smith SB, Wassertheil-Smoller S, Speliotes EK, Spitz MR, Sucheston L, Taylor H, Tayo BO, Tucker MA, Van Den Berg DJ, Edwards DR, Wang Z, Wiencke JK, Winkler TW, Witte JS, Wrensch M, Wu X, Yang JJ, Levin AM, Young TR, Zakai NA, Cushman M, Zanetti KA, Zhao JH, Zhao W, Zheng Y, Zhou J, Ziegler RG, Zmuda JM, Fernandes JK, Gilkeson GS, Kamen DL, Hunt KJ, Spruill IJ, Ambrosone CB, Ambs S, Arnett DK, Atwood L, Becker DM, Berndt SI, Bernstein L, Blot WJ, Borecki IB, Bottinger EP, Bowden DW, Burke G, Chanock SJ, Cooper RS, Ding J, Duggan D, Evans MK, Fox C, Garvey WT, Bradfield JP, Hakonarson H, Grant SF, Hsing A, Chu L, Hu JJ, Huo D, Ingles SA, John EM, Jordan JM, Kabagambe EK, Kardia SL, Kittles RA, Goodman PJ, Klein EA, Kolonel LN, Le Marchand L, Liu S, McKnight B, Millikan RC, Mosley TH, Padhukasahasram B, Williams LK, Patel SR, Peters U, Pettaway CA, Peyser PA, Psaty BM, Redline S, Rotimi CN, Rybicki BA, Sale MM, Schreiner PJ, Signorello LB, Singleton AB, Stanford JL, Strom SS, Thun MJ, Vitolins M, Zheng W, Moore JH, Williams SM, Ketkar S, Zhu X, Zonderman AB, Consortium N, Consortium U, BioBank Japan P, Consortium A, Kooperberg C, Papanicolaou GJ, Henderson BE, Reiner AP, Hirschhorn JN, Loos RJ, North KE, Haiman CA. A meta-analysis identifies new loci associated with body mass index in individuals of African ancestry. Nat Genet. 2013;45(6):690-6. doi: 10.1038/ng.2608. PubMed PMID: 23583978; PMCID: 3694490. **I performed the MESA GWAS analyses for this paper.*

10. Ng MC, Saxena R, Li J, Palmer ND, Dimitrov L, Xu J, **Rasmussen-Torvik** LJ, Zmuda JM, Siscovick DS, Patel SR, Crook ED, Sims M, Chen YD, Bertoni AG, Li M, Grant SF, Dupuis J, Meigs JB, Psaty BM, Pankow JS, Langefeld CD, Freedman BI, Rotter JI, Wilson JG, Bowden DW. Transferability and fine mapping of type 2 diabetes loci in African Americans: the Candidate Gene Association Resource Plus Study. Diabetes. 2013;62(3):965-76. doi: 10.2337/db12-0266. PubMed PMID: 23193183; PMCID: 3581206.**I was the CARDIA representative for this paper.*

11. Kraja AT, Chasman DI, North KE, Reiner AP, Yanek LR, Kilpelainen TO, Smith JA, Dehghan A, Dupuis J, Johnson AD, Feitosa MF, Tekola-Ayele F, Chu AY, Nolte IM, Dastani Z, Morris A, Pendergrass SA, Sun YV, Ritchie MD, Vaez A, Lin H, Ligthart S, Marullo L, Rohde R, Shao Y, Ziegler MA, Im HK, Cross Consortia Pleiotropy G, Cohorts for Heart a, Aging Research in Genetic E, Genetic Investigation of Anthropometric Traits C, Global Lipids Genetics C, Meta-Analyses of G, Insulin-related traits C, Global BC, Consortium AD, Women's Genome Health S, Howard University Family S, Schnabel RB, Jorgensen T, Jorgensen ME, Hansen T, Pedersen O, Stolk RP, Snieder H, Hofman A, Uitterlinden AG, Franco OH, Ikram MA, Richards JB, Rotimi C, Wilson JG, Lange L, Ganesh SK, Nalls M, **Rasmussen-Torvik** LJ, Pankow JS, Coresh J, Tang W, Linda Kao WH, Boerwinkle E, Morrison AC, Ridker PM, Becker DM, Rotter JI, Kardia SL, Loos RJ, Larson MG, Hsu YH, Province MA, Tracy R, Voight BF, Vaidya D, O'Donnell CJ, Benjamin EJ, Alizadeh BZ, Prokopenko I, Meigs JB, Borecki IB. Pleiotropic genes for metabolic syndrome and inflammation. Mol Genet Metab. 2014;112(4):317-38. doi: 10.1016/j.ymgme.2014.04.007. PubMed PMID: 24981077; PMCID: 4122618. **I was the ARIC representative for this paper.*

12. Ng MC, Shriner D, Chen BH, Li J, Chen WM, Guo X, Liu J, Bielinski SJ, Yanek LR, Nalls MA, Comeau ME, **Rasmussen-Torvik** LJ, Jensen RA, Evans DS, Sun YV, An P, Patel SR, Lu Y, Long J, Armstrong LL, Wagenknecht L, Yang L, Snively BM, Palmer ND, Mudgal P, Langefeld CD, Keene KL, Freedman BI, Mychaleckyj JC, Nayak U, Raffel LJ, Goodarzi MO, Chen YD, Taylor HA, Jr., Correa A, Sims M, Couper D, Pankow JS, Boerwinkle E, Adeyemo A, Doumatey A, Chen G, Mathias RA, Vaidya D, Singleton AB, Zonderman AB, Igo RP, Jr., Sedor JR, Consortium F, Kabagambe EK, Siscovick DS, McKnight B, Rice K, Liu Y, Hsueh WC, Zhao W, Bielak LF, Kraja A, Province MA, Bottinger EP, Gottesman O, Cai Q, Zheng W, Blot WJ, Lowe WL, Pacheco JA, Crawford DC, e MC, Consortium D, Grundberg E, Mu TC, Rich SS, Hayes MG, Shu XO, Loos RJ, Borecki IB, Peyser PA, Cummings SR, Psaty BM, Fornage M, Iyengar SK, Evans MK, Becker DM, Kao WH, Wilson JG, Rotter JI, Sale MM, Liu S, Rotimi CN, Bowden DW, Consortium ME-aotDiAA. Meta-analysis of genome-wide association studies in African Americans provides insights into the genetic architecture of type 2 diabetes. PLoS Genet. 2014;10(8):e1004517. doi: 10.1371/journal.pgen.1004517. PubMed PMID: 25102180; PMCID: 4125087. **I was the CARDIA representative for this paper.*

13. Palmer ND, Goodarzi MO, Langefeld CD, Wang N, Guo X, Taylor KD, Fingerlin TE, Norris JM, Buchanan TA, Xiang AH, Haritunians T, Ziegler JT, Williams AH, Stefanovski D, Cui J, Mackay AW, Henkin LF, Bergman RN, Gao X, Gauderman J, Varma R, Hanis CL, Cox NJ, Highland HM, Below JE, Williams AL, Burtt NP, Aguilar-Salinas CA, Huerta-Chagoya A, Gonzalez-Villalpando C, Orozco L, Haiman CA, Tsai MY, Johnson WC, Yao J, **Rasmussen-Torvik** L, Pankow J, Snively B, Jackson RD, Liu S, Nadler JL, Kandeel F, Chen YD, Bowden DW, Rich SS, Raffel LJ, Rotter JI, Watanabe RM, Wagenknecht LE. Genetic Variants Associated With Quantitative Glucose Homeostasis Traits Translate to Type 2 Diabetes in Mexican Americans: The GUARDIAN (Genetics Underlying Diabetes in Hispanics) Consortium. Diabetes. 2015;64(5):1853-66. doi: 10.2337/db14-0732. PubMed PMID: 25524916; PMCID: 4407862. **I performed MESA GWAS replication analysis for this paper.*

14. Wessel J, Chu AY, Willems SM, Wang S, Yaghootkar H, Brody JA, Dauriz M, Hivert MF, Raghavan S, Lipovich L, Hidalgo B, Fox K, Huffman JE, An P, Lu Y, **Rasmussen-Torvik** LJ, Grarup N, Ehm MG, Li L, Baldridge AS, Stancakova A, Abrol R, Besse C, Boland A, Bork-Jensen J, Fornage M, Freitag DF, Garcia ME, Guo X, Hara K, Isaacs A, Jakobsdottir J, Lange LA, Layton JC, Li M, Hua Zhao J, Meidtner K, Morrison AC, Nalls MA, Peters MJ, Sabater-Lleal M, Schurmann C, Silveira A, Smith AV, Southam L, Stoiber MH, Strawbridge RJ, Taylor KD, Varga TV, Allin KH, Amin N, Aponte JL, Aung T, Barbieri C, Bihlmeyer NA, Boehnke M, Bombieri C, Bowden DW, Burns SM, Chen Y, Chen YD, Cheng CY, Correa A, Czajkowski J, Dehghan A, Ehret GB, Eiriksdottir G, Escher SA, Farmaki AE, Franberg M, Gambaro G, Giulianini F, Goddard WA, 3rd, Goel A, Gottesman O, Grove ML, Gustafsson S, Hai Y, Hallmans G, Heo J, Hoffmann P, Ikram MK, Jensen RA, Jorgensen ME, Jorgensen T, Karaleftheri M, Khor CC, Kirkpatrick A, Kraja AT, Kuusisto J, Lange EM, Lee IT, Lee WJ, Leong A, Liao J, Liu C, Liu Y, Lindgren CM, Linneberg A, Malerba G, Mamakou V, Marouli E, Maruthur NM, Matchan A, McKean-Cowdin R, McLeod O, Metcalf GA, Mohlke KL, Muzny DM, Ntalla I, Palmer ND, Pasko D, Peter A, Rayner NW, Renstrom F, Rice K, Sala CF, Sennblad B, Serafetinidis I, Smith JA, Soranzo N, Speliotes EK, Stahl EA, Stirrups K, Tentolouris N, Thanopoulou A, Torres M, Traglia M, Tsafantakis E, Javad S, Yanek LR, Zengini E, Becker DM, Bis JC, Brown JB, Cupples LA, Hansen T, Ingelsson E, Karter AJ, Lorenzo C, Mathias RA, Norris JM, Peloso GM, Sheu WH, Toniolo D, Vaidya D, Varma R, Wagenknecht LE, Boeing H, Bottinger EP, Dedoussis G, Deloukas P, Ferrannini E, Franco OH, Franks PW, Gibbs RA,

Gudnason V, Hamsten A, Harris TB, Hattersley AT, Hayward C, Hofman A, Jansson JH, Langenberg C, Launer LJ, Levy D, Oostra BA, O'Donnell CJ, O'Rahilly S, Padmanabhan S, Pankow JS, Polasek O, Province MA, Rich SS, Ridker PM, Rudan I, Schulze MB, Smith BH, Uitterlinden AG, Walker M, Watkins H, Wong TY, Zeggini E, Consortium EP-I, Laakso M, Borecki IB, Chasman DI, Pedersen O, Psaty BM, Tai ES, van Duijn CM, Wareham NJ, Waterworth DM, Boerwinkle E, Kao WH, Florez JC, Loos RJ, Wilson JG, Frayling TM, Siscovick DS, Dupuis J, Rotter JI, Meigs JB, Scott RA, Goodarzi MO. Low-frequency and rare exome chip variants associate with fasting glucose and type 2 diabetes susceptibility. Nat Commun. 2015;6:5897. doi: 10.1038/ncomms6897. PubMed PMID: 25631608; PMCID: 4311266. **I directed CARDIA rare varaint analysis for this paper and participated in the primary writing group.*

15. Kilpelainen TO, Carli JF, Skowronski AA, Sun Q, Kriebel J, Feitosa MF, Hedman AK, Drong AW, Hayes JE, Zhao J, Pers TH, Schick U, Grarup N, Kutalik Z, Trompet S, Mangino M, Kristiansson K, Beekman M, Lyytikainen LP, Eriksson J, Henneman P, Lahti J, Tanaka T, Luan J, Del Greco MF, Pasko D, Renstrom F, Willems SM, Mahajan A, Rose LM, Guo X, Liu Y, Kleber ME, Perusse L, Gaunt T, Ahluwalia TS, Ju Sung Y, Ramos YF, Amin N, Amuzu A, Barroso I, Bellis C, Blangero J, Buckley BM, Bohringer S, YD IC, de Craen AJ, Crosslin DR, Dale CE, Dastani Z, Day FR, Deelen J, Delgado GE, Demirkan A, Finucane FM, Ford I, Garcia ME, Gieger C, Gustafsson S, Hallmans G, Hankinson SE, Havulinna AS, Herder C, Hernandez D, Hicks AA, Hunter DJ, Illig T, Ingelsson E, Ioan-Facsinay A, Jansson JO, Jenny NS, Jorgensen ME, Jorgensen T, Karlsson M, Koenig W, Kraft P, Kwekkeboom J, Laatikainen T, Ladwig KH, LeDuc CA, Lowe G, Lu Y, Marques-Vidal P, Meisinger C, Menni C, Morris AP, Myers RH, Mannisto S, Nalls MA, Paternoster L, Peters A, Pradhan AD, Rankinen T, **Rasmussen-Torvik** LJ, Rathmann W, Rice TK, Brent Richards J, Ridker PM, Sattar N, Savage DB, Soderberg S, Timpson NJ, Vandenput L, van Heemst D, Uh HW, Vohl MC, Walker M, Wichmann HE, Widen E, Wood AR, Yao J, Zeller T, Zhang Y, Meulenbelt I, Kloppenburg M, Astrup A, Sorensen TI, Sarzynski MA, Rao DC, Jousilahti P, Vartiainen E, Hofman A, Rivadeneira F, Uitterlinden AG, Kajantie E, Osmond C, Palotie A, Eriksson JG, Heliovaara M, Knekt PB, Koskinen S, Jula A, Perola M, Huupponen RK, Viikari JS, Kahonen M, Lehtimaki T, Raitakari OT, Mellstrom D, Lorentzon M, Casas JP, Bandinelli S, Marz W, Isaacs A, van Dijk KW, van Duijn CM, Harris TB, Bouchard C, Allison MA, Chasman DI, Ohlsson C, Lind L, Scott RA, Langenberg C, Wareham NJ, Ferrucci L, Frayling TM, Pramstaller PP, Borecki IB, Waterworth DM, Bergmann S, Waeber G, Vollenweider P, Vestergaard H, Hansen T, Pedersen O, Hu FB, Eline Slagboom P, Grallert H, Spector TD, Jukema JW, Klein RJ, Schadt EE, Franks PW, Lindgren CM, Leibel RL, Loos RJ. Genome-wide meta-analysis uncovers novel loci influencing circulating leptin levels. Nat Commun. 2016;7:10494. doi: 10.1038/ncomms10494. PubMed PMID: 26833098; PMCID: 4740377. **I performed the MESA GWAS analysis for this paper.*

16. Liu CT, Raghavan S, Maruthur N, Kabagambe EK, Hong J, Ng MC, Hivert MF, Lu Y, An P, Bentley AR, Drolet AM, Gaulton KJ, Guo X, Armstrong LL, Irvin MR, Li M, Lipovich L, Rybin DV, Taylor KD, Agyemang C, Palmer ND, Cade BE, Chen WM, Dauriz M, Delaney JA, Edwards TL, Evans DS, Evans MK, Lange LA, Leong A, Liu J, Liu Y, Nayak U, Patel SR, Porneala BC, **Rasmussen-Torvik** LJ, Snijder MB, Stallings SC, Tanaka T, Yanek LR, Zhao W, Becker DM, Bielak LF, Biggs ML, Bottinger EP, Bowden DW, Chen G, Correa A, Couper DJ, Crawford DC, Cushman M, Eicher JD, Fornage M, Franceschini N, Fu YP, Goodarzi MO, Gottesman O, Hara K, Harris TB, Jensen RA, Johnson AD, Jhun MA, Karter AJ, Keller MF, Kho AN, Kizer JR, Krauss RM, Langefeld CD, Li X, Liang J, Liu S, Lowe WL, Jr., Mosley TH, North KE, Pacheco JA, Peyser PA, Patrick AL, Rice KM, Selvin E, Sims M, Smith JA, Tajuddin SM, Vaidya D, Wren MP, Yao J, Zhu X, Ziegler JT, Zmuda JM, Zonderman AB, Zwinderman AH, Consortium A, Consortium CA, Consortium C-B, e MC, Consortium M, Adeyemo A, Boerwinkle E, Ferrucci L, Hayes MG, Kardia SL, Miljkovic I, Pankow JS, Rotimi CN, Sale MM, Wagenknecht LE, Arnett DK, Chen YD, Nalls MA, Consortium M, Province MA, Kao WH, Siscovick DS, Psaty BM, Wilson JG, Loos RJ, Dupuis J, Rich SS, Florez JC, Rotter JI, Morris AP, Meigs JB. Trans-ethnic Meta-analysis and Functional Annotation Illuminates the Genetic Architecture of Fasting Glucose and Insulin. Am J Hum Genet. 2016;99(1):56-75. doi: 10.1016/j.ajhg.2016.05.006. PubMed PMID: 27321945; PMCID: 5005440. ** I was the CARDIA representative for this paper.*

17. van 't Hof FN, Ruigrok YM, Lee CH, Ripke S, Anderson G, de Andrade M, Baas AF, Blankensteijn JD, Bottinger EP, Bown MJ, Broderick J, Bijlenga P, Carrell DS, Crawford DC, Crosslin DR, Ebeling C, Eriksson JG, Fornage M, Foroud T, von Und Zu Fraunberg M, Friedrich CM, Gaal EI, Gottesman O, Guo DC, Harrison SC, Hernesniemi J, Hofman A, Inoue I, Jaaskelainen JE, Jones GT, Kiemeney LA, Kivisaari R, Ko N, Koskinen S, Kubo M, Kullo IJ, Kuivaniemi H, Kurki MI, Laakso A, Lai D, Leal SM, Lehto H, LeMaire SA, Low SK, Malinowski J, McCarty CA, Milewicz DM, Mosley TH, Nakamura Y, Nakaoka H, Niemela M, Pacheco J, Peissig PL, Pera J, **Rasmussen-Torvik** L, Ritchie MD, Rivadeneira F, van Rij AM, Santos-Cortez

RL, Saratzis A, Slowik A, Takahashi A, Tromp G, Uitterlinden AG, Verma SS, Vermeulen SH, Wang GT, Aneurysm C, Vascular Research Consortium of New Z, Han B, Rinkel GJ, de Bakker PI. Shared Genetic Risk Factors of Intracranial, Abdominal, and Thoracic Aneurysms. J Am Heart Assoc. 2016;5(7). doi: 10.1161/JAHA.115.002603. PubMed PMID: 27418160; PMCID: 5015357. ** I was the Northwestern eMERGE representative on this paper.*

18. Graff M, Scott RA, Justice AE, Young KL, Feitosa MF, Barata L, Winkler TW, Chu AY, Mahajan A, Hadley D, Xue L, Workalemahu T, Heard-Costa NL, den Hoed M, Ahluwalia TS, Qi Q, Ngwa JS, Renstrom F, Quaye L, Eicher JD, Hayes JE, Cornelis M, Kutalik Z, Lim E, Luan J, Huffman JE, Zhang W, Zhao W, Griffin PJ, Haller T, Ahmad S, Marques-Vidal PM, Bien S, Yengo L, Teumer A, Smith AV, Kumari M, Harder MN, Justesen JM, Kleber ME, Hollensted M, Lohman K, Rivera NV, Whitfield JB, Zhao JH, Stringham HM, Lyytikainen LP, Huppertz C, Willemsen G, Peyrot WJ, Wu Y, Kristiansson K, Demirkan A, Fornage M, Hassinen M, Bielak LF, Cadby G, Tanaka T, Magi R, van der Most PJ, Jackson AU, Bragg-Gresham JL, Vitart V, Marten J, Navarro P, Bellis C, Pasko D, Johansson A, Snitker S, Cheng YC, Eriksson J, Lim U, Aadahl M, Adair LS, Amin N, Balkau B, Auvinen J, Beilby J, Bergman RN, Bergmann S, Bertoni AG, Blangero J, Bonnefond A, Bonnycastle LL, Borja JB, Brage S, Busonero F, Buyske S, Campbell H, Chines PS, Collins FS, Corre T, Smith GD, Delgado GE, Dueker N, Dorr M, Ebeling T, Eiriksdottir G, Esko T, Faul JD, Fu M, Faerch K, Gieger C, Glaser S, Gong J, Gordon-Larsen P, Grallert H, Grammer TB, Grarup N, van Grootheest G, Harald K, Hastie ND, Havulinna AS, Hernandez D, Hindorff L, Hocking LJ, Holmens OL, Holzapfel C, Hottenga JJ, Huang J, Huang T, Hui J, Huth C, Hutri-Kahonen N, James AL, Jansson JO, Jhun MA, Juonala M, Kinnunen L, Koistinen HA, Kolcic I, Komulainen P, Kuusisto J, Kvaloy K, Kahonen M, Lakka TA, Launer LJ, Lehne B, Lindgren CM, Lorentzon M, Luben R, Marre M, Milaneschi Y, Monda KL, Montgomery GW, De Moor MHM, Mulas A, Muller-Nurasyid M, Musk AW, Mannikko R, Mannisto S, Narisu N, Nauck M, Nettleton JA, Nolte IM, Oldehinkel AJ, Olden M, Ong KK, Padmanabhan S, Paternoster L, Perez J, Perola M, Peters A, Peters U, Peyser PA, Prokopenko I, Puolijoki H, Raitakari OT, Rankinen T, **Rasmussen-Torvik** LJ, Rawal R, Ridker PM, Rose LM, Rudan I, Sarti C, Sarzynski MA, Savonen K, Scott WR, Sanna S, Shuldiner AR, Sidney S, Silbernagel G, Smith BH, Smith JA, Snieder H, Stancakova A, Sternfeld B, Swift AJ, Tammelin T, Tan ST, Thorand B, Thuillier D, Vandenput L, Vestergaard H, van Vliet-Ostaptchouk JV, Vohl MC, Volker U, Waeber G, Walker M, Wild S, Wong A, Wright AF, Zillikens MC, Zubair N, Haiman CA, Lemarchand L, Gyllensten U, Ohlsson C, Hofman A, Rivadeneira F, Uitterlinden AG, Perusse L, Wilson JF, Hayward C, Polasek O, Cucca F, Hveem K, Hartman CA, Tonjes A, Bandinelli S, Palmer LJ, Kardia SLR, Rauramaa R, Sorensen TIA, Tuomilehto J, Salomaa V, Penninx B, de Geus EJC, Boomsma DI, Lehtimaki T, Mangino M, Laakso M, Bouchard C, Martin NG, Kuh D, Liu Y, Linneberg A, Marz W, Strauch K, Kivimaki M, Harris TB, Gudnason V, Volzke H, Qi L, Jarvelin MR, Chambers JC, Kooner JS, Froguel P, Kooperberg C, Vollenweider P, Hallmans G, Hansen T, Pedersen O, Metspalu A, Wareham NJ, Langenberg C, Weir DR, Porteous DJ, Boerwinkle E, Chasman DI, Consortium C, Consortium EP-I, Consortium P, Abecasis GR, Barroso I, McCarthy MI, Frayling TM, O'Connell JR, van Duijn CM, Boehnke M, Heid IM, Mohlke KL, Strachan DP, Fox CS, Liu CT, Hirschhorn JN, Klein RJ, Johnson AD, Borecki IB, Franks PW, North KE, Cupples LA, Loos RJF, Kilpelainen TO. Genome-wide physical activity interactions in adiposity - A meta-analysis of 200,452 adults. PLoS Genet. 2017;13(4):e1006528. doi: 10.1371/journal.pgen.1006528. PubMed PMID: 28448500; PMCID: PMC5407576. ** I directed MESA GWAS analysis for this paper.*

19. Holzinger ER, Verma SS, Moore CB, Hall M, De R, Gilbert-Diamond D, Lanktree MB, Pankratz N, Amuzu A, Burt A, Dale C, Dudek S, Furlong CE, Gaunt TR, Kim DS, Riess H, Sivapalaratnam S, Tragante V, van Iperen EPA, Brautbar A, Carrell DS, Crosslin DR, Jarvik GP, Kuivaniemi H, Kullo IJ, Larson EB, **Rasmussen-Torvik LJ**, Tromp G, Baumert J, Cruickshanks KJ, Farrall M, Hingorani AD, Hovingh GK, Kleber ME, Klein BE, Klein R, Koenig W, Lange LA, Mrz W, North KE, Charlotte Onland-Moret N, Reiner AP, Talmud PJ, van der Schouw YT, Wilson JG, Kivimaki M, Kumari M, Moore JH, Drenos F, Asselbergs FW, Keating BJ, Ritchie MD. Discovery and replication of SNP-SNP interactions for quantitative lipid traits in over 60,000 individuals. BioData Min. 2017;10:25. Epub 2017/08/05. doi: 10.1186/s13040-017-0145-5. PubMed PMID: 28770004; PMCID: PMC5525436. ** I was an eMERGE representative for this paper.*

20. Jones GT, Tromp G, Kuivaniemi H, Gretarsdottir S, Baas AF, Giusti B, Strauss E, Van't Hof FN, Webb TR, Erdman R, Ritchie MD, Elmore JR, Verma A, Pendergrass S, Kullo IJ, Ye Z, Peissig PL, Gottesman O, Verma SS, Malinowski J, **Rasmussen-Torvik** LJ, Borthwick KM, Smelser DT, Crosslin DR, de Andrade M, Ryer EJ, McCarty CA, Bottinger EP, Pacheco JA, Crawford DC, Carrell DS, Gerhard GS, Franklin DP, Carey DJ, Phillips VL, Williams MJ, Wei W, Blair R, Hill AA, Vasudevan TM, Lewis DR, Thomson IA, Krysa J, Hill GB, Roake J, Merriman TR, Oszkinis G, Galora S, Saracini C, Abbate R,

Pulli R, Pratesi C, Saratzis A, Verissimo AR, Bumpstead S, Badger SA, Clough RE, Cockerill G, Hafez H, Scott DJ, Futers TS, Romaine SP, Bridge K, Griffin KJ, Bailey MA, Smith A, Thompson MM, van Bockxmeer FM, Matthiasson SE, Thorleifsson G, Thorsteinsdottir U, Blankensteijn JD, Teijink JA, Wijmenga C, de Graaf J, Kiemeney LA, Lindholt JS, Hughes A, Bradley DT, Stirrups K, Golledge J, Norman PE, Powell JT, Humphries SE, Hamby SE, Goodall AH, Nelson CP, Sakalihasan N, Courtois A, Ferrell RE, Eriksson P, Folkersen L, Franco-Cereceda A, Eicher JD, Johnson AD, Betsholtz C, Ruusalepp A, Franzen O, Schadt EE, Bjorkegren JL, Lipovich L, Drolet AM, Verhoeven EL, Zeebregts CJ, Geelkerken RH, van Sambeek MR, van Sterkenburg SM, de Vries JP, Stefansson K, Thompson JR, de Bakker PI, Deloukas P, Sayers RD, Harrison SC, van Rij AM, Samani NJ, Bown MJ. Meta-Analysis of Genome-Wide Association Studies for Abdominal Aortic Aneurysm Identifies Four New Disease-Specific Risk Loci. Circ Res. 2017;120(2):341-53. doi: 10.1161/CIRCRESAHA.116.308765. PubMed PMID: 27899403; PMCID: 5253231. ** I was the Northwestern eMERGE representative on this paper.*

21. Justice AE, Winkler TW, Feitosa MF, Graff M, Fisher VA, Young K, Barata L, Deng X, Czajkowski J, Hadley D, Ngwa JS, Ahluwalia TS, Chu AY, Heard-Costa NL, Lim E, Perez J, Eicher JD, Kutalik Z, Xue L, Mahajan A, Renstrom F, Wu J, Qi Q, Ahmad S, Alfred T, Amin N, Bielak LF, Bonnefond A, Bragg J, Cadby G, Chittani M, Coggeshall S, Corre T, Direk N, Eriksson J, Fischer K, Gorski M, Neergaard Harder M, Horikoshi M, Huang T, Huffman JE, Jackson AU, Justesen JM, Kanoni S, Kinnunen L, Kleber ME, Komulainen P, Kumari M, Lim U, Luan J, Lyytikainen LP, Mangino M, Manichaikul A, Marten J, Middelberg RPS, Muller-Nurasyid M, Navarro P, Perusse L, Pervjakova N, Sarti C, Smith AV, Smith JA, Stancakova A, Strawbridge RJ, Stringham HM, Sung YJ, Tanaka T, Teumer A, Trompet S, van der Laan SW, van der Most PJ, Van Vliet-Ostaptchouk JV, Vedantam SL, Verweij N, Vink JM, Vitart V, Wu Y, Yengo L, Zhang W, Hua Zhao J, Zimmermann ME, Zubair N, Abecasis GR, Adair LS, Afaq S, Afzal U, Bakker SJL, Bartz TM, Beilby J, Bergman RN, Bergmann S, Biffar R, Blangero J, Boerwinkle E, Bonnycastle LL, Bottinger E, Braga D, Buckley BM, Buyske S, Campbell H, Chambers JC, Collins FS, Curran JE, de Borst GJ, de Craen AJM, de Geus EJC, Dedoussis G, Delgado GE, den Ruijter HM, Eiriksdottir G, Eriksson AL, Esko T, Faul JD, Ford I, Forrester T, Gertow K, Gigante B, Glorioso N, Gong J, Grallert H, Grammer TB, Grarup N, Haitjema S, Hallmans G, Hamsten A, Hansen T, Harris TB, Hartman CA, Hassinen M, Hastie ND, Heath AC, Hernandez D, Hindorff L, Hocking LJ, Hollensted M, Holmen OL, Homuth G, Jan Hottenga J, Huang J, Hung J, Hutri-Kahonen N, Ingelsson E, James AL, Jansson JO, Jarvelin MR, Jhun MA, Jorgensen ME, Juonala M, Kahonen M, Karlsson M, Koistinen HA, Kolcic I, Kolovou G, Kooperberg C, Kramer BK, Kuusisto J, Kvaloy K, Lakka TA, Langenberg C, Launer LJ, Leander K, Lee NR, Lind L, Lindgren CM, Linneberg A, Lobbens S, Loh M, Lorentzon M, Luben R, Lubke G, Ludolph-Donislawski A, Lupoli S, Madden PAF, Mannikko R, Marques-Vidal P, Martin NG, McKenzie CA, McKnight B, Mellstrom D, Menni C, Montgomery GW, Musk AB, Narisu N, Nauck M, Nolte IM, Oldehinkel AJ, Olden M, Ong KK, Padmanabhan S, Peyser PA, Pisinger C, Porteous DJ, Raitakari OT, Rankinen T, Rao DC, **Rasmussen-Torvik** LJ, Rawal R, Rice T, Ridker PM, Rose LM, Bien SA, Rudan I, Sanna S, Sarzynski MA, Sattar N, Savonen K, Schlessinger D, Scholtens S, Schurmann C, Scott RA, Sennblad B, Siemelink MA, Silbernagel G, Slagboom PE, Snieder H, Staessen JA, Stott DJ, Swertz MA, Swift AJ, Taylor KD, Tayo BO, Thorand B, Thuillier D, Tuomilehto J, Uitterlinden AG, Vandenput L, Vohl MC, Volzke H, Vonk JM, Waeber G, Waldenberger M, Westendorp RGJ, Wild S, Willemsen G, Wolffenbuttel BHR, Wong A, Wright AF, Zhao W, Zillikens MC, Baldassarre D, Balkau B, Bandinelli S, Boger CA, Boomsma DI, Bouchard C, Bruinenberg M, Chasman DI, Chen YD, Chines PS, Cooper RS, Cucca F, Cusi D, Faire U, Ferrucci L, Franks PW, Froguel P, Gordon-Larsen P, Grabe HJ, Gudnason V, Haiman CA, Hayward C, Hveem K, Johnson AD, Wouter Jukema J, Kardia SLR, Kivimaki M, Kooner JS, Kuh D, Laakso M, Lehtimaki T, Marchand LL, Marz W, McCarthy MI, Metspalu A, Morris AP, Ohlsson C, Palmer LJ, Pasterkamp G, Pedersen O, Peters A, Peters U, Polasek O, Psaty BM, Qi L, Rauramaa R, Smith BH, Sorensen TIA, Strauch K, Tiemeier H, Tremoli E, van der Harst P, Vestergaard H, Vollenweider P, Wareham NJ, Weir DR, Whitfield JB, Wilson JF, Tyrrell J, Frayling TM, Barroso I, Boehnke M, Deloukas P, Fox CS, Hirschhorn JN, Hunter DJ, Spector TD, Strachan DP, van Duijn CM, Heid IM, Mohlke KL, Marchini J, Loos RJF, Kilpelainen TO, Liu CT, Borecki IB, North KE, Cupples LA. Genome-wide meta-analysis of 241,258 adults accounting for smoking behaviour identifies novel loci for obesity traits. Nat Commun. 2017;8:14977. doi: 10.1038/ncomms14977. PubMed PMID: 28443625; PMCID: PMC5414044. ** I directed MESA GWAS analysis for this paper.*

22. Wheeler E, Leong A, Liu CT, Hivert MF, Strawbridge RJ, Podmore C, Li M, Yao J, Sim X, Hong J, Chu AY, Zhang W, Wang X, Chen P, Maruthur NM, Porneala BC, Sharp SJ, Jia Y, Kabagambe EK, Chang LC, Chen WM, Elks CE, Evans DS, Fan Q, Giulianini F, Go MJ, Hottenga JJ, Hu Y, Jackson AU, Kanoni S, Kim YJ, Kleber ME, Ladenvall C, Lecoeur C, Lim SH, Lu Y, Mahajan A, Marzi C, Nalls MA, Navarro P, Nolte IM, Rose LM, Rybin DV, Sanna S, Shi Y, Stram DO, Takeuchi F, Tan SP, van

der Most PJ, Van Vliet-Ostaptchouk JV, Wong A, Yengo L, Zhao W, Goel A, Martinez Larrad MT, Radke D, Salo P, Tanaka T, van Iperen EPA, Abecasis G, Afaq S, Alizadeh BZ, Bertoni AG, Bonnefond A, Bottcher Y, Bottinger EP, Campbell H, Carlson OD, Chen CH, Cho YS, Garvey WT, Gieger C, Goodarzi MO, Grallert H, Hamsten A, Hartman CA, Herder C, Hsiung CA, Huang J, Igase M, Isono M, Katsuya T, Khor CC, Kiess W, Kohara K, Kovacs P, Lee J, Lee WJ, Lehne B, Li H, Liu J, Lobbens S, Luan J, Lyssenko V, Meitinger T, Miki T, Miljkovic I, Moon S, Mulas A, Muller G, Muller-Nurasyid M, Nagaraja R, Nauck M, Pankow JS, Polasek O, Prokopenko I, Ramos PS, **Rasmussen-Torvik L**, Rathmann W, Rich SS, Robertson NR, Roden M, Roussel R, Rudan I, Scott RA, Scott WR, Sennblad B, Siscovick DS, Strauch K, Sun L, Swertz M, Tajuddin SM, Taylor KD, Teo YY, Tham YC, Tonjes A, Wareham NJ, Willemsen G, Wilsgaard T, Hingorani AD, Consortium E-C, Consortium EP-I, Lifelines Cohort S, Egan J, Ferrucci L, Hovingh GK, Jula A, Kivimaki M, Kumari M, Njolstad I, Palmer CNA, Serrano Rios M, Stumvoll M, Watkins H, Aung T, Bluher M, Boehnke M, Boomsma DI, Bornstein SR, Chambers JC, Chasman DI, Chen YI, Chen YT, Cheng CY, Cucca F, de Geus EJC, Deloukas P, Evans MK, Fornage M, Friedlander Y, Froguel P, Groop L, Gross MD, Harris TB, Hayward C, Heng CK, Ingelsson E, Kato N, Kim BJ, Koh WP, Kooner JS, Korner A, Kuh D, Kuusisto J, Laakso M, Lin X, Liu Y, Loos RJF, Magnusson PKE, Marz W, McCarthy MI, Oldehinkel AJ, Ong KK, Pedersen NL, Pereira MA, Peters A, Ridker PM, Sabanayagam C, Sale M, Saleheen D, Saltevo J, Schwarz PE, Sheu WHH, Snieder H, Spector TD, Tabara Y, Tuomilehto J, van Dam RM, Wilson JG, Wilson JF, Wolffenbuttel BHR, Wong TY, Wu JY, Yuan JM, Zonderman AB, Soranzo N, Guo X, Roberts DJ, Florez JC, Sladek R, Dupuis J, Morris AP, Tai ES, Selvin E, Rotter JI, Langenberg C, Barroso I, Meigs JB. Impact of common genetic determinants of Hemoglobin A1c on type 2 diabetes risk and diagnosis in ancestrally diverse populations: A transethnic genome-wide meta-analysis. PLoS Med. 2017;14(9):e1002383. Epub 2017/09/13. doi: 10.1371/journal.pmed.1002383. PubMed PMID: 28898252; PMCID: PMC5595282. **I was the CARDIA representative for this paper*.

23. Do AN, Zhao W, Baldridge AS, Raffield LM, Wiggins KL, Shah SJ, Aslibekyan S, Tiwari HK, Limdi N, Zhi D, Sitlani CM, Taylor KD, Psaty BM, Sotoodehnia N, Brody JA, **Rasmussen-Torvik LJ**, Lloyd-Jones D, Lange LA, Wilson JG, Smith JA, Kardia SLR, Mosley TH, Vasan RS, Arnett DK, Irvin MR. Genome-wide meta-analysis of SNP and antihypertensive medication interactions on left ventricular traits in African Americans. Mol Genet Genomic Med. 2019;7(10):e00788. Epub 2019/08/14. doi: 10.1002/mgg3.788. PubMed PMID: 31407531; PMCID: PMC6785453. ** I was the CARDIA representative for this paper.*

24. Guan M, Keaton JM, Dimitrov L, Hicks PJ, Xu J, Palmer ND, Ma L, Das SK, Chen YI, Coresh J, Fornage M, Franceschini N, Kramer H, Langefeld CD, Mychaleckyj JC, Parekh RS, Post WS, Rasmussen-Torvik LJ, Rich SS, Rotter JI, Sedor JR, Thornley-Brown D, Tin A, Wilson JG, Freedman BI, Bowden DW, Ng MCY, Consortium F. Genome-wide association study identifies novel loci for type 2 diabetes-attributed end-stage kidney disease in African Americans. Hum Genomics. 2019;13(1):21. Epub 2019/05/17. doi: 10.1186/s40246-019-0205-7. PubMed PMID: 31092297; PMCID: PMC6521376. ** I was the MESA represtative for this paper.*

25. Liu CT, Merino J, Rybin D, DiCorpo D, Benke KS, Bragg-Gresham JL, Canouil M, Corre T, Grallert H, Isaacs A, Kutalik Z, Lahti J, Marullo L, Marzi C, Rasmussen-Torvik LJ, Rocheleau G, Rueedi R, Scapoli C, Verweij N, Vogelzangs N, Willems SM, Yengo L, Bakker SJL, Beilby J, Hui J, Kajantie E, Muller-Nurasyid M, Rathmann W, Balkau B, Bergmann S, Eriksson JG, Florez JC, Froguel P, Harris T, Hung J, James AL, Kavousi M, Miljkovic I, Musk AW, Palmer LJ, Peters A, Roussel R, van der Harst P, van Duijn CM, Vollenweider P, Barroso I, Prokopenko I, Dupuis J, Meigs JB, Bouatia-Naji N. Genome-wide Association Study of Change in Fasting Glucose over time in 13,807 non-diabetic European Ancestry Individuals. Sci Rep. 2019;9(1):9439. Epub 2019/07/03. doi: 10.1038/s41598-019-45823-7. PubMed PMID: 31263163; PMCID: PMC6602949. ** I performed the ARIC analyses for this paper.*

B. Invited Reviews and Commentaries

1. **Rasmussen-Torvik LJ**, Harlow BL. The association between depression and diabetes in the perinatal period. Curr Diab Rep. 2010;10(3):217-23. doi: 10.1007/s11892-010-0108-4. PubMed PMID: 20425585.

2. Carnethon MR, **Rasmussen-Torvik LJ,** Palaniappan L. The obesity paradox in diabetes. Curr Cardiol Rep. 2014;16(2):446. doi: 10.1007/s11886-013-0446-3. PubMed PMID: 24408674.

3. **Rasmussen-Torvik LJ**, Colangelo LA, Lima JAC, Jacobs DR, Jr., Rodriguez CJ, Gidding SS, Lloyd-Jones DM, Shah SJ. Rasmussen-Torvik et al. Respond to "The Perfect Measure of Diastolic Dysfunction". Am J Epidemiol. 2017:1-2. doi: 10.1093/aje/kww216. PubMed PMID: 28453663.

C. Books and Book Chapters

1. Katz, DH, **Rasmussen-Torvik, LJ**. Genome-Wide Association Studies. In: Shah, SJ, Arnett, DK, editors. Cardiovascular Genetics and Genomics in Clinical Practice. New York: Demos Medical Publishing, LLC; 2015. P. 23-33.

D. Peer-Reviewed Educational Materials

E. Case Reports, Letters, Editorials

1. Folsom AR, Cushman M, **Rasmussen-Torvik LJ**, Heckbert SR, Tsai MY. Prospective study of polymorphisms of the protein Z-dependent protease inhibitor and risk of venous thromboembolism. Thromb Haemost. 2007;97(3):493-4. PubMed PMID: 17334519.

F. Practice Guidelines, Standards, and Consensus Statements

G. Public Policy and Legislative Testimony

H. Patents

I. Database Deposition

J. Software

K. Abstracts (*denotes presenting author)

a. Oral Abstract Presentations

1. **Rasmussen-Torvik** LJ*, North KE, Gu CC, Lewis CE, Wilk JB, Chakravarti A, Chang YP, Miller MB, Li N, Devereux RB, Arnett DK. A population association study of angiotensinogen polymorphisms and haplotypes with left ventricular phenotypes. American Heart Association 45th Annual Convention on Cardiovascular Disease Epidemiology and Prevention (NHLBI Trainee Presentation Session), March 2005.

2. **Rasmussen-Torvik LJ*,** Pankow JS, Jacobs Jr. DR, Steffen LM, Moran AM, Steinberger S, Leiendecker-Foster C, Sinaiko AR. Waist is Associated Longitudinally with Adiponectin but not with Clamp-derived Insulin Sensitivity in a Cohort of Adolescents. American Heart Association 47th Annual Convention on Cardiovascular Disease Epidemiology and Prevention (NHLBI Trainee Presentation Session), February 28-March 3, 2007.

3. **Rasmussen-Torvik** LJ*, Li M, Kao WH, Couper D, Boerwinkle E, Bielinski SJ, Folsom AR, Pankow JS. Association of a fasting glucose genetic risk score with subclinical atherosclerosis: The Atherosclerosis Risk in Communities (ARIC) study. American Heart Association 50th Annual Convention on Cardiovascular Disease Epidemiology and Prevention March 2010.

4. **Rasmussen-Torvik** LJ, Shay CM*, Abramson JG, Friedrich CA, Nettleton JA, Prizment AE, Folsom AR. Ideal cardiovascular health is inversely associated with incident cancer: the Atherosclerosis Risk In Communities study. American Heart Association Scientific Sessions. Orlando, FL, November 2011.

5. **Rasmussen-Torvik LJ***, Colangelo L, Lima J, Jacobs D, Rodrigez C, Lloyd-Jones D, Shah S. Issues with echocardiographic definitions of diastolic dysfunction in the CARDIA Study. American Heart Association Scientific Sessions. Chicago, IL, November 2014.

b. Poster Presentations

1. Liquori CL*, Ricker K, Jacobsen JF, **Rasmussen LJ,** Dick KA, Dalton JC, Day JW, Ranum LPW. Multiple Haplotypes in DM2 Indicate Multiple Founder Mutations. American Society of Human Genetics 51st Annual Meeting, October 12-16, 2001.

2. Moseley ML*, **Rasmussen LJ**, Pryor J, Roberts K, Day JW, Ranum LPW. SCA8 Repeat Contractions in the Male Germline Occur Before Meiosis. American Society of Human Genetics 51st Annual Meeting, October 12-16, 2001.

3. **Rasmussen-Torvik LJ***, Pankow JS, Miller MB, Evans GW, Heiss G, Sholinsky P. Familial Aggregation Analysis and Genome Scan of Carotid Artery Plaque in the NHLBI Family Heart Study. American Heart Association 44th Annual Conference on Cardiovascular Disease Epidemiology and Prevention, March 3-7, 2004.

4. **Rasmussen-Torvik LJ***, Pankow JS, Jacobs Jr. DR, Steffen LM, Moran AM, Steinberger S, Leiendecker-Foster C, Sinaiko AR. Heritability, Genetic Correlations, and Genetic Associations of Insulin Sensitivity and Fasting Insulin Measured by the Euglycemic Hyperinsulinemic Clamp. American Heart Association 46th Annual Convention on Cardiovascular Disease Epidemiology and Prevention, March 2-5, 2006.

5. **Rasmussen-Torvik LJ***, Cushman M, Tsai M, Heckbert S, Rosamond W, Folsom A. Positive Association of the α-Fibrinogen Thr312Ala Polymorphism with Venous Thromboembolism in the Longitudinal Investigation of Venous Thromboembolism (LITE) Study. Second North American Congress of Epidemiology, June 21-24, 2006.

6. Wassel Fyr CL*, Pankow JS, **Rasmussen-Torvik LJ**, Li N, Taylor KD, Guo X, Goodarzi MO, Palmas W, Post W. Adiponectin gene (ADIPOQ) polymorphisms are associated with subclinical cardiovascular disease (CVD) phenotypes in the Multi-Ethnic Study of Atherosclerosis (MESA). American Heart Association 48th Annual Convention on Cardiovascular Disease Epidemiology and Prevention, March 13-15, 2008.

7. Kottgen A*, Bi M, Boerwinkle W, North K, Hoogeveen R, **Rasmussen-Torvik LJ**, Coresh J, Kao W. rs780094 of Glucokinase Regulator Gene is Associated with Multiple Metabolic Traits: The Atherosclerosis Risk in Communities Study. American Heart Association 49th Annual Convention on Cardiovascular Disease Epidemiology and Prevention, March 11-14, 2009.

8. **Rasmussen-Torvik LJ***, Pankow JS, Wassel CL, Goodarzi MO, Guo X, Shea SJ, Hsu F-C, Bowden DW. Association of ADIPOQ, TNFA, and TNFRSF1A Single-Nucleotide Polymorphisms with Insulin Resistance; The Multi Ethnic Study of Atherosclerosis (MESA). American Heart Association 49th Annual Convention on Cardiovascular Disease Epidemiology and Prevention, March 11-14, 2009.

9. **Rasmussen-Torvik LJ***, Alonso A, Li M, Kao W, Kottgen A, Yan Y, Couper D, Boerwinkle E, Bielinski S, Pankow J. Genome-Wide Association Study of Repeated Fasting Glucose Measures; The ARIC Study. American Diabetes Association 69th Scientific Sessions, June 5-9, 2009.

10. Dreyfus J*, Steffen L, **Rasmussen-Torvik LJ**, Steinberger J, Moran A, Jacobs D, Hong CP, Sinaiko A. The Association of the PPARgamma Pro 12A1a Polymorphism with Cardiovascular Disease Risk Factors among Adolescents. Society for Pediatric and Perinatal Epidemiologic Research 23rd Annual Meeting, June 22-23, 2010.

11. Lutsey P*, **Rasmussen-Torvik LJ,** Pankow JS, Tang W, Coresh J, Volcik KA, Ballantyne CM, Boerwinkle E, Folsom AR. Relation of lipid gene scores to longitudinal trends in lipid levels and incidence of abnormal lipid levels among Caucasians: The Atherosclerosis Risk in Communities (ARIC). American Heart Association. 2011 Scientific Sessions. March 22 – 25, 2011.

12. **Rasmussen-Torvik LJ***, Wassel CL, Ding J, Jenny N, Allison M. Correlations among the Leptin to Adiponectin Ratio, Adiposity, and Insulin Resistance across Ethnic Groups: The Multi-Ethnic Study of Atherosclerosis (MESA). American Heart Association. 2011 Scientific Sessions. March 22 – 25, 2011.

13. Bielinski SJ*, Pankow JS, **Rasmussen-Torvik LJ**, Bailey K, Li M, Selvin E, Couper D, Vazquez G, Brancati F. Strength of Association for Incident Diabetes Risk Factors differ by Diabetes Case Definitions: The Atherosclerosis Risk in Communities (ARIC). American Heart Association. 2011 Scientific Sessions. March 22 – 25, 2011.

14. Hivert MF*, Manning A, Scott R, Chen H, Bouatia-Naji N, Bielak L, **Rasmussen-Torvik LJ**, Florez JC, Prokopenko I, Langenberg C, Watanabe R, Dupuis J, Meigs JB. Accounting for the Interaction between Body Mass Index and Genes helps reveal new loci associated with fasting insulin: A Genome-Wide Association Study Meta-Analysis of 29 Cohorts. American Heart Association. 2011 Scientific Sessions. March 22 – 25, 2011.

15. Liu C*, Adeyemo A, Bielinski S, Boerwinkle E, Borecki I, Bowden DW, Chen YD I, Djousse L, Fornage M, Goodarzi MO, Grant S FA, Grimsby J, Guo X, Harris T, Jensen R, Kao L, Kabagambe E, Kizer J, Liu Y, Mukamal K, Nettleton J, Ng M, Pankow J, Parekh R, Patel S, Ramos E, **Rasmussen-Torvik LJ**, Redline S, Rich SS, Rotimi C, Rotter JI, Rybin D, Sarpong D, Shriner D, Sims M, Siscovick D, Wilson JG, Zmuda J, Dupuis J, Florez JC, Meigs JB. Transferability and Fine-Mapping of Fasting Glucose Quantitative Trait Loci across Populations: CARe, the Candidate Gene Association Resource. American Diabetes Association 201. San Diego, California. June 24-28, 2011.

16. **Rasmussen-Torvik LJ***, Guo X, Bowden D, Bertoni A, Sale M, Rotter J, Bluemke D, Goodarzi M, Chen Y-D, Vaidya D, Raffel L, Pankow J. Association of GWAS Candidate SNPs with Fasting Glucose Across Ethnic Groups in MESA. American Diabetes Association conference. San Diego, CA. June 24-28, 2011.

17. Scott RA*, Manning AK, Hivert M-F, Bouatia-Naji N, Grimsby J, Liu C-T, Chen H, Bielak LF, **Rasmussen-Torvik LJ**, Wareham NJ, Watanbe RM, Florez JC, Langenberg C, Dupuis J, Meigs JB. Gernome-wide joint meta-analysis of SNP by BMI interaction on fasting insulin: A MAGIC study. 47th European Association for the Study of Diabetes Annual Meeting. Lisbon, Portugal. September 12-16, 2011.

18. Hayes MG*, Kho A, Armstrong LL, Ritchie MD, Pacheco JA, **Rasmussen-Torvik LJ**, Just EM, Denny J, Crawford DC, Peissig P, Rasmussen LV, Wei W, de Andrade M, Kullo IJ, Crosslin DR, Mirel D, Crenshaw A, Doheny KF, PughE , Wolf WA, Lowe WL, Roden DM, Chisholm RL. Use of Diverse Electronic Medical Record Systems for a Genome-wide Association Study of Type 2 Diabetes in European- and African-ancestry populations. Presented at American Society for Human Genetics. 2011. Montreal, Canada. October 11-15, 2011

19. **Rasmussen-Torvik LJ***, Pacheco JA, Hayes MG, Kho AN, Muthalagu A, Armstrong LL, Scheftner DA, Wilkins JT, Crosslin D, Ritchie M, Wilke R, Li R, Manolio T, Chisholm R. African American LDL-C GWAS reveals a strong protective SNP Association in APOE: the eMERGE study. American Heart Association 2012 EPI NPAM Scientific Sessions. San Diego, CA. March 2012.

20. Wassel CL***, Rasmussen-Torvik LJ,** Callas PW, Deneberg JO, Durda JP, Reiner AP, Smith NL, Allison MA, Criqui MH, Cushman M. Genetic Risk Scores are Associated with Chronic Venous Disease Prevalence and Severity in a Multi-Ethnic Cohort: The San Diego Population Study. American Heart Association 2012 EPI NPAM Scientific Sessions. San Diego, CA. March 2012.

21. Vassy J*, Durant NH, Kabagambe EK, Carnethon MR, **Rasmussen-Torvik LJ**, Fornage M, Lewis CE, Siscovick DS, Meigs JM. A Genotype Risk Score Predicts Type 2 Diabetes from Young Adulthood: the CARDIA Study. American Diabetes Association. 2012 Scientific Sessions. Philadelphia, Pennsylvania. June 8-12, 2012.

22. **LJ Rasmussen-Torvik***, J Denny, MS Williams, B Keating, A Brautbar, C Prows, S Manzi , SJ Bielinski, S Scott, J Ralston S Volpi, A Gordo, J Haines, D Roden. The PGx project: design and implementation. IGES meeting, Chicago, IL, September 2012.

23. Selvaraj S*, Aguilar FG, Martinez E, Kim KYA, Peng J, **Rasmussen-Torvik LJ**, Sha J, Irvin R, Arnett DK, Shah SJ. Diastolic Wall Strain: A Simple Marker of Abnormal Cardiac Mechanics. American Heart Association 2012 Scientific Sessions. Los Angeles, CA. November 5, 2012.

24. Shah SJ*, Aguilar FG, Selvaraj S, Martinez EE, Kim KYA, Peng J, **Rasmussen-Torvik LJ**, Sha J, Irvin R, Budinger S, Mutlu GM, Arnett DK. Adverse Effects of Obesity, Hyperglycemia, and Insulin Resistance on Cardiac Mechanics. American Heart Association 2012 Scientific Sessions. Los Angeles, CA. November 7, 2012.

25. Vardeny O*, Gupta D, Claggett B, Burke SL, Shah A, Loehr LR, **Rasmussen-Torvik LJ**, Selvin E, Chang PP, Aguilar A, Solomon SD. The Association between Insulin Resistance and Incident Heart Failure in the Aric Study. American Heart Association 2012 Scientific Sessions. Los Angeles, CA. November 7, 2012.

26. Aguilar FG*, Selvaraj A, Martinez EE, Kim CYA, Peng J, **Rasmussen-Torvik LJ**, Sha J, Irvin R, Arnett DK, Shah SJ. Serum Uric Acid is an Independent Risk Factor for Subclinical Cardiac Dysfunction: A Speckle-Tracking Analysis of the HyperGE. American Heart Association 2012 Scientific Sessions. Los Angeles, CA. November 7, 2012.

27. Allen N, **Rasmussen-Torvik L***, Arguelles LM, Hwang S, Fornage M, Morrison A, Daviglus M, Levy D, Cupples LA, Fox C, Rotter J, Palmas W, Allison M, Pankow J, Lloyd-Jones D, O'Donnell C. Genetic Loci Associated with Ideal Cardiovascular Health: A Meta-Analysis of Genome-wide Association Studies. Presented as a moderated poster (MP55) at American Heart Association Cardiovascular Epidemiology Conference, New Orleans, LA. March 20, 2013

28. **Rasmussen-Torvik LJ***, de Chavez P, Bertoni A, Bowden D, Dyer A, Golden SH, Meigs J, Pankow J, Liu K, Vassy J, Carnethon MR. Association of SNP rs7903146 in TCF7L2 with incident type 2 diabetes in normal weight and overweight/obese individuals; a pooled analysis. New Orleans, LA. March 20, 2013.

29. **Rasmussen-Torvik LJ***, Pacheco JA, Aufox SA, Kim KYA, Hungness E, Smith ME. Demographic Predictors of Long-term Weight Loss After Bariatric Surgery, ACRT meeting, Washington, DC, June 2013

30. **Rasmussen-Torvik LJ***, Denny J, Williams MS, Keating B, Brautbar A, Prows C, Manzi S, Bielinski SJ, Scott S, Ralston J, Volpi S, Gordo A, Haines J, Roden D. The PGx project: design and implementation. IGES meeting, Chicago, IL, September 2013.

31. **Rasmussen-Torvik LJ***, Pacheco JA, Aufox SA, Kim KYA, Hungness E, Smith ME, Carnethon MR, Greenland P. Association of a variant at 15q26.1 with long-term weight regain after bariatric surgery. Obesity Week, Atlanta GA, November 2013.

32. Carnethon MR*, De Chavez PJD, **Rasmussen-Torvik LJ**, Womack V, Kershaw K. Trends in Diabetes by Socioeconomic Status between 1999-2010: National Health and Nutrition Examination Surveys. American Heart Association 2014 Scientific Sessions. San Francisco, CA. 19 March 2014.

33. Allen NB*, Hallman DM, Gooding H, **Rasmussen-Torvik LJ**, Shay C, Steffen L, Labarthe DR, MD. Heterogeneity in Blood Pressure and Lipid Trajectories throughout Childhood: Project HeartBeat! American Heart Association 2014 Scientific Sessions. San Francisco, CA. March 2014.

34. **Rasmussen-Torvik LJ***, Baldridge A, Pacheco J, Aufox S, Kim K, Silverstein J, Denham E, Hungness E, Smith M, Greenland P. Demographic Predictors of Long-term Weight Loss Beginning One-Year After Bariatric Surgery at Two Medical Centers. American Heart Association 2014 Scientific Sessions. San Francisco, CA. March 2014.

35. Van Driest SL*, Stallings S, Bush WS, Gordon A, Crosslin DR, Jarvik GP, Carrell DS, Bielinski SJ, Olson JE, Ye Z, Kullo IJ, Abul-Husn NS, Scott SA, Castillo BA, Connolly J, Hakonarson H, **Rasmussen-Torvik LJ**, Persell S, Smith M, Kitchner T, Wallace JR, Doheny KF, Li R, Manolio TA, Callis TE, Macaya D, Ackerman MJ, Ritchie MD, Denny JC, Roden DM. Rare potentially pathogenic variants in the congenital arrhythmia syndrome disease genes SCN5A and KCNH2 are detected frequently but rarely associated with arrhythmia phenotypes in electronic health records. Peer reviewed poster presentation. American Society for Human Genetics. San Diego, CA. October 2014

36. Kullo IJ*, **Rasmussen-Torvik LJ** et al**.** Association of rare variants in *LDL.* Peer reviewed poster presentation. American Society for Human Genetics. San Diego, CA. October 2014.

37. Stallings S*, **Rasmussen-Torvik LJ**, et al. The Electronic Medical Records and Genomics Network-Pharmacogenomics (eMERGE-PGx) Project. American College of Medical Genetics and Genomics Annual Clinical Genetics Meeting. Bethesda, MD. March 2015

38. **Rasmussen-Torvik LJ***, Colangelo L, Lima J, Jacobs D, Rodrigez C, Lloyd-Jones D, Shah S. Overlap of echocardiographic definitions of diastolic dysfunction in the CARDIA Study. American Heart Association 2015 Epidemiology and Lifestyle Council Meeting. Baltimore, MD. March 2015.

39. **Rasmussen-Torvik LJ***, de Chavez PJ , Kershaw KN, Knutson KL, Kim KY, Zee P, Carnethon MR. Mediation of racial differences in hypertension by sleep characteristic: The Chicago Area Sleep Study. American Heart Association 2016 Epidemiology and Lifestyle Council Meeting. Phoenix, AZ. March 2016.

40. Wassel Christina L*, **Rasmussen-Torvik LJ**, Frazier-Wood Alexis, Allison Matthew A., McDermott Mary M., Folsom Aaron R., Lloyd-Jones Donald M., Allen Norrina B., Burke Gregory L., Szklo Moyses, Criqui Michael H., Cushman Mary. American Heart Association (AHA)'s Life's 2 Simple 7 and Risk of Lower Extremity Peripheral Artery Disease (PAD): The Multi Ethnic Study of Atherosclerosis (MESA). American Heart Association 2016 Epidemiology and Lifestyle Council Meeting. Phoenix, AZ. March 2016.

41. Safarova MS*, Fan X, Jarvik GP, Leppig KA, **Rasmussen-Torvik LJ**, Pendergrass S, Sturm A, Namjou B, Shah A, Carroll R, Chung WK, Wei WQ, Stein M, Williams MA, Roden DM, Denny JC, Kullo IJ. A Phenome-wide Association Study to Assess Pleiotropic Effects of LPA. American Heart Association Scientific Sessions 2017, Anaheim, California.

42. Wei WQ*, Li X, Feng Q, Kubo M, Kullo IJ, Peissig PL, Karlson EL, Jarvik GP, Lee MT, Shang N, Larson EA, Edwards T, Shaffer C, Mosley JD, Maeda S, Horikoshi M, Ritchie MS, Williams MS, Larson EB, Crosslin DR, Bland ST, Pacheco JA, **Rasmussen-Torvik LJ**, Cronkite D, Hripcsak G, Cox NJ, Wilke RA, Stein CM, Rotter JI, Momozawa Y, Roden DM, Krauss RM, Denny JC. LPA variants are associated with residual cardiovascular risk in patients receiving statins. American Heart Association Scientific Sessions 2017, Anaheim, California.

43. Pottinger TD*, Puckelwartz M, Dellafave-Castillo L, Pesce L, Robinson A, Pacheco J, Hoell C, Aufox S, **Rasmussen-Torvik LJ**, Smith M, Chisholm R, McNally E. Higher genetic variability in genes linked to inherited cardiac disorders in subjects of African descent. American Heart Association Scientific Sessions 2018, Chicago, IL.

44. Bavishi A*, Ning H, Glynn P, Ahmad F, Yancy Y, Shah S, **Rasmussen-Torvik LJ**, Lloyd-Jones D, Kahn S. Validation of a heart failure risk assessment tool in a large contemporary electronic health record population. American College of Cardiology 2019, New Orleans, LA.

MEDIA COVERAGE AND APPEARANCES

There article below attracted considerable popular press attention:

Rasmussen-Torvik LJ, Shay CM, Abramson JG, Friedrich CA, Nettleton JA, Prizment AE, Folsom AR. Ideal cardiovascular health is inversely associated with incident cancer: the Atherosclerosis Risk In Communities study. Circulation. 2013;127(12):1270-5. doi: 10.1161/CIRCULATIONAHA.112.001183. PubMed PMID: 23509058; PMCID: 3685848.

I was interviewed by CBS radio, CTV news, and the Chicago Tribune. Some links to this coverage are pasted below.

http://www.ctvnews.ca/health/health-headlines/how-a-healthy-heart-can-keep-cancer-at-bay-1.1201616

http://www.theglobeandmail.com/life/health-and-fitness/health-navigator/being-heart-healthy-can-help-prevent-cancer-study/article9927902/

http://www.cbsnews.com/news/key-to-cancer-prevention-may-be-keeping-your-heart-healthy/

http://www.dailymail.co.uk/health/article-2295568/The-seven-point-plan-healthy-life-Simple-lifestyle-steps-help-prevent-cancer-heart-disease-new-study-finds.html

http://abcnews.go.com/blogs/health/2013/03/18/7-steps-to-cut-cancer-risk-in-half/

http://health.usnews.com/health-news/news/articles/2013/03/18/whats-good-for-the-heart-may-also-prevent-cancer

GROUP EXHIBIT D

Affidavit of Elizabeth Corrado For Bryant Blake

My name is Elizabeth Corrado. I am a Volunteer Investigator at the Chicago Community Bond Fund, assisting Plaintiffs' counsel in *Mays v. Dart*. On April 14, I spoke to Bryant Blake, a detainee in the Cook County Jail, who provided me the following information.

1. Mr. Blake is 51 years old. He is residing in Division 11 (**Div11-BF-310-1)** of the Cook County Jail. He is incarcerated on $100,000 bond that he cannot afford to pay. He has been in the Jail since February 29, 2020.

2. Mr. Blake was residing in quarantine until April 12. His previous roommate contracted COVID-19, at which point he was moved from a double cell to a single cell. Mr. Blake asked to be tested after his cellmate tested positive, but he did not receive a test.

3. Mr. Blake has a spinal and neck injury. He is supposed to receive bilateral facial injections because of the injury but he has not been receiving them.

4. Social distancing is not possible in the Jail. The detainees in Mr. Blake's tier share showers, toilets and sinks. They share 12 tables in the dayroom, and phones, which are under 2 feet apart.

5. Mr. Blake has access to soap but not hand sanitizer. He does not have access to cleaning supplies for his cell and it does not get cleaned regularly.

6. Mr. Blake received a mask for the first time on April 12.

7. Mr. Blake has written multiple grievances since the pandemic started, including one asking for a COVID-19 test after his cellmate tested positive. He has not seen a counselor to submit the grievances.

I am providing this hearsay declaration because of restrictions on visitors and contact with detainees in the Cook County Jail. I declare under penalty of perjury that the foregoing is true and correct.

April 14, 2020 /s/ Elizabeth Corrado
Chicago, Illinois Elizabeth Corrado

Affidavit of Elizabeth Corrado For Kevin Watson

My name is Elizabeth Corrado. I am a Volunteer Investigator at the Chicago Community Bond Fund, assisting Plaintiffs' counsel in *Mays v. Dart*. On April 14, I spoke to Kevin Watson, a detainee in the Cook County Jail, who provided me the following information.

1. Mr. Watson is 35 years old. He is residing in Division 11 (**Div11-AH-401-1)** of the Cook County Jail. He is incarcerated on a no bond order. He was booked in the Jail on August 24, 2019.

2. Mr. Watson is HIV-positive and he has a hernia.

3. Mr. Watson's deck went on quarantine on April 14. The deck across from his is also on quarantine (after three people tested positive). Four people from the deck across from Mr. Watson's were moved to his deck on April 13. One of those people had a fever, and he was then moved to Division 4. Mr. Watson's deck first had their temperatures taken on April 14. A nurse told him that if it was 102 degrees or over, it was a symptom of COVID.

4. Because they are on quarantine, people on Mr. Watson's deck are only allowed out of their cells for 2.5 hours total in a day, 6 people at a time.

5. Everyone on the deck shares showers, sinks and toilets.

6. Mr. Watson has filed two grievances related to COVID but has not received a response.

I am providing this hearsay declaration because of restrictions on visitors and contact with detainees in the Cook County Jail. I declare under penalty of perjury that the foregoing is true and correct.

April 14, 2020 /s/ Elizabeth Corrado
Chicago, Illinois Elizabeth Corrado

Affidavit of Elizabeth Corrado on Behalf of Charles Bocock

My name is Elizabeth Corrado. I am a volunteer investigator helping Plaintiffs' counsel in *Mays v. Dart*. On April 16, 2020, I spoke to Charles Bocock, who is a detainee in the Cook County Jail.

1. Charles Bocock was transferred to Division 4 on April 15.

2. His unit experienced flooding and has been closed for a while. A lot of the toilets and sinks don't work.

3. There is no heat on the Division 4 tier.

4. Detainees were told not to drink the water coming from the taps. A cooler was brought in and placed in the day room, but detainees are only allowed in the day room for a few hours each day.

5. The plumbing is broken in most of the cells so it's impossible to wash hands.

6. He has not seen cleaning supplies. Whereas in Division 6 (his origin division) the COs had spray bottles to disinfect things, none of the guards here do.

7. Some guards placed duct tape and sprayed paint on the floor and said it had something to do with social distancing, but didn't explained how it works, and haven't enforced it.

8. Detainees have no cleaning cloths in Division 4, so they have ripped apart towels of detainees who have been discharged.

9. A person in Division 6 who was in the kitchen tested positive for COVID-19 and went to Stroger.

I am providing this hearsay declaration because of restrictions on visitors and contact with detainees in the Cook County Jail. I declare under penalty of perjury that the foregoing is true and correct.

April 19, 2020 /s/ Elizabeth Corrado
Chicago, Illinois Elizabeth Corrado

Affidavit of Jason Hammond For Javier Montanez

My name is Jason Hammond. I am a Volunteer Investigator at the Chicago Community Bond Fund, assisting Plaintiffs' counsel in *Mays v. Dart*. On April 16, I spoke to Javier Montanez, a detainee in the Cook County Jail, who provided me the following information.

1. Mr. Montanez is 52 years old. He is residing in Division 6 (**DIV6-1L-21-2)** of the Cook County Jail. He is incarcerated on a no bond order. He has been in the Jail since March 29, 2019.

2. Mr. Montanez has Hepatitis C and high blood pressure. He is supposed to be receiving blood draws every three weeks because of his Hepatitis. Mr. Montanez has not been receiving the draws, and he was told that medical was shut down.

3. The entire division is on lockdown/quarantine. Mr. Montanez is let out of his cell 6 hours per day, and locked in for 18 hours per day. 12 people ae allowed in the dayroom at a time.

4. Everyone shares the dayroom bathroom, as well as general showers and toilets. People share dayroom tables, three phones and a single microwave.

5. Mr. Montanez receives soap but not hand sanitizer. Cells are never cleaned and the common areas only get cleaned with watered down bleach.

6. About a week ago, detainees started receiving one mask per day.

7. Nobody in Mr. Montanez's tier has been tested for COVID-19.

8. Mr. Montanez submitted a grievance about COVID two weeks ago (April 2) but has not received a response. He also wrote to a person at Cermak about his complaint but did not receive a response.

I am providing this hearsay declaration because of restrictions on visitors and contact with detainees in the Cook County Jail. I declare under penalty of perjury that the foregoing is true and correct.

April 14, 2020 /s/ Jason Hammond
Chicago, Illinois Jason Hammond

Affidavit of Jason Hammond For Jeffrey Ferguson

My name is Jason Hammond. I am a Volunteer Investigator at the Chicago Community Bond Fund, assisting Plaintiffs' counsel in *Mays v. Dart*. On April 16, I spoke to Jeffrey Ferguson, a detainee in the Cook County Jail, who provided me the following information.

1. Mr. Ferguson is 42 years old. He is residing in Division 2 (**DIV2-D2-N-23**) of the Cook County Jail. He is incarcerated on a no bond order. He was booked in the Jail on January 22, 2018.

2. Mr. Ferguson has chronic mental health issues, including mania and psychosis, as well as high blood pressure.

3. Mr. Ferguson is living in an open dormitory, which is on quarantine. It is a working deck, and kitchen workers reside there.

4. Everyone on the deck shares a toilet, shower and sinks. The beds are 2-3 feet from one another. The detainees all share telephones, which are two feet apart, as well as tables for eating and one microwave that is shared with another unit as well.

5. Mr. Ferguson receives soap but rarely hand sanitizer. The bathrooms are very dirty as no one monitors that they get cleaned.

6. On April 12, all detainees in his unit started receiving a mask per day.

7. Some people on the deck have had serious COVID symptoms, and they were removed. On April 7, one person was brought in to the deck right after being booked, even though the deck was on quarantine.

8. Mr. Ferguson has had symptoms of COVID for about a week. He has asked twice to be tested but has still not received a test. Jail staff just started checking temperatures on April 13.

9. On April 12, Mr. Ferguson put duct tape down in the dayroom to remind detainees to social distance. But guards are making jokes about breaking compliance, and showing disregard for detainees' health and inability to social distance.

10. On April 2, Mr. Ferguson tried to submit a health grievance. But there is no system for submitting grievances. The Jail is not giving out forms or receipts or signatures or any records that the Jail is receiving or processing grievances.

I am providing this hearsay declaration because of restrictions on visitors and contact with detainees in the Cook County Jail. I declare under penalty of perjury that the foregoing is true and correct.

April 16, 2020 /s/ Jason Hammond
Chicago, Illinois Jason Hammond

Affidavit of Jason Hammond on Behalf of Jalessa Boner for Dominick Wing

My name is Jason Hammond. I am a Volunteer Investigator at the Chicago Community Bond Fund, assisting Plaintiffs' counsel in *Mays v. Dart*. On April 14, I spoke to Jalessa Boner about Dominick Wing, a detainee in the Cook County Jail, who provided me the following information.

1. Mr. Wing is 27 years old. He is residing in Division 9 (**DIV9-2B-2302-1**) of the Cook County Jail. He is incarcerated on a no bond order. He has been in the Jail since September 6, 2019.

2. Mr. Wing has asthma. He is currently out of medicine. Nurses have been ignoring his requests for asthma medicine for months.

3. Mr. Wing is residing in a two person cell in Division 9, with another person, who is sleeping four feet away from him. His tier is not on lockdown. 48 other people are on the tier.

4. Social distancing is not possible in the tier. People share the dayroom toilets, Mr. Wing shares a cell, and everyone shares the phones, which are two feet apart.

5. Mr. Wing does not have access to soap or hand sanitizer. Mr. Wing requested soap through Commissary but it was never delivered. He has no access to cleaning supplies.

6. Mr. Wing has not received a mask.

7. Mr. Wing filed a grievance asking for a COVID-19 test. He has not received a response.

I am providing this hearsay declaration because of restrictions on visitors and contact with detainees in the Cook County Jail. I declare under penalty of perjury that the foregoing is true and correct.

April 14, 2020 /s/ Jason Hammond
Chicago, Illinois Jason Hammond

Affidavit of Jason Hammond on Behalf of Lamonte Powell

My name is Jason Hammond. I am a volunteer investigator at the Chicago Community Bond Fund, helping Plaintiffs' counsel in *Mays v. Dart*. On April 18, 2020, I spoke to Lamonte Powell, who is a detainee in the Cook County Jail.

1. Lamonte Powell is housed in Division 11 on a $10,000 bond.

2. He is in a single cell. There are 12 people allowed out on his dayroom at a time.

3. Soap is available in the commissary but he has not received free soap.

4. Detainees are provided with hand sanitizer once a day, in the morning.

5. There is no cleaning of the cells, which is very worrisome; he does not know whether someone previously occupying had symptoms.

6. The common areas are cleaned every other day by 6 or 7 inmates from Division 11. They do a thorough job but the bleach is watered down.

7. He often sees guards with their masks off.

I am providing this hearsay declaration because of restrictions on visitors and contact with detainees in the Cook County Jail. I declare under penalty of perjury that the foregoing is true and correct.

April 18, 2020 /s/ Jason Hammond
Chicago, Illinois Jason Hammond

Affidavit of Kara Crutcher For Dante McGee

My name is Kara Crutcher. I am a Volunteer Investigator at the Chicago Community Bond Fund, assisting Plaintiffs' counsel in *Mays v. Dart*. On April 14, I spoke to Dante McGee, a detainee in the Cook County Jail, who provided me the following information.

1. Mr. McGee is 58 years old. At the time of the conversation, Dante McGee was residing in Division 4 of the Cook County Jail. According to the Sheriff's website, he is now in the Hospital wing of the Jail. He is incarcerated on a $30,000 bond he cannot afford to pay. He has been in the Jail since October 16, 2019.

2. While in Division 4, Mr. McGee lived with 24 other people. 12 people were left out of their cells at a time. They shared showers and sinks. They shared phones.

3. Mr. McGee receives small bars of soap. He does not have access to hand sanitizer or clean towels and wipes for cleaning. Mr. McGee's cell in Division 4 was not cleaned.

4. Mr. McGee lived in Division 8 before Division 4. While there, he shared a cell with someone who tested positive.

5. Mr. McGee filed two grievances about the danger of COVID-19 in the Jail but never heard back.

I am providing this hearsay declaration because of restrictions on visitors and contact with detainees in the Cook County Jail. I declare under penalty of perjury that the foregoing is true and correct.

April 14, 2020 /s/ Kara Crutcher
Chicago, Illinois Kara Crutcher

Affidavit of Kara Crutcher For Eric Blake

My name is Kara Crutcher. I am a Volunteer Investigator at the Chicago Community Bond Fund, assisting Plaintiffs' counsel in *Mays v. Dart*. On April 14, I spoke to Bryant Blake, a detainee in the Cook County Jail, who provided me the following information.

1. Mr. Blake is 25 years old. He is residing in Division 10 (**DIV10-2A-2120-2)** of the Cook County Jail. He is incarcerated on a no bond order. He has been in the Jail since April 20, 2018.

2. Mr. Blake was residing in a double cell until April 12, when he was moved into a single cell. He is not in quarantine.

3. Social distancing is not practical. Half of the tier (24 people) come out of their cell, for 2.5 hours at a time. The people on his tier share sinks, showers, and toilets. They also share 12 tables in the common area and four phones.

4. People in the division have symptoms of dry throat, inability to breathe and fevers, but they were tested after telling staff they were sick.

5. One person was removed from the tier because he was sick. No one who was exposed to that man was tested for COVID-19.

6. Mr. Blake receives a hotel bar of soap, once a week. No one comes to clean his cell. Mr. Blake uses soap he bought in Commissary to clean his cell.

7. Detainees are receiving masks but not on a regular basis.

8. Mr. Blake put in one grievance for medical treatment because nurses have not been coming around for medical treatment. Mr. Blake gave the grievance to CO Sanders and has not heard anything.

9. Usually detainees give grievances to the social workers. But no social workers are allowed in the tier, so the grievances are disappearing.

I am providing this hearsay declaration because of restrictions on visitors and contact with detainees in the Cook County Jail. I declare under penalty of perjury that the foregoing is true and correct.

April 14, 2020 /s/ Kara Crutcher
Chicago, Illinois Kara Crutcher

Affidavit of Laura Stempel on Behalf of Deon Baker

My name is Laura Stempel. I am a volunteer investigator at the Chicago Community Bond Fund, helping Plaintiffs' counsel in *Mays v. Dart*. On April 18, 2020, I spoke to Deon Baker, who is a detainee in the Cook County Jail.

1. Deon Baker has asthma. He was housed in Division 11 but was recently moved to Division 4.

2. It appears that his unit has not been used for several years. Everything is filthy. The detainees were not given anything to clean their unit.

3. The sinks in the unit are rusted out and the water is the color of rust. The jail has provided a water cooler but it's only accessible when staff make it available.

4. The unit has no heat and during this cold spell it has been extremely cold inside

I am providing this hearsay declaration because of restrictions on visitors and contact with detainees in the Cook County Jail. I declare under penalty of perjury that the foregoing is true and correct.

April 18, 2020 /s/ Laura Stempel
Chicago, Illinois Laura Stempel

Affidavit of Laura Stempel on Behalf of Michael Jorgensen

My name is Laura Stempel. I am a Volunteer Investigator at the Chicago Community Bond Fund, assisting Plaintiffs' counsel in *Mays v. Dart*. On April 14, I spoke to Michael Jorgensen, a detainee in the Cook County Jail, who provided me the following information.

1. Mr. Jorgensen is 31 years old. He is residing in Division 10 (**DIV10-2A-2106-2**) of the Cook County Jail. He is incarcerated on a no bond order. He has been in the Jail since February 16, 2018.

2. Mr. Jorgensen is residing in quarantine.

3. Mr. Jorgensen has had COVID-19 symptoms (cough, difficulty breathing) for some days. He did not receive care until he began vomiting blood. At that point he was put in isolation for five days and given antibiotics. He was unable to get tested.

4. Mr. Jorgensen filed a grievance asking for a COVID-19 test. He has not received a response.

I am providing this hearsay declaration because of restrictions on visitors and contact with detainees in the Cook County Jail. I declare under penalty of perjury that the foregoing is true and correct.

April 14, 2020 /s/ Laura Stempel
Chicago, Illinois Laura Stempel

Affidavit of Sam Goldberg on Behalf of Isaac Correcillias-Correa

My name is Sam Goldberg. I am a volunteer investigator at the Chicago Community Bond Fund, helping Plaintiffs' counsel in *Mays v. Dart*. On April 17, 2020, I spoke to Isaac Correcillias-Correa, who is a detainee in the Cook County Jail.

1. Isaac Correcillias-Correa is housed in Division 2, in a dorm setting.

2. There are about 150 people in the dorm. On April 16, they moved another 50 or so people to the dorm.

3. His bunk is close to others.

4. When eating the detainees use a common area. They have to sit picnic-bench style; social distancing is impossible in this setting.

5. Two bars of soap are given out each week but they are not enough to last a week. They would last two days if you were washing your hands after contact with other people.

6. The area is cleaned once per day by inmates.

7. Lots of people on the deck don't feel well, but they aren't tested. Some are removed, but the Jail does not disinfect the area near them. New people are moved in and they are given the removed detainee's sheets.

8. There is no cleaning of the detainee phones between calls.

9. More than half the guards use masks, but many don't use them.

I am providing this hearsay declaration because of restrictions on visitors and contact with detainees in the Cook County Jail. I declare under penalty of perjury that the foregoing is true and correct.

April 18, 2020 /s/ Sam Goldberg
Chicago, Illinois Sam Goldberg

Affidavit of Sam Goldberg on Behalf of Joshua Barbee

My name is Sam Goldberg. I am a volunteer investigator at the Chicago Community Bond Fund, helping Plaintiffs' counsel in *Mays v. Dart*. On April 17, 2020, I spoke to Joshua Barbee, who is a detainee in the Cook County Jail.

1. Joshua Barbee is housed in Division 6, in a tier setting.

2. Mr. Barbee was single-celled until the morning of April 17, when another detainee was placed in his cell.

3. Detainees are given two bars of soap per week, size of a hotel soap bar. It is not enough to last the week. You can ask a guard for more soap, but only some guards will give it to you.

4. There is no cleaning of the phones between uses.

5. There is one bottle of disinfectant on the tier, it's not enough to disinfect surfaces because it's for everything.

6. Guards wear masks for the most part, but some don't.

I am providing this hearsay declaration because of restrictions on visitors and contact with detainees in the Cook County Jail. I declare under penalty of perjury that the foregoing is true and correct.

April 19, 2020 /s/ Sam Goldberg
Chicago, Illinois Sam Goldberg

GROUP EXHIBIT E

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

VASIF "VINCENT" BASANK; FREDDY BARRERA CARRERRO; MANUEL BENITEZ PINEDA; MIGUEL ANGEL HERNANDEZ BALBUENA; LATOYA LEGALL; CARLOS MARTINEZ; ESTANLIG MAZARIEGOS; MANUEL MENENDEZ; ANTAR ANDRES PENA; and ISIDRO PICAZO NICOLAS,

Petitioner,

-against-

THOMAS DECKER, in his official capacity as Director of the New York Field Office of U.S. Immigrations & Customs Enforcement; and CHAD WOLF, in his official capacity as Acting Secretary, U.S. Department of Homeland Security,

Respondents.

20 Civ. 2518 (AT)

MEMORANDUM AND ORDER

ANALISA TORRES, District Judge:

Petitioners, Vasif "Vincent" Basank, Freddy Barrera Carrerro, Manuel Benitez Pineda, Miguel Angel Hernandez Balbuena; Latoya Legall, Carlos Martinez, Estanlig Mazariegos, Manuel Menendez, Antar Andres Pena, and Isidro Picazo Nicolas, are currently detained by Immigration and Customs Enforcement ("ICE") in county jails where cases of COVID-19 have been identified. Petition ¶ 1, ECF No. 9.

Last night after 11:00 p.m., Petitioners filed an amended petition for a writ of habeas corpus under 28 U.S.C. § 2241, requesting release from ICE custody because of the public health crisis posed by COVID-19. *See* Petition. Petitioners also submitted an application for a temporary restraining order ("TRO") pursuant to Rule 65 of the Federal Rules of Civil Procedure, seeking an order (1) releasing them on their own recognizance, subject to reasonable and appropriate conditions, and (2) restraining Respondents, Thomas Decker, in his official capacity

as Director of the New York Field Office of ICE, and Chad Wolf, in his official capacity as Acting Secretary of the U.S. Department of Homeland Security, from arresting Petitioners for civil immigration detention purposes during the pendency of their immigration proceedings. TRO at 1, ECF No. 6.

For the reasons stated below, the TRO is GRANTED, and (1) Respondents, and the Hudson, Bergen, and Essex County Correctional Facilities, are ORDERED to **immediately** release Petitioners today on their own recognizance, and (2) Respondents are RESTRAINED from arresting Petitioners for civil immigration detention purposes during the pendency of their immigration proceedings.

BACKGROUND

Petitioners were detained by ICE in connection with removal proceedings pending at the Varick Street Immigration Court. They are housed in New Jersey county jails where either detainees or staff have tested positive for COVID-19. TRO at 3–4. Specifically, Basank, Benitez Pineda, and Mazariegos are detained at the Hudson County Correctional Facility ("Hudson County Jail"). Petition ¶¶ 5, 7, 11. Barrera Carrerro, Hernandez Balbuena, Legall, Martinez, and Menendez are detained at the Bergen County Correctional Facility ("Bergen County Jail"). *Id.* ¶¶ 6, 8, 9, 10, 12. Pena and Picazo Nicolas are detained at the Essex County Correctional Facility ("Essex County Jail"). *Id.* ¶¶ 13–14.[1]

Each Petitioner suffers from chronic medical conditions, and faces an imminent risk of death or serious injury in immigration detention if exposed to COVID-19. Basank is 54 years old and has a lengthy history of smoking. *Id.* ¶ 5. Barrera Carrerro, age 39, has underlying

[1] During oral argument, Respondents represented to the Court that five Petitioners—Hernandez Balbuena, Legall, Menendez, Basank, and Benitez Pineda—are expected to be released today. However, because Petitioners are not yet released, and because counsel for Petitioners indicated, and Respondents did not dispute, that ICE may take as long as a day to complete the release process, the Court enters the TRO as to all Petitioners directing their immediate release today without fail.

health conditions, including obesity, respiratory problems, a history of gastrointestinal problems, and colorectal bleeding. *Id.* ¶ 6. Benitez Pineda is 44, with pulmonary issues and a history of hospitalization for severe pneumonia. *Id.* ¶ 7. Hernandez Balbuena suffers from diabetes and diabetes-related complications. *Id.* ¶ 8. Legall is 33 years old, and suffers from respiratory problems, including asthma. *Id.* ¶ 9. Martinez, age 56, suffers from severe heart disease, and has a history of hospitalization for congestive heart failure, severe aortic valvular insufficiency, and acute systolic failure, requiring immediate heart valve replacement surgery. *Id.* ¶ 10. Mazariegos is 44, and suffers from high blood pressure and pre-diabetes. *Id.* ¶ 11. Menendez is 31 years old and suffers from chronic asthma. *Id.* ¶ 12. At 36, Pena is asthmatic and has chronic obstructive pulmonary disease ("COPD"), which require inhalers and other medical treatment. *Id.* ¶ 13. Picazo Nicolas, age 40, suffers from Type II diabetes and morbid obesity. *Id.* ¶ 14.

On March 16, 2020, Hannah McCrea, an attorney with Brooklyn Defender Services, emailed Assistant United States Attorney Michael Byars, requesting that ICE release particularly vulnerable individuals, including Basank, Legall, Martinez, and Picazo Nicolas. Harper Decl. ¶ 2, ECF No. 6-1. On March 18, 2020, AUSA Byars responded that he did "not have a timeframe for ICE's response." *Id.* ¶ 3. On March 24, 2020, Alexandra Lampert, also a lawyer with Brooklyn Defender Services, emailed Byars to request the release of additional individuals identified as particularly vulnerable, including Barrera Carrerro, Benitez Pineda, Hernandez Balbuena, Mazariegos, Menendez, and Pena. *Id.* ¶ 4. On March 25, 2020, Lampert again emailed Byars and informed him of Petitioners' intent to seek a temporary restraining order in the Southern District of New York, with the amended petition attached, thus putting Respondents on notice of Petitioners' serious medical conditions and their request for injunctive relief. *Id.* ¶¶ 5, 7.

At 12:30 p.m. today, the Court held a telephonic hearing on Petitioners' request for a TRO.

DISCUSSION

I. Legal Standard

"A plaintiff seeking a temporary restraining order must establish that he is likely to succeed on the merits, that he is likely to suffer irreparable harm in the absence of preliminary relief, that the balance of equities tips in his favor, and that an injunction is in the public interest." *Natera, Inc. v. Bio-Reference Labs., Inc.*, No. 16 Civ. 9514, 2016 WL 7192106, at *2 (S.D.N.Y. Dec. 10, 2016) (internal quotation marks, citation, and alteration omitted).

"It is well established that in this Circuit the standard for an entry of a TRO is the same as for a preliminary injunction." *Andino v. Fischer*, 555 F. Supp. 2d 418, 419 (S.D.N.Y. 2008) (collecting cases). "The showing of irreparable harm is perhaps the single most important prerequisite for a preliminary injunction." *CF 135 Flat LLC v. Triadou SPY N.A.*, No. 15 Civ. 5345, 2016 WL 2349111, at *1 (S.D.N.Y. May 3, 2016) (internal quotation marks, citation, and alteration omitted). Under this prong, the movant "must show that the injury it will suffer is likely and imminent, not remote or speculative, and that such injury is not capable of being fully remedied by money damages." *NAACP v. Town of E. Haven*, 70 F.3d 219, 224 (2d Cir. 1995). To satisfy this requirement, a movant must demonstrate "that he would suffer irreparable harm if the TRO does not issue." *Andino*, 555 F. Supp. 2d at 419. "The district court has wide discretion in determining whether to grant a preliminary injunction." *Almontaser v. N.Y.C. Dep't of Educ.*, 519 F.3d 505, 508 (2d Cir. 2008) (internal quotation marks and citation omitted) (per curiam).

II. Analysis

A. Irreparable Harm

In the Second Circuit, a "showing of irreparable harm is the single most important prerequisite for the issuance of a preliminary injunction." *Faiveley Transport Malmo AB v. Wabtec Corp.*, 559 F.3d 110, 118 (2d Cir. 2009) (internal quotation marks and citations omitted). That harm must be "actual and imminent" rather than speculative. *Id.*

Petitioners have shown irreparable injury by establishing the risk of harm to their health and to their constitutional rights.

1. Risk of Death

On March 11, 2020, the World Health Organization declared COVID-19 a global pandemic. Petition ¶ 26. At that time, there were more than 118,000 cases in 114 countries, and 4,291 people had died. *Id.* ¶ 27. Merely two weeks later, there have been at least 458,927 cases identified in 172 countries and at least 20,807 people have died. *Id.* New York and its surrounding areas have become one of the global epicenters of the outbreak. *Id.* ¶ 35. Petitioners are held at detention facilities located in northern New Jersey. *See id.* ¶¶ 5–14.

As of March 26, 2020, New Jersey has 4,407 confirmed cases of COVID-19—the second highest number of reported cases by any state after New York. Niko Kommenda and Pablo Gutierrez, *Coronavirus map of the US: latest cases state by state*, The Guardian (Mar. 26, 2020), https://www.theguardian.com/world/ng-interactive/2020/mar/26/coronavirus-map-of-the-us-latest-cases-state-by-state. New Jersey also has the fourth most COVID-19 related deaths in the country. *Id.* The three counties where the jails are located—Bergen, Essex, and Hudson counties—comprise one-third of the confirmed cases of COVID-19 in New Jersey, with Bergen County reporting 819 positive results, Essex reporting 381 positives, and Hudson 260. Petition

¶ 36. The jails are no exceptions. Each of the jails where a Petitioner is being housed has reported confirmed cases of COVID-19. *Id.* ¶ 41. This includes two detainees and one correctional officer in the Hudson County Jail; one detainee at the Bergen County Jail; and a "superior officer" at the Essex County Jail. *Id.*

The nature of detention facilities makes exposure and spread of the virus particularly harmful. Jaimie Meyer, M.D., M.S., who has worked extensively on infectious disease treatment and prevention in the context of jails and prisons, recently submitted a declaration in this district noting that the risk of COVID-19 to people held in New York-area detention centers, including the Hudson, Bergen, and Essex County Jails, "is significantly higher than in the community, both in terms of risk of transmission, exposure, and harm to individuals who become infected." Meyer Decl. ¶ 7, *Velesaca v. Wolf*, 20 Civ. 1803 (S.D.N.Y. Feb. 28, 2020), ECF No. 42.

Moreover, medical doctors, including two medical experts for the Department of Homeland Security, have warned of a "tinderbox scenario" as COVID-19 spreads to immigration detention centers and the resulting "imminent risk to the health and safety of immigrant detainees" and the public. Catherine E. Shoichet, *Doctors Warn of "Tinderbox scenario" if Coronavirus Spreads in ICE Detention*, CNN (Mar. 20, 2020), https://www.cnn.com/2020/03/20/health/doctors-ice-detention-coronavirus/index.html. "It will be nearly impossible to prevent widespread infections inside the Hudson, Bergen, and Essex County jails now that the virus is in the facilities because detainees live, sleep, and use the bathroom in close proximity with others, and because '[b]ehind bars, some of the most basic disease prevention measures are against the rules or simply impossible.'" Petition ¶ 47 (internal quotation marks and citation omitted).

Petitioners face serious risks to their health in their confinement. Each has underlying illnesses, including asthma, diabetes, heart disease, hypertension, obesity, and respiratory

problems including COPD. *Id.* ¶¶ 5–14. The Court takes judicial notice that, for people of advanced age, with underlying health problems, or both, COVID-19 causes severe medical conditions and has increased lethality. *People at Risk for Serious Illness from COVID-19*, Centers for Disease Control (Mar. 20, 2020), https://www.cdc.gov/coronavirus/2019-ncov/specific-groups/high-risk-complications.html ("Older people and people of all ages with severe underlying health conditions—like heart disease, lung disease and diabetes, for example—seem to be at higher risk of developing serious COVID-19 illness."); *Information for Healthcare Professionals: COVID-19 and Underlying Conditions*, Centers for Disease Control (Mar. 22, 2020), https://www.cdc.gov/coronavirus/2019-ncov/hcp/underlying-conditions.html (listing, among other medical diagnoses, "moderate to severe asthma," "heart disease," "obesity," and "diabetes" as conditions that trigger higher risk of severe illness from COVID-19); *see* Fed. R. Evid. 201(b) ("The court may judicially notice a fact that is not subject to reasonable dispute because it: (1) is generally known within the trial court's territorial jurisdiction; or (2) can be accurately and readily determined from sources whose accuracy cannot be reasonably questioned."); *Brickey v. Superintendent, Franklin Corr. Facility*, No. 10 Civ. 085, 2011 WL 868148, at *2 n.3 (N.D.N.Y. Feb. 17, 2011) (taking judicial notice of the meaning and symptoms of the condition sciatica), *report and recommendation adopted*, 2011 WL 868087 (N.D.N.Y. Mar. 10, 2011); *Lin v. Metro. Life Ins. Co.*, No. 07 Civ. 03218, 2010 WL 668817, at *1 (S.D.N.Y. Feb. 25, 2010) ("In its decision, the Court took judicial notice of certain medical background information about Hepatitis B.").

A number of courts in this district and elsewhere have recognized the threat that COVID-19 poses to individuals held in jails and other detention facilities. *See United States v. Stephens*, No. 15 Cr. 95, 2020 WL 1295155, at *2 (S.D.N.Y. Mar. 19, 2020) ("[I]nmates may be at a

heightened risk of contracting COVID-19 should an outbreak develop.") (collecting authorities); *United States v. Garlock*, 18 Cr. 418, 2020 WL 1439980, at *1 (N.D. Cal. Mar. 25, 2020) ("By now it almost goes without saying that we should not be adding to the prison population during the COVID-19 pandemic if it can be avoided. Several recent court rulings have explained the health risks—to inmates, guards, and the community at large—created by large prison populations. The chaos has already begun inside federal prisons—inmates and prison employees are starting to test positive for the virus, quarantines are being instituted, visits from outsiders have been suspended, and inmate movement is being restricted even more than usual." (citations omitted)); *see also* Letter from Mike McGrath, Chief Justice, Montana Supreme Court, to Montana Courts of Limited Jurisdiction Judges (Mar. 20, 2020), https://courts.mt.gov/Portals/189/virus/Ltr%20to%20COLJ%20Judges%20re%20COVID-19%20032020.pdf?ver=2020-03-20-115517-333 ("Because of the high risk of transmittal of COVID-19, not only to prisoners within correctional facilities but staff and defense attorneys as well, we ask that you review your jail rosters and release, without bond, as many prisoners as you are able, especially those being held for nonviolent offenses. . . . Due to the confines of [correctional] facilities, it will be virtually impossible to contain the spread of the virus."). Indeed, at least one court has ordered the release on bail of a non-citizen in immigration detention on the ground that detention conditions have been rendered unsafe by COVID-19. *Calderon Jimenez v. Wolf*, No. 18 Civ. 10225 (D. Mass. Mar. 26, 2020), ECF No. 507. Addressing the situation in New Jersey specifically, the New Jersey Supreme Court has held that "reduction of county jail populations, under appropriate conditions, is in the public interest to mitigate risks imposed by COVID-19" in light of "the profound risk posed to people in correctional facilities arising from the spread of COVID-19," and has ordered the release of many individuals serving sentences in New Jersey

county jails. *In the Matter of the Request to Commute or Suspend County Jail Sentences*, Case No. 84230 (N.J. Mar. 22, 2020).

Courts have also recognized this health risk to be particularly acute—and of constitutional significance—for inmates who are elderly or have underlying illnesses. *See United States v. Martin*, No. 19 Cr. 140-13, 2020 WL 1274857, at *2 (D. Md. Mar. 17, 2020) ("[T]he Due Process Clauses of the Fifth or Fourteenth Amendments, for federal and state pretrial detainees, respectively, may well be implicated if defendants awaiting trial can demonstrate that they are being subjected to conditions of confinement that would subject them to exposure to serious (potentially fatal, if the detainee is elderly and with underlying medical complications) illness."). At least one court has ordered the release on bail of an inmate facing extradition on the basis of the risk to his health the pandemic poses. *Matter of Extradition of Toledo Manrique*, No. 19 MJ 71055, 2020 WL 1307109, at *1 (N.D. Cal. Mar. 19, 2020) ("These are extraordinary times. The novel coronavirus that began in Wuhan, China, is now a pandemic. The nine counties in the San Francisco Bay Area have imposed shelter-in-place orders in an effort to slow the spread of the contagion. This Court has temporarily halted jury trials, even in criminal cases, and barred the public from courthouses. Against this background, Alejandro Toledo has moved for release, arguing that at 74 years old he is at risk of serious illness or death if he remains in custody. The Court is persuaded. The risk that this vulnerable person will contract COVID-19 while in jail is a special circumstance that warrants bail.").

The risk that Petitioners will face a severe, and quite possibly fatal, infection if they remain in immigration detention constitutes irreparable harm warranting a TRO. *See Shapiro v. Cadman Towers, Inc.*, 51 F.3d 328, 332 (2d Cir. 1995) (upholding finding of irreparable injury "premised . . . upon [the district court's] finding that [plaintiff] was subject to risk of injury,

infection, and humiliation"); *Mayer v. Wing*, 922 F. Supp. 902, 909 (S.D.N.Y. 1996) ("[T]he deprivation of life-sustaining medical services . . . certainly constitutes irreparable harm.").

2. Constitutional Violations

Second, Petitioners have also shown irreparable injury because, as discussed below, they face a violation of their constitutional rights. In the Second Circuit, it is well-settled that an alleged constitutional violation constitutes irreparable harm. *See, e.g.*, *Connecticut Dep't of Envtl. Prot. v. O.S.H.A.*, 356 F.3d 226, 231 (2d Cir. 2004) ("[W]e have held that the alleged violation of a constitutional right triggers a finding of irreparable injury." (internal quotation marks and citations omitted)); *Statharos v. New York City Taxi & Limousine Comm'n*, 198 F.3d 317, 322 (2d Cir. 1999) ("Because plaintiffs allege deprivation of a constitutional right, no separate showing of irreparable harm is necessary."); *Jolly v. Coughlin*, 76 F.3d 468, 482 (2d Cir. 1996) (clarifying that "it is the alleged violation of a constitutional right that triggers a finding of irreparable harm" and a substantial likelihood of success on the merits of a constitutional violation is not necessary); *Sajous v. Decker*, No. 18 Civ. 2447, 2018 WL 2357266, at *12 (S.D.N.Y. May 23, 2018) (finding that immigration detainee established irreparable injury by alleging that prolonged immigration detention violated his constitutional due process rights).

The Court finds, therefore, that Petitioners have established the threat of irreparable harm absent the TRO.

B. Likelihood of Success on the Merits

The Court concludes that Petitioners have met their burden of showing a likelihood of success on the merits. Petitioners argue that their continued confinement in ICE detention centers where COVID-19 is present and without adequate protection for their health violates their due process rights. TRO at 8. The Court agrees.

The Due Process Clause of the Fifth Amendment to the United States Constitution forbids the government from depriving a person of life, liberty, or property without due process of law. The protection applies to "all 'persons' within the United States, including aliens, whether their presence here is lawful, unlawful, temporary, or permanent." *Zadvydas v. Davis*, 533 U.S. 678, 693 (2001). An application for habeas corpus under 28 U.S.C. § 2241 is the appropriate vehicle for an inmate in federal custody to challenge conditions or actions that pose a threat to his medical wellbeing. *See Roba v. United States*, 604 F.2d 215, 218–19 (2d Cir. 1979) (allowing a § 2241 application to challenge an inmate's "transfer while seriously ill" where that transfer posed a risk of fatal heart failure).

Immigration detainees can establish a due process violation for unconstitutional conditions of confinement by showing that a government official "knew, or should have known" of a condition that "posed an excessive risk to health," and failed to take appropriate action. *Darnell v. Pineiro*, 849 F.3d 17, 35 (2d Cir. 2017); *Charles v. Orange Cty.*, 925 F.3d 73, 87 (2d Cir. 2019) ("Deliberate indifference . . . can be established by either a subjective or objective standard: A plaintiff can prove deliberate indifference by showing that the defendant official recklessly failed to act with reasonable care to mitigate the risk that the condition posed to the pretrial detainee even though the defendant-official knew, *or should have known*, that the condition posed an excessive risk to the plaintiff's health or safety." (internal quotation marks, citation, and alterations omitted)). The risk of contracting COVID-19 in tightly-confined spaces, especially jails, is now exceedingly obvious.[2] It can no longer be denied that Petitioners, who

[2] Other courts have recognized the heightened risk to detainees of contracting COVID-19. *See, e.g.*, *Xochihua-Jaimes v. Barr*, 18-71460, Doc. No. 53 (9th Cir. Mar. 23, 2020) (unpublished) ("In light of the rapidly escalating public health crisis, which public health authorities predict will especially impact immigration detention centers, the court *sua sponte* orders that [p]etitioner be immediately released from detention . . . ."); *Stephens*, 2020 WL 1295155, at *2 (ordering "conditions of 24-hour home incarceration and electronic location monitoring"); Chris Villani, *Releasing ICE Detainee, Judge Says Jail No Safer Than Court*, Law360, March 25, 2020 ("We are living in the midst of a coronavirus pandemic, some infected people die, not all, but some infected people die," U.S. District

suffer from underlying illnesses, are caught in the midst of a rapidly-unfolding public health crisis. The Supreme Court has recognized that government authorities may be deemed "deliberately indifferent to an inmate's current health problems" where authorities "ignore a condition of confinement that is sure or very likely to cause serious illness and needless suffering the next week or month or year," including "exposure of inmates to a serious, communicable disease," even when "the complaining inmate shows no serious current symptoms." *Helling v. McKinney*, 509 U.S. 25, 33 (1993). Petitioners need not demonstrate that "they actually suffered from serious injuries" to show a due process violation. *Darnell*, 849 F.3d at 31; *see Helling*, 509 U.S. at 33. Instead, showing that the conditions of confinement "pose an unreasonable risk of serious damage to their future health" is sufficient. *Phelps v. Kapnolas*, 308 F.3d 180, 185 (2d Cir. 2002) (quoting *Helling*, 509 U.S. at 35) (alteration omitted).

Respondents have exhibited, and continue to exhibit, deliberate indifference to Petitioners' medical needs. The spread of COVID-19 is measured in a matter of a single day—not weeks, months, or years—and Respondents appear to ignore this condition of confinement that will likely cause imminent, life-threatening illness. At oral argument, Respondents represented that ICE and the detention facilities in which Petitioners are housed are taking certain measures to prevent the spread of the virus: screening detainees upon intake for risk factors, isolating detainees who report symptoms, conducting video court appearances with only one detainee in the room at a time, providing soap and hand sanitizer to inmates, and increasing the frequency and intensity of cleaning jail facilities.

These measures are patently insufficient to protect Petitioners. At today's hearing, Respondents could not represent that the detention facilities were in a position to allow inmates

---

Judge Wolf said. "Being in a jail enhances risk. Social distancing is difficult or impossible, washing hands repeatedly may be difficult. There is a genuine risk this will spread throughout the jail.").

to remain six feet apart from one another, as recommended by the Centers for Disease Control and Prevention ("CDC"). *See How to Protect Yourself*, Centers for Disease Control (Mar. 18, 2020), https://www.cdc.gov/coronavirus/2019-ncov/prepare/prevention.html. Nor could Respondents provide the Court with any information about steps taken to protect high-risk detainees like Petitioners. And though Respondents represented that the detention facilities are below their full capacity, the appropriate capacity of a jail during a pandemic obviously differs enormously from its appropriate capacity under ordinary circumstances. Confining vulnerable individuals such as Petitioners without enforcement of requisite social distancing and without specific measures to protect their delicate health "pose[s] an unreasonable risk of serious damage to [their] future health," *Phelps*, 308 F.3d at 185 (internal quotation marks and citation omitted), and demonstrates deliberate indifference.

The Court holds, therefore, that Petitioners are likely to succeed on the merits of their due process claim that Respondents knew or should have known that Petitioners' conditions of confinement pose excessive risks to their health.[3]

C. Balance of Equities and Public Interest

The equities and public interest weigh heavily in Petitioners' favor. First, Petitioners face irreparable injury—to their constitutional rights and to their health.

Second, the potential harm to Respondents is limited. At today's hearing, Respondents were unable to identify a single specific reason for Petitioners' continued detention. And the Court finds that there is none. Petitioners' counsel committed to ensuring the continued appearance of Petitioners at immigration hearings. And, of course, Petitioners' failure to appear at those hearings would carry grave consequences for their respective cases. The Court finds that

[3] The Court does not reach Petitioners' additional argument that they are likely to succeed on the merits of the claim that their due process rights were violated because their current conditions of confinement are punitive. TRO at 8–9.

those incentives are sufficient to safeguard Respondents' interest in Petitioners' in-person participation in future immigration court proceedings.

At oral argument, Respondents raised the fact that Petitioners Martinez and Pena are currently mandatorily detained pursuant to 18 U.S.C. § 1226(c).[4] However, courts have the authority to order those detained in violation of their due process rights released, notwithstanding § 1226(c). *See Cabral v. Decker*, 331 F. Supp. 3d 255, 259 (S.D.N.Y. 2018) (collecting cases). Thus, Respondents have failed to justify Petitioners' continued detention in unsafe conditions.

Finally, the public interest favors Petitioners' release. Petitioners are confined for civil violations of the immigration laws. In the highly unusual circumstances posed by the COVID-19 crisis, the continued detention of aging or ill civil detainees does not serve the public's interest. *See* Declaration of Dr. Homer Venters ¶ 12, *Fraihat v. U.S. Imm. and Customs Enforcement*, 5:19 Civ. 1546, ECF No. 81-11 (C.D. Cal. Mar. 24, 2020) (opining that "the design and operation of detention settings promotes the spread of communicable diseases such as COVID-19"); Declaration of Dr. Carlos Franco-Paredes, *id.* at ECF No. 81-12 at 1 ("Immigration detention centers in the U.S. are tinderboxes for the transmission of highly transmissible infectious pathogens including the SARS-CoV-2, which causes COVID-19. Given the large population density of immigration detention centers and the ease of transmission of this viral pathogen, the attack rate inside these centers will take exponential proportions, consuming significant medical and financial resources."); *Urgent action needed to prevent COVID-19 "rampaging through places of detention" – Bachelet*, UNHCR (Mar. 25, 2020), https://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=25745&LangID=e (United Nations High Commissioner for Human Rights urging that detention of people in jails

[4] As represented by Petitioners' counsel, Martinez's § 1226(c) detention was triggered by his conviction for controlled substances trafficking in 2014, an offense for which he served no term of imprisonment. Pena's § 1226(c) detention was triggered by misdemeanor marijuana convictions from 2002.

"should be a measure of last resort, particularly during this crisis"). To the contrary, public health and safety are served best by rapidly decreasing the number of individuals detained in confined, unsafe conditions. *See, e.g.*, *Grand River Enterprises Six Nations, Ltd. v. Pryor*, 425 F.3d 158, 169 (2d Cir. 2005) (referring to "public health" as a "significant public interest").

CONCLUSION

For the reasons stated above, the TRO is GRANTED. Respondents, and the Hudson, Bergen, and Essex County Correctional Facilities are ORDERED to **immediately** release Petitioners today on their own recognizance without fail. Respondents are RESTRAINED from arresting Petitioners for civil immigration detention purposes during the pendency of their immigration proceedings.

The TRO will expire on **April 9, 2020**, at **6:30 p.m.** No later than **April 2, 2020**, at **12:00 p.m.**, Respondents must show cause why the TRO should not be converted to a preliminary injunction. Petitioners may file a response no later than **April 7, 2020**, at **12:00 p.m.**

SO ORDERED.

Dated: March 26, 2020, at 6:30 p.m.
New York, New York

ANALISA TORRES
United States District Judge

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
CIVIL MINUTES—GENERAL

Case No.	**CV 85-4544-DMG (AGRx)**	Date	March 28, 2020
Title	***Jenny L. Flores, et al. v. William P. Barr, et al.***	Page	1 of 15

Present: The Honorable DOLLY M. GEE, UNITED STATES DISTRICT JUDGE

KANE TIEN	NOT REPORTED
Deputy Clerk	Court Reporter
Attorneys Present for Plaintiff(s)	Attorneys Present for Defendant(s)
None Present	None Present

Proceedings: IN CHAMBERS—ORDER RE PLAINTIFFS' *EX PARTE* APPLICATION FOR RESTRAINING ORDER AND ORDER TO SHOW CAUSE RE PRELIMINARY INJUNCTION [733]

On March 26, 2020, in light of the COVID-19 public health crisis, Plaintiffs filed an *Ex Parte* Application for a Temporary Restraining Order (TRO) and an Order to Show Cause (OSC) why a preliminary injunction should not issue, arguing that Defendants the Office of Refugee Resettlement ("ORR") and Immigration and Customs Enforcement ("ICE") must promptly release or provide justification for retaining custody over eligible Class Members, and that ORR and ICE should implement the practices recommended by the United States Centers for Disease Control and Prevention ("CDC") to avoid the spread of infection.[1] [Doc. # 733.] On March 27, 2020, Defendants filed their response, and the Court held a hearing. [Doc. # 73.]

Having duly considered the parties' written submissions and oral arguments, the Court **GRANTS in part** and **DENIES in part** the *Ex Parte* Application for the reasons set forth below.

I. BACKGROUND[2]

The Coronavirus Disease 2019 ("COVID-19") has reached pandemic status and, without effective intervention, the CDC projects it will infect up to 200 million people and cause as many as 1.5 million deaths in the United States alone. TRO App., Ex. A (Peeler Decl.) ¶¶ 5–6 [Doc. # 733-3]. Governments and public agencies have taken extraordinary measures to attempt to curtail exponential rates of infection of this highly contagious disease, including school closures and "shelter in place" orders covering over 160 million Americans. *See* TRO App. at 10; TRO

[1] Currently, Plaintiffs do not seek a TRO against Defendant Customs and Border Patrol ("CBP"), as those parties are close to an agreement on the relevant issues in CBP facilities. Schey Decl. ¶ 7.

[2] The Court incorporates by reference the factual background of the *Flores* Agreement set out in *Flores v. Lynch*, 828 F.3d 898, 901–04 (9th Cir. 2016), and this Court's own prior orders.

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
CIVIL MINUTES—GENERAL

App., Ex. B (Haney Decl.) ¶ 5 [Doc. # 733-4].[3] With no vaccine or cure at present, and hospitals in some parts of the country already becoming overwhelmed with COVID-19 cases, medical experts urge the practice of social distancing—maintaining more than six feet between all individuals, even asymptomatic individuals—and frequent hand washing and use of hand sanitizer. Peeler Decl. ¶¶ 12–14; TRO App., Ex. C (Graves Decl.) ¶ 8 [Doc. # 733-5]; TRO App., Ex. E (Wang Decl.) ¶ 12 [Doc. # 733-7]. Officials recommend limiting gatherings of more than ten people. Wang Decl. ¶ 18.

The CDC has issued "Interim Guidance on Management of Coronavirus Disease 2019 (COVID-19) in Correctional and Detention Facilities" advising such facilities on preparation, prevention, and management measures to help reduce the risk of transmission and severity of disease from COVID-19. Defs.' Response, Ex. L ("CDC Guidance") [Doc. # 736-12].[4]

On March 19, 2020, ORR distributed the "COVID-19 Interim Guidance for ORR Programs" ("ORR Guidance") to its contracted care facilities. TRO App., Ex. L ("ORR Guidance") [Doc. # 773-14]. The ORR Guidance requires (1) planning and coordination with local hospitals and health departments, (2) enhanced staff and visitor screening for symptoms or COVID-19 risk, (3) identifying children with risk of COVID-19 exposure risk, (4) isolating children with symptoms or high risk if possible, and (5) releasing children from custody only once they have been medically cleared by a physician or ORR has been consulted. *Id.* ORR has since updated its practices regarding COVID-19, as described in more detail below. *See generally* Defs' Response, Ex. A (Sualog Decl.) [Doc. # 736-1]. A CDC COVID-19 specialist has advised that "ORR's current COVID-19 procedures are consistent with CDC guidances for congregate settings; they direct grantee care-provider facilities to implement both containment and mitigation measures. In some respects, ORR's current COVID-19 procedures actually exceed those set forth in the CDC guidances to congregate care facilities." Defs.' Response, Ex. K (Cohn Decl.) ¶ 20 [Doc. # 736-11].[5]

[3] All page references herein are to page numbers inserted by the CM/ECF system.

[4] The CDC Guidance specifically refers to ICE as a covered agency but does not specifically cover the higher-security ORR facilities or juvenile facilities. The Guidance does suggest, however, that administrators of juvenile facilities adapt the CDC Guidance to suit their needs. *Id.* at 4.

[5] This statement compares ORR's procedures to CDC's guidances for long-term care facilities such as nursing homes, not to the CDC guidance for detention facilities. *See* CDC, *Preparing for COVID-19: Long-term Care Facilities, Nursing Homes*, https://www.cdc.gov/coronavirus/2019-ncov/healthcare-facilities/prevent-spread-in-long-term-care-facilities.html (last accessed March 28, 2020). The CDC guidance for long-term care facilities is less detailed than that for detention facilities but makes similar general recommendations. "Congregate" care refers to

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
CIVIL MINUTES—GENERAL

ICE's Guidance on COVID-19 was last updated and reviewed on March 26, 2020, U.S. Immigration and Customs Enforcement, ICE Guidance on COVID-19, https://www.ice.gov/covid19 (last visited March 27, 2020) ("ICE Guidance").[6] The ICE Guidance claims in general terms that it incorporates the CDC's recommendations. ICE has suspended social visitation to its three Family Residential Centers ("FRCs") where Class Members and their family members are held, and offered virtual legal visitation. Peeler Decl. ¶ 16; TRO App., Ex. J (Meza Decl.) ¶ 14 [Doc. # 733-12]; Defs.' Ex. M, (Johnson Decl.) ¶¶ 21, 24 [Doc. # 736-13]. An attorney observed that as of March 23, 2020, Karnes County Residential Center ("Karnes") appeared to be implementing some social distancing measures. Meza Decl. ¶ 38. ICE is screening visitors, testing detainees with symptoms for COVID-19, and transporting detainees who require higher levels of monitoring and care to appropriate hospitals. Johnson Decl. ¶¶ 10, 22–23. ICE is also following Pennsylvania and Texas state guidance in managing FRCs located in those states, including shutting down schools and volunteer programs that would expose residents to in-person contact. *Id.* ¶¶ 19, 24, 30.

As of March 26, 2020, eight program personnel or foster parents at five ORR care-provider programs located in New York, Washington, and Texas have self-reported testing positive for COVID-19. Sualog Decl. ¶ 38. There were four confirmed cases among minors in ORR care provider facilities, all in one facility in New York, and 18 minors have been tested. *Id.* ¶¶ 35–37. At least one child in ICE care is under quarantine, has received a COVID-19 test, and is awaiting results. TRO App., Ex. H (Cambria Decl.) ¶ 36 [Doc. # 733-10]. According to ICE, as of March 26, 2020, there are two confirmed cases of COVID-19 among ICE detainees, three confirmed cases among ICE personnel working in detention facilities, and 19 confirmed cases among ICE employees not assigned to detention facilities. *See* ICE Guidance.

Plaintiffs now argue that ORR's and ICE's response to the coronavirus pandemic violates their contractual obligations under the *Flores* Settlement Agreement ("FSA" or "Agreement") and seek a TRO requiring ORR and ICE to promptly release eligible Class Members, record the agencies' reasons for not promptly releasing Class Members, and implement the CDC's recommendations for managing COVID-19 in detention facilities.

---

settings where numerous people sleep, eat, bathe, and participate in daily activities in close quarters, and by definition, is incompatible with social distancing. Wang Decl. ¶ 17; Graves Decl. ¶ 10.

[6] The Court *sua sponte* takes judicial notice of the ICE Guidance as facts not subject to reasonable dispute and "capable of accurate and ready determination by resort to sources whose accuracy cannot reasonably be questioned." *Campbell v. PricewaterhouseCoopers, LLP*, 642 F.3d 820, 824, n. 3 (9th Cir. 2011) (citing Fed. R. Evid. 201(b)).

II.
LEGAL STANDARD

TROs are governed by the same standard applicable to preliminary injunctions. *Niu v. United States*, 821 F. Supp.2d 1164, 1167 (C.D. Cal. 2011) (internal quotation omitted); *see also Stuhlbarg Int'l Sales Co. v. John D. Brush & Co.*, 240 F.3d 832, 839 n.7 (9th Cir. 2001). A plaintiff seeking preliminary injunctive relief must show that: (1) they are likely to succeed on the merits; (2) they are likely to suffer irreparable harm in the absence of preliminary relief; (3) the balance of equities tips in their favor; and (4) an injunction is in the public interest. *Toyo Tire Holdings of Ams. Inc. v. Cont'l Tire N. Am., Inc.*, 609 F.3d 975, 982 (9th Cir. 2010) (citing *Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 20 (2008)). An injunction is also appropriate when a plaintiff raises "serious questions going to the merits," demonstrates that "the balance of hardships tips sharply in [their] favor," and "shows that there is a likelihood of irreparable injury and that the injunction is in the public interest." *All. for the Wild Rockies v. Cottrell*, 632 F.3d 1127, 1135 (9th Cir. 2011) (quoting *Lands Council v. McNair*, 537 F.3d 981, 987 (9th Cir. 2008)). In the Ninth Circuit, the four "elements of the preliminary injunction test are balanced, so that a stronger showing of one element may offset a weaker showing of another." *Id.* at 1131.

III.
DISCUSSION

A. Likelihood of success on the merits

Plaintiffs argue that they have shown likelihood of success on the merits of their claims that ORR and ICE have failed to comply with their obligations under the FSA to "release a minor from its custody without unnecessary delay" and "make and record the prompt and continuous efforts on its part toward family reunification and the release of the minor," as well as their obligation to keep Class Members "in facilities that are safe and sanitary and that are consistent with [their] concern for the particular vulnerability of minors." *Flores* Agreement ¶¶ 12, 14, 18 [Doc. # 101]. To protect Class Members' rights under the Agreement, Plaintiffs seek (1) the prompt release of minors who are neither a flight risk nor a danger and minors who have a suitable custodian, as well as placement of minors in non-congregate settings if possible and up-to-date reporting on the justifications for keeping minors in custody, and (2) ORR and ICE's prompt implementation of public health strategies recommended by the CDC to protect people that remain in congregate settings in detention. Plaintiffs also seek enforcement of the *Flores* Agreement's provision requiring that Defendants make and record their continuous efforts toward releasing individual Class Members.

It is beyond dispute at this point in this litigation that the FSA is a consent decree that is construed as a contract. *See, e.g.*, *Flores v. Sessions*, 862 F.3d 863, 874 (9th Cir. 2017); Order re Pls.' Mot. to Enforce at 3 [Doc. # 177]; Order re Pls.' Mot. to Enforce & Appoint a Special Monitor at 2–4 [Doc. # 363]. The Court incorporates the legal standards that it articulated in its July 24, 2015 Order and June 27, 2017 Order and need not repeat them here. [Doc. ## 177, 363.]

For the reasons stated below, the Court finds that Plaintiffs have shown serious questions as to the merits of their claim that ICE has breached the FSA with regard to the provision of safe and sanitary conditions and appropriate medical care and living accommodations in the context of the COVID-19 outbreak. The Court further finds that Plaintiffs have a strong likelihood of succeeding on their claim that both ICE and ORR have breached the FSA in their failure to release minors to suitable custodians in a prompt manner and to record their continuous efforts towards minors' release.

1. Safe and sanitary conditions and appropriate medical care

The Court has previously held, with regard to CBP temporary facilities, that the Agreement's requirement for safe and sanitary conditions covers an array of basic hygiene and health needs such as soap, toothbrushes, regulated temperatures, and conditions in which Class Members can sleep. *See Flores v. Sessions*, 394 F. Supp. 3d 1041, 1057, 1059, 1061 (C.D. Cal. 2017); *see also Flores v. Barr*, 934 F.3d 910, 916 (9th Cir. 2019) ("We note that, as the district court properly understood, assuring 'safe and sanitary' conditions includes protecting children from developing short- or long-term illnesses as well as protecting them from accidental or intentional injury."). In addition to requiring safe and sanitary conditions with the particular vulnerabilities of minors in mind, Exhibit 1 to the FSA also specifies that minors detained in licensed programs shall receive, *inter alia*, "suitable living accommodations, . . . [a]ppropriate routine medical . . . care, . . . emergency health care services, . . . screening for infectious [disease] within 48 hours of admission . . . [and] immunizations in accordance with the U.S. Public Health Service (PHS), Center for Disease Control." Settlement Exhibit 1, ¶ A.1. There is no dispute that ORR care facilities and ICE FRCs are covered by Exhibit 1.[7]

[7] Defendants argue that Paragraph 12 of the FSA, which provides for the requirement that "[f]ollowing arrest, the INS shall hold minors in facilities that are safe and sanitary," does not apply to ORR's care facilities, which are licensed facilities designed for longer-term custody of Class Members, or to the one ICE FRC that is state-licensed. Defs.' Response at 25. The Court need not decide at this time whether Paragraph 12 also applies to ORR facilities and one of the three ICE FRCs because those issues have not been fully addressed in a prior motion, and the Court need not address it in order to resolve the TRO. Moreover, there can be no dispute that other provisions of the FSA speak to the need to protect detained minors' safety and well-being. *See, e.g.*, *Flores* Agreement ¶¶ 11, 14.

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
CIVIL MINUTES—GENERAL

Medical experts fear the exceptionally rapid transmission of COVID-19 in detention facilities, where medical resources such as physicians, testing kits, and protective equipment are constrained; people are unable to practice social distancing; shared facilities are not frequently or properly sanitized; soap and hand sanitizer are not provided or easily accessible to detainees; quarantine or isolation units are scarce; and there are frequent opportunities for an infected person to enter or leave the facility. *See, e.g.*, Peeler Decl. ¶¶ 19–25; Haney Decl. ¶¶ 7–11; TRO App., Ex. D (Meyer Decl.) ¶¶ 8–15. For migrant children in detention, who are already more likely to have mental health concerns or may be separated from their family members, the trauma of undergoing solitary quarantine for the virus or simply not receiving adequate information about the potential for infection is likely to exacerbate existing mental health concerns. Peeler Decl. ¶¶ 26-27; Haney Decl. ¶¶ 12–13; TRO App., Ex. F (Zein Decl.) at 2–3 [Doc. # 733-8]. Furthermore, a high concentration of sick children, family members, and/or staff members in one community may overwhelm already strained local health care resources, particularly in the rural communities where many ICE and ORR facilities are located. Peeler Decl. ¶ 28. Examples from prior epidemics and recent prison outbreaks of COVID-19 confirm these medical experts' fears. Peeler Decl. ¶¶ 30–31, 33. And, although children thus far appear less susceptible to COVID-19 than adults, they may still carry and transmit the coronavirus, and common health concerns affecting many Class Members, such as asthma, malnutrition, and immunosuppression, may make them more susceptible to serious forms of the disease. Peeler Decl. ¶ 8; Graves Decl. ¶ 11. Accordingly, experts recommend reducing the size of the population within detention facilities to permit children to be in the custody of family sponsors or to be released with their families and thereby lessen the resource constraints and likelihood of overwhelming contagion in the less-crowded facilities. Peeler Decl. ¶¶ 35–41; Graves Decl. ¶¶ 27–32; TRO App. Ex. G (Letter to Congress) [Doc. # 733-9]. [8]

ORR has submitted evidence that the Chief Medical Officer of the CDC's National Center for Immunizations and Respiratory Diseases, who is also Deputy Incident Manager for the CDC COVID-19 response, approves of ORR's current COVID-19 procedures as consistent with CDC guidances for congregate settings, and stated that "[i]n some respects, ORR's current COVID-19 procedures actually exceed those set forth in the CDC guidances to congregate care facilities." Cohn Decl. ¶¶ 20–21. ORR also responds that it now: (1) has stopped placements in New York, California, and Washington (states with significant coronavirus outbreaks); (2) has limited air travel to local placements; (3) requires all care providers to conduct temperature checks for every Class Member in its care twice each day; (4) elevates all medical cases with flu-like symptoms;

[8] Defendants' objections to these physicians' opinions are OVERRULED, to the extent that the Court finds the opinions reliable and based on expertise and personal knowledge. The Court gives only some weight to these opinions insofar as they are not based upon personal knowledge of ORR and ICE detention facilities. *See* Defs.' Response at 41–43.

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
CIVIL MINUTES—GENERAL

(5) maintains medically appropriate isolate capabilities at all of its shelters; (6) restricts access to all visitors who display either an elevated temperature or flu-like symptoms; (7) provides testing if recommended by medical personnel, (8) has full-time medical staff on site, and (9) isolates anyone who either tests positive or is suspected of exposure to the COVID-19 virus. *See* Sualog Decl. ¶¶ 17–34.

Though ORR apparently still fails to address recommendations related to social distancing, personal hygiene, or personal protective equipment, among others, these updates in policy in response to a rapidly developing situation indicate that ORR is working to provide safe accommodations and medical care to Class Members in its custody. Furthermore, overcrowding at ORR facilities does not appear to be an issue, as ORR's care-provider facilities are operating significantly below their maximum capacity and historical highs. *See* Sualog Decl. ¶ 13. According to declarations submitted by plaintiffs in support of a request for a TRO in a related case, *Lucas R. v. Azar*, CV 18-05741 DMG (PLAx) (C.D. Cal.) [Doc. # 227],[9] attorneys working in ORR facilities for unaccompanied minors assert that each of the facilities in which they work is at half or three-quarters capacity, although children and staff continue to spend their time in close physical proximity. *Lucas R.* TRO App., Ex. F (Enriquez Decl.) ¶ 6 [Doc. # 227-8]; *id.*, Ex. G (Flamm Decl.) ¶ 5 [Doc # 227-9]; *id.*, Ex. H (Rutter Decl.) ¶ 3 [Doc. # 227-10]. Recent CDC orders prohibiting the entrance of unaccompanied children into the United States will also likely decrease ORR's custodial population. Cohn Decl. ¶ 23.

Though the Court recognizes that the limited facts before it do not describe the conditions at all of ORR's 107 diverse facilities nationwide, the parties have presented sufficient information for the Court to conclude at this time that ORR appears to be in substantial compliance with its FSA obligations to implement CDC-compliant guidelines and to provide adequate routine medical care and adequate living accommodations.

Accordingly, Plaintiffs have not shown a likelihood of success on the merits as to this part of their claim against ORR.

By contrast, the ICE Guidance appears deficient. The ICE Guidance asserts that it was updated on March 26, 2020 and that ICE implements CDC recommendations, but the section on its website about how it is specifically addressing conditions in detention has not been updated since March 15, 2020, and does not mention social distancing, increased personal hygiene, or increased testing and medical care. *See* ICE Guidance. Nor does the ICE Guidance recognize the

[9] At the hearing, the parties stipulated to the Court's use of declarations submitted in support of and in opposition to the *Lucas R.* TRO application in the disposition of this related TRO application, subject to evidentiary objections.

potential psychological harm of quarantining or isolating children for the duration of this pandemic.

Recent observations of ICE family residential centers ("FRCs") show uneven implementation of the recommended public health measures. An attorney at Karnes noted that as of March 23, 2020, the facility was attempting to implement social distancing measures such as limiting groups to 10 or fewer people, school closure, and meal delivery. Meza Decl. ¶ 38. But attorneys working in Berks County Residential Facility ("Berks") and South Texas FRC in Dilley, Texas ("Dilley"), personally observed that children, family members, and staff continue to spend the vast majority of their time in close physical proximity, and reports from detained minors and their family members indicate that large proportions of them have conditions that render them vulnerable to COVID-19 and/or already show symptoms associated with COVID-19 and that they lack information about COVID-19, access to hand sanitizer, cleaning supplies, personal protective equipment, and medical care. *See, e.g.*, App., Ex. I (Fluharty Decl.) ¶¶ 12-14, 16-17, 19, 23–33 [Doc. # 733-11]; Cambria Decl. ¶¶ 10, 29–35.[10]

ICE responds that, with the pandemic response evolving rapidly in all sectors, it has also updated its response. Now, it asserts that Berks, Dilley, and Karnes are implementing the public health measures that Plaintiffs requested in their TRO application. In summary, as of March 27, 2020, the FRCs are increasing the availability of hand sanitizers and soap and adding new sanitizing stations throughout the FRCs; conducting more frequent cleaning and deep cleaning in areas where residents congregate; suspended school and educational programs per statewide orders in Pennsylvania and Texas; employing extra screening measures; employing staggered or "satellite" meals to ensure greater social distancing at mealtime; limiting gatherings to small groups in common areas; encouraging families to stay in their own residential areas; and coordinating telephonic legal representation. Johnson Decl. ¶¶ 16, 18–22, 24, 27–29.

Though laggardly in its early response, as of two days ago ICE appears to have announced its implementation of CDC guidance during the COVID-19 outbreak. Given the current state of the evidence and ICE's only recent promulgation of some CDC recommendations in its FRCs, the Court finds that Plaintiffs have raised serious questions as to the merits of their claim that ICE is not compliant with its FSA obligations in the context of the COVID-19 outbreak.

[10] Defendants' objections to Fluharty's, Meza's, and Cambria's declarations are OVERRULED, to the extent that the Court relies on the attorneys' personal observations. Considering the difficulty of obtaining non-hearsay testimony from detainees even without the physical constraints of this pandemic and lack of any other evidence regarding on-the-ground conditions in the FRCs, the Court accords appropriate weight to hearsay observations by Class Members and their families. *See* Defs.' Response at 39–41.

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
CIVIL MINUTES—GENERAL

Considering the Court's past orders, the exigencies of the circumstances, COVID-19's highly contagious nature, and the imminence of the threat, the Court invokes its authority, as described in the October 5, 2018 Order Appointing Special Master/Independent Monitor [Doc. # 494], to require heightened inspections of ICE facilities and, to a more limited extent, ORR facilities to ensure the existence of safe and sanitary conditions. *See* October 5, 2018 Order at ¶¶ A, B.

2. Release without unnecessary delay and recording efforts toward release

In 2019, children in ORR custody remained in that agency's care for an average of 66 days.[11] Office of Refugee Resettlement, Facts and Data: Length of Care, https://www.acf.hhs.gov/orr/about/ucs/facts-and-data (last visited March 27, 2020). In addition to its obligations under the *Flores* Agreement, ORR is tasked by the William Wilberforce Trafficking Victims Protection Reauthorization Act ("TVPRA") to ensure that any sponsor is "capable of providing for the child's physical and mental well-being." 8 U.S.C. § 1232(c)(3)(A). This Court has previously found that some of ORR's policies, even if they result in delays in releasing minors to adult custodians, "appear to be reasonably calculated to protect Class Members from 'harm or neglect' and to ensure that they have an adequate 'standard of care.'" *Flores v. Sessions*, No. CV 85-4544-DMG (AGRx), 2018 WL 10162328, at *18 (C.D. Cal. July 30, 2018) (quoting Agreement at ¶¶ 11, 17). But the change in factual circumstances now requires a reexamination of whether ORR's continued custody of children in congregate settings meets the Agreement's requirement that Class Members be released without unnecessary delay.

As of March 13, 2020, ORR had 3,622 minors in custody, 1,193 of whom were in congregate settings after having been detained for 30 days or more. TRO App., Schey Decl. ¶ 3 [Doc # 733-2]. According to fairly recent data provided by Defendants to Plaintiffs and subsequently analyzed the Dr. Nancy Wang, Professor of Emergency Medicine at Stanford University Medical Center, as of December 31, 2019, of the 4,562 minors still in custody at that time, nearly half of them had been in custody for less than 20 days, but 11.6 percent had been in custody for 31-60 days and—incredibly—11.7 percent had been in custody for six months to one year. TRO App., Ex. P (ORR Data) at 9, 21 [Doc. # 738]. ORR's data do not indicate why the agency failed to release these minors or how many of them have sponsors.[12] According to the

[11] The Court takes judicial notice of the cited ORR website.

[12] Although Dr. Wang's analysis and data from 2018 indicates that the vast majority of children in ORR's care had close family members available as custodians, neither party has provided more updated information about the availability of custodians for ORR's current care population. *See* Schey Decl. ¶ 9; Defs.' Response at 21; ORR Data at 12.

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
CIVIL MINUTES—GENERAL

Dilley Pro Bono Project's records of Dilley residents, as of March 25, 2020, at least 22 minors have been detained more than 160 days, 10 have been detained for over 200 days, seven have been detained for more than 220 days, and one has been detained for 229 days. Fluharty Decl. ¶ 50. ORR's apparent failure to "make and record the prompt and continuous efforts on its part toward . . . the release of the minor" makes it more difficult to ascertain how many of the minors' releases to suitable custodians have been delayed without good reason. Agreement at ¶ 18; *see also Flores v. Sessions*, 2018 WL 10162328, at *21 (finding that the Agreement requires individualized assessments of whether a sponsor is a fit custodian and that requiring the ORR director's approval of certain Class Members' release violated the Agreement). Accordingly, though ORR may have justifications under the TVPRA for delaying release, Plaintiffs have raised serious questions going to the merits of their claim that ORR is in violation of the FSA's recording requirement.

As for ICE, the agency explains that its decisions to release class members depend on various factors, including the applicable detention authority, the status of any removal, credible fear, or reasonable fear proceedings, judicial or administrative stays, and humanitarian factors. Defs.' Response at 23–24. Those decisions may be complicated by the fact that the FSA does not contain any affirmative right of release for adults in immigration detention with their children. *Flores v. Lynch*, 828 F.3d 898, 909 (9th Cir. 2016). But the Court reminds Defendants—yet again—that "hold[ing] minors in indefinite detention in unlicensed facilities, . . . constitute[s] a fundamental and material breach of the parties' Agreement." *Flores v. Sessions*, No. CV 85-4544-DMG (AGRx), 2018 WL 4945000, at *2 (C.D. Cal. July 9, 2018). ICE therefore must still comply with the Agreement's requirement to release minors without unnecessary delay and "make and record the prompt and continuous efforts on its part toward family reunification and the release of the minor." Agreement ¶¶ 12, 14. And,

> [t]o be clear, the Court will not dictate how Defendants must exercise their discretion to parole or release minors in every single case—instead, the Court will order Defendants to comply with the unambiguous charge of the *Flores* Agreement to make *individualized* determinations regarding a minor's flight risk rather than blanket determinations.

Flores v. Sessions, 394 F. Supp. 3d 1041, 1067 (C.D. Cal. 2017).

Plaintiffs have provided evidence to indicate that ICE does not undertake or record any efforts aimed at the release of minors as required by Paragraphs 14 and 18 of the Agreement. Schey Decl. ¶ 7; Cambria Decl. ¶ 39; Fluharty Decl. ¶ 38–40; Meza Decl. ¶¶ 10, 43. According to a preliminary review of the most recent data provided by ICE to Plaintiffs, in February 2020, about 3,359 class members were detained in ICE family detention facilities. Schey Decl. ¶¶ 2,4.

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
CIVIL MINUTES—GENERAL

More than half of those class members—1,861—have been detained for three months or longer. Of those class members, two were apprehended in 2014, four were apprehended in 2018, dozens have been detained for between ten to twelve months, and hundreds have been in custody for four months or more. *Id.* at ¶ 4. Though Defendants argue that these numbers are inaccurate, they are unable to provide any evidence of more accurate numbers within the time frame necessary to resolve this TRO application. Defs' Response at 23. Without any contrary data, the Court finds that Plaintiffs have shown a strong likelihood of success on their claim that ICE has not undertaken or recorded efforts to promptly release the Class Members in its custody.

Defendants argue that the data Plaintiffs request from ICE is already covered by the Court's October 5, 2018 Order Appointing Special Master/Independent Monitor, [Doc. # 494]. The Monitor is, *inter alia*, tasked with monitoring ICE's compliance with the Court's June 27, 2017 Order [Doc. # 363], which found that ICE violated Paragraphs 14 and 18 of the FSA by failing to make and record continuous efforts to release Class Members and place them in non-secure, licensed facilities. *See* Order Appointing Special Master/Independent Monitor at 4–5 [Doc. # 494]. In fact, the Monitor is also tasked with monitoring ORR's compliance with the Court's July 30, 2018 Order [Doc. # 470], in which the Court found ORR unnecessarily delayed the release of Class Members to custodians in violation of Paragraph 14 and 18 of the FSA. *Id.* at 5. The Monitor thus already has the authority to request "database" information for *all* Class Members, including the "dates, locations, and reasons for all transfers of Class Members" and, if the Class Member was not transferred to a licensed facility or released within 20 days, the reason why. *Id.* at ¶ B.1.c.i. On top of the information already within the Monitor's purview, however, Plaintiffs also request some information about what efforts ICE and ORR are making to ensure Class Members' prompt release and why each Class Member is remaining in custody. This global pandemic appears to be the type of emergency in which the Court may waive the time periods for the dispute resolution procedure set forth in the Order Appointing the Special Master/Independent Monitor. *Id.* at 24.

Because COVID-19 poses unprecedented threats to the safety of Class Members and all who come in contact with them, including ORR and ICE staff, healthcare providers, and local populations, the Court finds that any *unexplained delay* in releasing a child in ORR and ICE custody violates of Paragraphs 14 and 18 of the FSA, which require the agencies to release Class Members in their custody without unnecessary delay and make and record efforts to release the Class Members. This finding is bolstered by the Court's longstanding orders construing and mandating compliance with paragraphs 14 and 18 due to past violations. *See* July 24, 2015 Order [Doc. # 177]; June 27, 2017 Order [Doc. # 363]; July 30, 2018 Order [Doc. # 470]. Accordingly, Plaintiffs have established a strong likelihood of success as to the merits of this part of their claim.

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
CIVIL MINUTES—GENERAL

B. Irreparable harm, public interest, and balance of the equities

Based on the foregoing discussion of the near-certainty of the rapid spread of COVID-19 in ICE and ORR facilities, even if ORR and ICE take more urgent preventative measures, Plaintiffs have demonstrated that "they themselves are likely to suffer irreparable harm absent an injunction" that may aid in securing their release. *Nat'l Wildlife Fed'n v. Nat'l Marine Fisheries Serv.*, 886 F.3d 803, 822 (9th Cir. 2018); *see also Unknown Parties v. Johnson*, No. CV-15-00250-TUC (DCBx), 2016 WL 8188563, at *15 (D. Ariz. No. 18, 2016), *aff'd sub nom Doe v. Kelly*, 878 F.3d 710 (9th Cir. 2017) (finding irreparable harm where the evidence demonstrated "medical risks associated with . . . being exposed to communicable diseases"). As Plaintiffs' counsel noted at the hearing, having information about delays in Class Members' release from ORR and ICE custody can help expedite their release from congregate settings that medical experts agree are hotbeds for contagion.

The severity of the harm to which Plaintiffs are exposed and the public's interest in preventing outbreaks of COVID-19 among families and children in ICE or ORR custody that will infect ICE and ORR staff, spread to others in geographic proximity, and likely overwhelm local healthcare systems tips the balance of equities sharply in Plaintiffs' favor. *See Stormans, Inc. v. Selecky*, 586 F.3d 1109, 1138 (9th Cir. 2009). Any countervailing financial and administrative concerns do not outweigh public health and safety in the midst of pandemic, particularly given the limited scope of the temporary relief that the Court will grant. *See Hernandez v. Sessions*, 872 F.3d 976, 996 (9th Cir. 2017) ("Faced with such a conflict between financial concerns and preventable human suffering, we have little difficulty concluding that the balance of hardships tips decidedly in plaintiffs' favor." (quoting *Lopez v. Heckler*, 713 F.2d 1432, 1437 (9th Cir. 1983)).

The Court agrees with Defendants, however, that the interests of all parties and the public are not well served at this time by rushing to release minors *en masse* in the midst of the current travel restrictions or to release them to potentially unfit custodians based on limited information, particularly given the possibility of contagion via public transportation, or introducing healthy children to homes where they could be at a higher risk of infection. *See* Cohn Decl. ¶ 22; Sualog Decl. ¶¶ 42–44.[13] Furthermore, given the individualized circumstances of each family and each unaccompanied minor's potential sponsor, the Court does not find that ordering ORR and ICE to immediately release hundreds or even thousands of minors is appropriate on a class-wide basis.

[13] The Court is aware that some experts believe that release is safer for children than congregate care. *See, e.g., Lucas R.* TRO App., Supplemental Declaration of Julie DeAun Graves [Doc. # 231-3]. While that may be true as a general matter and therefore supports the FSA's general policy favoring release, the Court is also aware that in the real world not all "homes" are equal. Defendants must promptly fulfill their duty under both the FSA and the TVPRA to make determinations of suitable placement.

Based on the comments of Plaintiffs' counsel at the hearing, it appears that Plaintiffs also agree that an orderly, yet prompt, disposition of minors' claims of suitable placement is a responsible way to proceed.

Pursuant to the clear terms of the FSA and the Court's prior Orders, ORR and ICE are already obligated to release Class Members without unnecessary delay. Accordingly, the balance of equities still weighs in favor of granting Plaintiffs interim relief. While the Court will not order immediate release of minors on a class-wide basis, the Court will order ORR and ICE to show cause why they should not be held to answer for unexplained delays in releasing eligible Class Members.[14]

Thus, paying "particular regard [to] the public consequences in employing the extraordinary remedy of injunction," the Court finds that Plaintiffs have met their burden to show entitlement to temporary injunctive relief, as delineated below, due to the exigencies of the COVID-19 pandemic. *Weinberger v. Romero-Barcelo*, 456 U.S. 305, 312 (1982).

C. Bond

Rule 65(c) permits a court to grant preliminary injunctive relief "only if the movant gives security in an amount that the court considers proper to pay the costs and damages sustained by any party found to have been wrongfully enjoined or restrained." Notwithstanding its seemingly mandatory language, "Rule 65(c) invests the district court with discretion as to the amount of security required, if any." *Johnson v. Couturier*, 572 F.3d 1067, 1086 (9th Cir. 2009) (internal quotation marks omitted).

Based on the record before it and the composition of the class, the Court waives the bond requirement.

IV.
CONCLUSION

In light of the foregoing, Plaintiffs' TRO Application is **GRANTED in part** as follows:

1. Defendants are hereby **ORDERED to SHOW CAUSE** by **April 10, 2020 at 10:00 a.m.** why a preliminary injunction should not issue (1) requiring Defendants to make and record

[14] ORR has already submitted some information that may explain delays in the release of some Class Members, such as the coronavirus-related closure of fingerprinting sites that are key to completing TVPRA-required background checks. *See, e.g.*, Sualog Decl. ¶ 48.

continuous efforts to release class members; (2) enjoining Defendants from keeping minors who have suitable custodians in congregate custody due to ORR's unexplained failure to promptly release these minors to suitable sponsors under the TVPRA; and (3) enjoining Defendants from keeping minors who have suitable custodians in congregate custody due to ICE's unexplained failure to release these minors within 20 days, especially given the emergent circumstances and the Court's prior orders requiring the same (*see, e.g.*, July 24, 2015 Order [Doc. # 177], June 27, 2017 Order [Doc. # 363], July 9, 2018 Order [Doc. # 455], July 30, 2018 Order [Doc. # 470]).

2. Pending the OSC hearing, **IT IS HEREBY FURTHER ORDERED** as follows:

   a. ORR and ICE facilities shall make themselves available to the Juvenile Coordinators for inspection.[15] By no later than **April 9, 2020**, the Juvenile Coordinators overseeing ICE and ORR facilities shall provide the Court and the Special Monitor with a report regarding whether their facilities are at, above, or below capacity levels (with specific numbers) and the status of implementation of CDC-compliant guidances. The Juvenile Coordinators shall also videotape living conditions at any facility chosen by the Special Monitor and/or her expert consultant for review, as well as provide any requested information on what guidance protocols are being followed there.

   b. For the purposes of litigating Plaintiffs' request for injunctive relief, by **April 6, 2020**, ORR and ICE shall provide to the Monitor, Class Counsel, and the Court the information listed in the Order Appointing Special Master/Independent Monitor, at B.1.c.i(i)-(x), as well as a brief summary of efforts toward family reunification or release of the detained Class Member. [Doc. # 494.] To the extent this information implicates privacy concerns, it may be filed under seal.

      i. For the purposes of this evidentiary snapshot, the Court requires the requested data only for Class Members being held in ICE custody in any FRC, and ORR facilities located in States that have 3000 or more confirmed cases of COVID-19 as of the date of this Order: California, Illinois, Louisiana, Massachusetts, Michigan, New Jersey, New York, and Washington. To the extent possible, ORR should endeavor to provide the requested information for all Class Members in their custody.

[15] While physical inspection is preferred, given current guidelines regarding COVID-19 prevention, an inspection via videoconferencing technology is also acceptable.

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA
CIVIL MINUTES—GENERAL

c. ORR and ICE shall make every effort to promptly and safely release Class Members in accordance with Paragraphs 14 and 18 of the FSA and the Court's prior orders (*see, e.g.*, July 24, 2015 Order [Doc. # 177], June 27, 2017 Order [Doc. # 363], July 9, 2018 Order [Doc. # 455], July 30, 2018 Order [Doc. # 470]).

3. Plaintiffs must serve this Order on Defendants no later than **March 30, 2020** (or file Defendants' Voluntary Notice of Acknowledgment of Service), and Plaintiffs shall file a proof of service immediately after effecting service. Defendants shall file their supplemental Opposition, if any, to Plaintiffs' request for a preliminary injunction by noon on **April 6, 2020**, and Plaintiffs shall file and serve a Reply, if any, by noon on **April 8, 2020**. The videoconference hearing on the OSC re preliminary injunction shall be on **April 10, 2020 at 10:00 a.m.** By no earlier than April 6, 2020, counsel shall contact the courtroom deputy clerk at dmg_chambers@cacd.uscourts.gov to receive the videoconference link.

4. **If, at any time before the Court's ruling, the parties stipulate to any form of interim relief, they shall immediately inform the Court of that development.**

IT IS SO ORDERED.

GROUP EXHIBIT F

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

MARIA ALEJANDRA CELIMEN SAVINO, JULIO CESAR MEDEIROS NEVES, and all those similarly situated, Petitioners,	)	
v.	)	CIVIL ACTION NO. 20-cv-10617-WGY
STEVEN J. SOUZA, Respondent.	)	

YOUNG, D.J. April 4, 2020

ORDER

As set forth at the hearing on April 3, 2020, it is hereby Ordered:

1. Upon release by respondent of Hayk Khachatyan, Kokou Aziabo, Srikalathan Rohan, Firdavs Salakhidinov, Ruben Poghosyan, and Marcio De Sauza, the petition with respect these individuals is MOOT.

2. The Court grants bail to Henry Urbina Rivas, Robson Maria-De Oliveira, and Jervis Vernon pending resolution of the habeas corpus petition, upon all bail conditions deemed appropriate and imposed by ICE, and the following additional terms and conditions as to each of them: (a) release only to an acceptable custodian; (b) such custodian will pick the releasee

up outside the facility by car; (c) releasee will be taken from the facility to the place of residence previously identified to ICE (ICE shall notify the state and local law enforcement authorities about their presence and thee details of their bail status); (d) releasees are to be fully quarantined for 14 days from date leaving facility to the residence; (e) during and after the 14-day quarantine, releasees will remain under house arrest, without electronic monitoring, and shall not to leave the residence for any reason save to attend immigration proceedings or attend to their own medical needs should those needs be so severe that they have to go to a doctor's office or hospital (in which case they shall notify ICE as soon as practicable of their medical necessity); (f) releasees are not to be arrested by ICE officers unless: (i) upon probable cause a warrant is issued by a United States Magistrate Judge or United States District Judge that they have violated any terms of their bail, or (ii) there is a final order of removal making them presently removable from the United States within two weeks. The Court may, sua sponte or on motion of the parties, modify or revoke the bail provided herein.

3. Bail is DENIED without prejudice to Mohamad Bassyouni subject to resubmission by petitioners' counsel of a more detailed request.

4. The Court continues its consideration of bail for Gerson McGlashin. Respondent shall by the 5:00 p.m. April 6, 2020, provide a detailed explanation to the Court of how ICE intends to execute the final removal order within the next two weeks.

5. The Court continues its consideration of bail for Jesse Maina. Petitioner shall by Friday, April 10, 2020 provide the Court with a detailed plan of where he would reside, with whom, and who would be the custodian.

6. The parties shall by 4:00 pm, Saturday, April 4, 2020, submit, a single list (if possible) of 50 detainee names without regard to groupings previously identified by the Court. If no list is provided, or multiple lists are provided, then the Court will select its own list by 4:00 pm on Sunday, April 5, 2020. The Court proposes, if possible, to review ten petitions for bail per day beginning Tuesday, April 7, 2020, and continuing Wednesday, Thursday, Friday and Monday of the following week. As soon as practicable before each hearing date, the Court requests the parties submit briefing as to each detainee's circumstances relevant to the Court's bail determination.

7. The proposed stipulated Protective Order (ECF No. 39-1) is adopted as submitted. All parties are bound by the protective order, including the parties in the related matter.

8. Counsel for Darcy McMenamin and Gerardo Portillo shall by 12:00 noon on Monday April 6, 2020 notify the Court of their response to the respondent's counsel's proposal in the related action and whether that matter is resolved.

9. The 48-hour notification order issued in this action (ECF No. 22) does not apply to those voluntarily released by respondent in paragraph 1, supra, as the petition is moot as to those individuals, but it remains in effect as to those individuals granted bail by this Court and all other class members.

SO ORDERED.

/s/ William G. Young
WILLIAM G. YOUNG
DISTRICT JUDGE

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MASSACHUSETTS

MARIA ALEJANDRA CELIMEN SAVINO, *et al*., Petitioners-Plaintiffs, v. STEVEN SOUZA Respondent-Defendant.	Case No. 1:20-cv-10617-WGY

STIPULATED PROTECTIVE ORDER REGARDING CONFIDENTIAL INFORMATION

With the agreement of the Parties, the Court having determined that there is good cause for issuance of a protective order to govern the disclosure, use, and handling by the Parties and their respective agents, successors, personal representatives and assignees of certain information in the above-captioned action, IT IS HEREBY ORDERED as follows:

1. Private medical information produced by either Party during informal discovery or otherwise made available for the litigation will not be disseminated beyond the Counsel (including outside counsel) for the Parties, as defined to include associated personnel necessary to assist counsel in this Action, such as law student interns working under the supervision of counsel of record in this matter, litigation assistants, paralegals, and litigation support, information technology, information or records management, investigative, secretarial, or clerical personnel.

2. Such private medical information may be disclosed to experts or consultants for the Parties, provided the attorney of record first informs the expert that such information to be disclosed is confidential and to be used solely for the purpose of this litigation and further that

these restrictions are imposed by a court order.

3. The Parties will redact all private medical information in any publicly-available filings submitted to the Court.

Dated: April 4, 2020

/s/ William G. Young
WILLIAM J. YOUNG
UNITED STATES DISTRICT JUDGE

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

MARIA ALEJANDRA CELIMEN SAVINO, JULIO CESAR MEDEIROS NEVES, and all those similarly situated, Petitioners,	)	
v.	)	CIVIL ACTION NO. 20-cv-10617-WGY
STEVEN J. SOUZA, Respondent.	)	

YOUNG, D.J. April 10, 2020

ORDER

The order of submission of briefs on individual applications for bail is as follows:

Tuesday, April 14, 2020, 9:00 a.m.

1. Tarax-Villeda, Brayan
2. Soe, Aaron
3. Alvarez-Silva, Oscar
4. Gomes, Nuelson
5. Maney Lal, Neved Bai
6. De Carvalho, Janito
7. Vero Campoverde, Sandro
8. Ohenhen, Augustine
9. Dodieu, Woodly
10. Mullings, Terrano

Wednesday, April 15, 2020, 9:00 a.m.:

1. Gomes, Marcio
2. Miranda-Castillo, Luis
3. Kirkpatrick, Kevin
4. Monteiro, Alessandro
5. Santos-Cabrera, Melchor
6. Velasquez-Hernandez, Oscar
7. Lima, Jucinei
8. Sanchez, Juan
9. Dias, Amiry

Thursday, April 16, 2020, 9:00 a.m.:

1. Hassan, Ahmed
2. Tejada-Alarcon, Eduardo
3. Castaneda-Lomeli, Juan
4. Guallan-Tixi, Diego
5. Perdomo Vizcaino, Rafael
6. Ali, Liban
7. Shaban, Hamzah
8. Tabia, Guillaum
9. Villalta-Cruz, Edwin
10. Rojas Vargas, Karina

Friday, April 17, 2020, 9:00 a.m.:

1. Guerra Nolasco, Marco
2. Darocha, Edlander
3. Armijos, Segundo
4. Mateo Mateo, Melvin
5. Miranda-Tapia, German Oliverio
6. Taylor, Rayon
7. Lux-Quinilla, Carlos
8. Gonzalez Victorio, Abelardo
9. Doe, Isaac
10. Jijon Mora, Felix

Monday, April 20, 2020, 9:00 a.m.:

1. Smith, Cordel
2. Valentim, Lucas
3. Bonilla Garcia, Darwin Mauricio
4. Da Graca, Aires
5. Hernandez-Andino, Oscar
6. Leach, Damion
7. Lopez Rodriguez, Geremias
8. Williams, Keith
9. Ixcoy-Hernandez, Santos
10. Laul, Garang

SO ORDERED.

_/s/ William G. Young
WILLIAM G. YOUNG
DISTRICT JUDGE

Screenshots pulled from PACER.gov on April 19, 2020

United States District Court
District of Massachusetts (Boston)
CIVIL DOCKET FOR CASE #: 1:20-cv-10617-WGY

Date Filed	#	Docket Text
04/15/2020	86	Judge William G. Young: ELECTRONIC ORDER entered denying 82 Motion to Stay Further Releases by Thomas M. Hodgson. **"We are in the midst of a pandemic unprecedented in our lifetime. Past experience is an uncertain guide to meeting the challenges of today. Thus, while the Court notes the revised ICE regulations concerning detainees, it is simply not presently in a position to issue any blanket stay which would, as a practical matter, go far to determining the merits of this case, ignoring the many other issues raised by the class. Instead, the Court will continue, on an individual basis, to work through the difficult issues of bail in the present crisis. That done, probably by the end of next week, we shall together schedule proceedings promptly to address the merits. Moreover, compelling issues of individual, institutional, and community health preclude the luxury of a stay so counsel can 'consider their appellate options.' The motion is denied. The release of Sandro Vera Campoverde on bond means he drops out of the class. Augustine Ohenhen is denied bail. Neved Bai Maney Lal is to be released forthwith on the same bail terms as heretofore. The remaining bail determinations already considered remain under advisement."** (Gaudet, Jennifer) (Entered: 04/15/2020)