No. 19-2624

In The United States Court of Appeals
For The
Third Circuit

RODERICK JOHNSON,
PLAINTIFF-APPELLANT,

vs.

PENNSYLVANIA DEPARTMENT OF CORRECTIONS, ET AL.,
DEFENDANTS-APPELLEES

On Appeal from the United States District Court for the Middle District of Pennsylvania, Hon. Matthew W. Brann, No. 4:18-cv-01924

BRIEF OF *AMICI CURIAE* PROFESSORS AND PRACTITIONERS OF PSYCHIATRY, PSYCHOLOGY, AND MEDICINE IN SUPPORT OF PLAINTIFF-APPELLANT AND REVERSAL

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IDENTITY AND INTEREST OF AMICI CURIAE[1]

Amici curiae are experts in psychiatry, medicine, and psychology who have spent decades studying solitary confinement and its psychological and physiological effects on prisoners. Based on their own work and assessment of professional literature, *amici* have concluded that solitary confinement causes substantial harm to prisoners' mental and physical health. For prisoners subject to extreme lengths of solitary confinement, such as Appellant Johnson here, such harm is inevitable. Moreover, Johnson's ongoing placement in solitary confinement continues to impose injury. The longer such confinement, the greater the injury and likelihood it will be irreversible. Finally, solitary confinement imposes atypical and significant hardships on inmates in relation to the ordinary incidents of prison life, especially for inmates, like Johnson, who endure such solitary confinement while on death row.

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[1] *Amici* submit this brief pursuant to Federal Rule of Appellate Procedure 29(b). Pursuant to Federal Rule of Appellate Procedure 29(b)(2), *amici* state that all parties have consented to the filing of this brief. *Amici* further state, pursuant to Federal Rule of Appellate Procedure 29(a)(4)(E), that no counsel for a party authored this brief in whole or in part, and no person other than the *amici* or their counsel contributed money to fund preparing or submitting this brief.

Amici thus have an interest in this case, and submit this brief supporting Appellant Johnson's appeal and reversal. *Amici* will review the scientific studies and literature regarding the impact of solitary confinement on prisoners such as Johnson.

Amici are the following:

Stuart Grassian, M.D., is a psychiatrist who taught at Harvard Medical School for almost thirty years. He has evaluated hundreds of prisoners in solitary confinement and published numerous articles on the psychiatric effects of solitary confinement.

Craig W. Haney, Ph.D., J.D., is Distinguished Professor of Psychology and UC Presidential Chair at the University of California, Santa Cruz. He has researched and published numerous articles on the psychological effects of solitary confinement and has provided expert testimony before numerous courts and the United States Senate.

Terry A. Kupers, M.D., M.S.P., a Distinguished Life Fellow of The American Psychiatric Association, is Professor Emeritus at The Wright Institute. He has provided expert testimony in several lawsuits about prison conditions and published books and articles on related subjects.

Pablo Stewart, M.D., is Clinical Professor of Psychiatry at the University of Hawaii. He has worked in the criminal justice system for decades and as a court-appointed expert on the effects of solitary confinement for more than thirty years.

ARGUMENT

I. Solitary Confinement, Such As Endured by Johnson, Subjects Prisoners To Severe Psychological and Physiological Harms.

In 2015, Justice Kennedy recognized that solitary confinement "exact[s] a terrible price." *Davis v. Ayala*, 135 S. Ct. 2187, 2210 (2015) (Kennedy, J., concurring). More recently, this Court recognized "the increasingly obvious reality that extended stays in solitary confinement can cause serious damage to mental health." *Palakovic v. Wetzel*, 854 F.3d 209, 226 (3d Cir. 2017). These conclusions are broadly supported by scientific research, which has produced "strikingly consistent" results: the deprivation of meaningful social contact and environmental stimulation arising from solitary confinement subjects prisoners to grave psychological and physiological harms.[2] Craig Haney, *The Psychological*

[2] "Solitary confinement," as employed in the scientific literature and this brief, does not refer to absolute isolation from other humans in an

Effects of Solitary Confinement: A Systematic Critique, 47 Crime & Justice 365, 367-68, 370-75 (2018) (collecting studies); *see also* Stuart Grassian, *Psychiatric Effects of Solitary Confinement*, 22 Wash. U. J. L. & Pol'y 325, 335-38 (2006). Indeed, experts have recognized that the chronic stress imposed by such isolation "can be as clinically distressing as physical torture." Jeffrey L. Metzner & Jamie Fellner, *Solitary Confinement and Mental Illness in U.S. Prisons: A Challenge for Medical Ethics*, 38 J. Am. Acad. Psychiatry & L. 104, 104 (2010); *see also Glossip v. Gross*, 135 S. Ct. 2726, 2765 (2015) ("[I]t is well documented that . . . prolonged solitary confinement produces numerous deleterious harms." (Breyer, J., dissenting, citing *amici* Haney and Grassian)); *Williams v. Sec'y Pa. Dep't of Corr.*, 848 F.3d 549, 563 (3d Cir. 2017) ("Numerous studies on the impact of solitary confinement show that these conditions are extremely hazardous to well-being.").

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environment completely devoid of positive environmental stimuli. Indeed, *amici* are not aware of any facility in the United States that absolutely isolates prisoners. Rather, solitary confinement describes imprisonment under conditions where meaningful social interaction and positive environmental stimuli are severely restricted. Johnson's isolation for almost twenty-years is fully consistent with the conditions of solitary confinement at the facilities that were the subjects of the studies recounted by *amici* here.

Psychological injuries from solitary confinement include hallucinations, severe depression, cognitive dysfunction, memory loss, anxiety, paranoia, panic, and stimuli hypersensitivity. *See* Terry A. Kupers, *Waiting Alone to Die*, in Living On Death Row: The Psychology of Waiting To Die 47, 53 (Hans Toch & James Acker eds., 2018); Craig W. Haney, *Mental Health Issues in Long-Term Solitary and "Supermax" Confinement*, 49 Crime & Delinquency 124, 130-31, 134 (2003) (collecting studies); Grassian, *Psychiatric Effects*, *supra*, 22 Wash. U. J. L. & Pol'y at 335–36, 349, 370–71; Terry A. Kupers, *Isolated Confinement: Effective Method for Behavior Change or Punishment for Punishment's Sake?*, in Routledge Handbook of International Crime and Justice Studies 213, 216 (Bruce Arrigo & Heather Bersot eds., 2013); Peter Scharff Smith, *The Effects of Solitary Confinement on Prison Inmates: A Brief History and Review of the Literature*, 34 Crime & Just. 441, 488–90 (2006). Self-injurious behavior, such as self-mutilation and suicidal behavior is also prevalent among prisoners in solitary confinement. Stuart Grassian, *Psychopathological Effects of Solitary Confinement*, 140 Am. J. Psychiatry 1450, 1453 (2006); Grassian, *Psychiatric Effects*, *supra*, at 349.

The damage from prolonged solitary confinement is not limited to psychological symptoms and disability, there are also medical problems and physical injuries in the brain. *See Palakovic,* 854 F.3d at 226 (3d Cir. 2017) (recognizing that "the damage [arising from solitary confinement] does not stop at mental harm"); Jules Lobel & Huda Akil, *Law & Neuroscience: The Case of Solitary Confinement*, 147 Daedalus 61, 64 (2018) (noting "clear biological evidence of the overlap between physical and mental distress"). Prisoners in solitary confinement commonly suffer physiological injury, including hypertension, heart palpitations, decline in neural activity, gastrointestinal disorders, headaches, and severe insomnia. Kupers, *Waiting Alone to Die*, *supra*, at 54; Haney, *Mental Health Issues*, *supra*, at 133; Smith, *The Effects of Solitary Confinement on Prison Inmates, supra*, at 488–90. Isolation also causes "'increased activation of the brain's stress systems, vascular resistance, and blood pressure, as well as decreased inflammatory control, immunity, sleep salubrity, and expression of genes regulating glucocorticoid responses and oxidative stress.'" Elizabeth Bennion, *Banning the Bing: Why Extreme Solitary Confinement Is Cruel and Far Too Usual Punishment*, 90 Ind. L.J. 741, 762 (2015) (quoting John T. Cacioppo & Stephanie

Ortigue, *Social Neuroscience: How a Multidisciplinary Field Is Uncovering the Biology of Human Interactions*, Cerebrum, Dec. 19, 2011, at 7–8). An increased likelihood of dementia is also associated with such social isolation. *See id.* at 755 (summarizing studies).

The extreme duration of solitary confinement endured by Johnson – almost twenty years – is thus virtually assured to have inflicted significant harm, even if the symptoms are not obvious or have not yet manifested themselves. *See* Diana Arias & Christian Otto, NASA, *Defining the Scope of Sensory Deprivation for Long Duration Space Missions* at 43 (2011). Some of these injuries may be irreversible. *See* Craig W. Haney, *Mental Health Issues in Long-Term Solitary and "Supermax" Confinement*, 49 Crime & Delinquency 124, 137-41 (2003); Kupers, *Waiting Alone to Die*, *supra*, at 54; *see also* Richard Kozar, John McCain (Overcoming Adversity) 53 (2002) (Senator McCain described his solitary confinement in Vietnam as "crush[ing] your spirit and weaken[ing] your resistance more effectively than any other form of mistreatment."); Arias & Otto, NASA, *Long Duration Space Missions, supra,* at 43 (2011) (finding that "symptoms of anxiety, confusion,

depression, suspiciousness and detachment from social interactions" often remain for decades after isolation is discontinued).

The harm is especially grievous and predictable in this case, because Johnson has spent the entirety of his solitary confinement on death row. Death row prisoners are "exquisitely vulnerable to the harm of solitary confinement." *See* Kupers, *Waiting Alone to Die*, *supra*, at 60–62. "[L]iving for years with the knowledge that one is going to be executed . . . among prisoners who will likewise be executed, and watching one after another of one's neighbors . . . undergo execution" inflicts devastating psychological harm. *Id.* at 60. Moreover, such prisoners, like Johnson, are automatically placed in solitary confinement "and there is nothing they can do to improve their situation." *Id.* This greatly deepens the feelings of helplessness and isolation that are common among those held in solitary. *See Williams v. Sec'y Pa. Dep't of Corr.*, 848 F.3d 549, 562 (3d Cir. 2017) (recognizing that placement in solitary for an indeterminate period imposes atypical harm). Without the ability to process their circumstances through social interaction, death row inmates often find the indeterminate waiting in isolation too much to bear. Kupers, *Waiting Alone to die*, *supra*, at 62-64. The "not

surprising" result of this toxic combination is that "many inmates volunteer to be executed" rather than continue to endure a sentence of death in isolation. *Glossip v. Gross*, 135 S. Ct. 2726, 2766 (2015) (Breyer, J., dissenting).

Given his twenty-years in solitary confinement, there can be no credible claim that Johnson has not incurred harm. Johnson's symptoms, as alleged in his complaint, are consistent with the signs of psychological trauma and physical injury, which include severe anxiety, depression, hopelessness, and suicidal thoughts. App'x 38, Dkt. 35 at 3. And, even if Johnson did not already show signs of physical injury, harm arising from a lengthy term of solitary confinement should be presumed – the only real question is the nature and extent of the harm, and whether it is reversible. *See* Richard Kozar, John McCain (Overcoming Adversity) 53 (2002). Moreover, as noted above, and confirmed by our own research, the symptoms of the mental-health harms to Johnson may be hidden from view. A prisoner can seem to a layperson to be mentally "normal" while in fact suffering from the harms outlined above, and even without meeting diagnostic criteria for a standard mental disorder according to the DSM (the Diagnostic and Statistical Manual of Mental Disorders).

II. Johnson's Ever-Longer Solitary Confinement Likely Worsens His Injury.

Although Johnson has inevitably suffered harm from his over-twenty-year stint in solitary confinement, that does not mean that "the harm is done" and his ongoing placement in solitary will not be further injurious. Instead, research has shown that the severity of harm on prisoners, and the likelihood that it will be irreversible, increases as the period of solitary confinement increases. Although once thought to be an unchanging organ, the brain is now recognized to develop and change over time in response to environmental factors. According to various studies, chronic stress such as what is imposed by solitary confinement can impair brain structure and function in multiple ways. *See* Dana G. Smith, *Neuroscientists Make a Case Against Solitary Confinement*, Scientific American (Nov. 2018) (https://www.scientificamerican.com/article/neuroscientists-make-a-case-against-solitary-confinement/); Bruce C. McEwen, *Protective and Damaging Effects of Stress Mediators*, 338 New Eng. J. Med. 171, 175-76 (1998).

Over time, excessive stress kills brain cells, "rewires" the brain, and reduces the size of the brain. *See* Carol Schaeffer, "Isolation Devastates the Brain": The Neuroscience of Solitary Confinement, Solitary Watch

(May 11, 2016); Nicole Branan, *Stress Kills Brain Cells Off*, 18 Scientific American 10 (June 2007) (https://www.scientfic-american.com/article/stress-kills-brain-cells/); M. Malter Cohen, et al., *Translational Developmental Studies of Stress on Brain and Behavior*, 249 Neuroscience 53, 54-55 (2013). Chronic stress damages the hippocampus, a brain area important for memory, spatial orientation and emotion regulation. *See* D. Smith, *Neuroscientists Make a Case against Solitary Confinement*, *supra*. Stress can also can increase the size of the amygdala, which makes the brain more receptive to stress, creating a vicious cycle. *See* Bruce S. McEwen, et al., *Stress Effects on Neuronal Structure: Hippocampus, Amygdala, and Prefrontal Cortex*, 41 Neuropsychopharmacology 3 (2015).

Unsurprisingly, therefore, studies show that the longer a prisoner is subject to solitary confinement, the more severe the harm and the more likely that such injury will continue after return to the general population, or become irreversible. For example, Dr. Haney observed that prisoners' behavioral "adaptations" to their solitary environment become more extreme and permanent as the duration of isolation increases. Haney, *Mental Health Issues*, 49 Crime & Delinq. at 138–41. As solitary

confinement lengthens, prisoners develop coping behaviors that can become lifelong, undermining their ability to have normal social interactions or physical contacts once released into either the general prison population or free world. *See* Craig W. Haney & Mona Lynch, *Regulating Prisons of the Future: A Psychological Analysis of Supermax and Solitary Confinement*, 23 N.Y.U. Rev. L. & Soc. Change 477, 567 (1997); Haney, *Mental Health Issues*, 49 Crime & Delinq. at 140 (prisoners in prolonged solitary confinement "become increasingly unfamiliar and uncomfortable with social interaction" causing them to feel "further alienated from others and made anxious in their presence"); Terry A. Kupers, Solitary: The Inside Story of Supermax Isolation and How We Can Abolish It at 97 (2017) ("The longer one spends idle in a cell by oneself, the more one's skills for living in the community disappear . . . .").

III. The Harm Imposed by Solitary Confinement Is "Atypical and Significant" as Compared to the General Prison Population.

In *Williams v. Secretary Pennsylvania Department of Corrections*, this Court recognized that, in evaluating whether a prisoner has a "liberty interest sufficient to trigger due process protections," the courts

look to whether the restraint "'imposes *atypical and significant hardship* on the inmate in relation to the ordinary incidents of prison life.'" 848 F.3d 549, 559 (3d Cir. 2017) (emphasis in original) (quoting *Griffin v. Vaughn*, 112 F.3d 703, 708 (3d Cir. 1997). Scientific studies emphatically show the answer to be yes.

Solitary confinement is uniquely harmful to prisoners as compared to those in the general prison population. Studies consistently demonstrate that solitary confinement causes psychological and physiological damage that is extreme in comparison to harms experienced by prisoners in general population. *See* Craig W. Haney, *Restricting the Use of Solitary Confinement*, 1 Ann. Rev. Criminology 285, 292–93 (2018); Kenneth Appelbaum, *American Psychiatry Should Join the Call to Abolish Solitary Confinement*, 43 J. Am. Acad. Psychiatry & L. 406, 410 (2015); Terry A. Kupers, Solitary: The Inside Story of Supermax Isolation and How We Can Abolish It at 32 (2017) ("No matter what mental condition a man is in before entering solitary, in my experience it is rare that he does not emerge in demonstrably worse mental and physical condition.").

For example, a study in Denmark determined that prisoners who spent more than four weeks in solitary confinement were twenty times more likely to require psychiatric hospitalization than prisoners in general population. Bennion, *Why Extreme Solitary Confinement is Cruel*, *supra*, 90 Ind. L.J. at 758 (citing Dorte Maria Sestoft et al., *Impact of Solitary Confinement on Hospitalization Among Danish Prisoners in Custody*, 21 Int'l J.L. & Psychiatry 99, 103 (1998)). Similarly, a California study by Dr. Haney of prisoners in solitary confinement and in general population concluded that the distress and suffering of the general population prisoners bore "absolutely no comparison to the level of suffering and distress" experienced by prisoners in solitary confinement. Expert Report of Craig Haney in *Ashker v. Brown*, No. 4:09-cv-05796-CW at 81 (N.D. Cal. Mar. 12, 2015) (available at https://ccrjustice.org/sites/default/files/attach/2015/07/Redacted_Haney%20Expert%20Report.pdf). Instead, "[o]n nearly every single specific dimension [] measured, the [solitary confinement] sample was in significantly more pain, were more traumatized and stressed, and manifested more isolation-related pathological reactions." *Id.* at 81–82. Other studies have similarly concluded that prisoners "in solitary

confinement suffered significantly more both physically and psychologically than the prisoners in the [general population] control group." Peter Scharff Smith, *The Effects of Solitary Confinement on Prison Inmates: A Brief History and Review of the Literature*, 34 Crime & Just. 441, 477 (2006); *see also* Thomas Hafemeister & Jeff George, *The Ninth Circle of Hell*, 90 Denv. U. L. Rev. 1, 46–47 (2012) (Washington study concluding that mental illness was twice as common for prisoners in solitary confinement); Grassian, *Psychiatric Effects*, *supra*, at 333 (finding that solitary confinement results in "acute mental illness in individuals who had previously been free of any such illness"); *Ayala*, 135 S. Ct. at 2209 (Solitary confinement "will bring you to the edge of madness, perhaps to madness itself.") (Kennedy, J., concurring).

Suicide and self-mutilation are also disproportionately high among prisoners in solitary confinement. *See* Craig W. Haney, *Restricting the Use of Solitary Confinement*, 1 Ann. Rev. Criminology 285, 294 (2018) (collecting studies); Fatos Kaba, et al., *Solitary Confinement and Risk of Self-Harm Among Jail Inmates*, 104 Amer. J. Pub. Health 442-447 (2014) (New York study concluding inmates in solitary confinement were about 6.9 times as likely to commit acts of self-harm); Kupers, *Waiting Alone to*

Die, *supra*, at 55; Stuart Grassian & Terry A. Kupers, *The Colorado Study vs. The Reality of Supermax Confinement*, 13 Correctional Mental Health Rep. 1 (2011); Lauren Brinkley-Rubinstein, et al., *Association of Restrictive Housing During Incarceration With Mortality After Release, JAMA Network Open*, 1, 5-6, 9 (Oct. 4, 2019), available at https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2752350 (last visited 12/2/2019). Indeed, although prisoners in solitary confinement comprise only 2% to 8% of the United States prison population, they account for 50% of all prisoner suicides. *See* Grassian & Kupers, *The Colorado Study, supra*, at 1; Kupers, *Waiting Alone to Die*, *supra*, at 55. A national survey of prisoner suicides across a two-year period revealed that two-thirds of suicides were committed by detainees subjected to solitary confinement, causing researchers to designate solitary confinement one of three "key indicators of suicidal behavior." Lindsay M. Hayes & Joseph R. Rowan, *National Study of Jail Suicides: Seven Years Later*, 60 Psych. Q. 7, 23 (1989).

CONCLUSION

For the reasons given above, *amici* request that this Court find in favor of Appellant Johnson and reverse the district court's judgment.

Dated: December 2, 2019

Respectfully submitted,

/s/Benjamin I. Friedman

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CERTIFICATE OF COMPLIANCE

Pursuant to Fed. R. App. P. 32, the undersigned certifies that this brief complies with the type-volume limitations of Fed. R. App. P. 29(b)(4). The brief is proportionally spaced, has typeface of 14 points, and contains 3010 words, based upon the word count feature of Microsoft Word, version 2016.

I further certify that a copy of the foregoing Brief of *Amici Curiae* Professors and Practitioners of Psychiatry, Psychology, and Medicine In Support of Appellant and Reversal, as submitted in digital form via the Court's ECF system, is an exact copy of the written document filed with the Clerk and has been scanned for viruses using the Carbon Black Sensor program, version 3.1.0.100, and, according to that program, is free of viruses. I further certify that that all required privacy redactions, if any, have been made to this document.

I certify that the information on this form is true and correct to the best of my knowledge and belief formed after a reasonable inquiry.

/s/ Benjamin I. Friedman
Counsel for Amici Curiae

CERTIFICATE OF SERVICE

I, Benjamin I. Friedman, a member of the Bar of this Court, hereby certify that on December 2, 2019, I caused the foregoing Brief of *Amici Curiae* Professors and Practitioners of Psychiatry, Psychology, and Medicine In Support of Appellant and Reversal to be filed in digital form with the Clerk of Court for the United States Court of Appeals for the Fourth Circuit by using the appellate CM/ECF system. I certify that all participants in the case are registered CM/ECF users and that service will be accomplished by the appellate CM/ECF system.

/s/ Benjamin I. Friedman
Counsel for Amici Curiae