

No. 18-1503

**IN THE UNITED STATES COURT OF APPEALS
FOR THE FOURTH CIRCUIT**

ARELI VEGA REYNA, as next friend of J.F.G., K.G., J.D.V. and J.D.V.,
all minor children; MACARIO DIAZ MORALES; KAREN VITELA, as next friend
of M.V.R.C., a minor; HUMBERTO RAMOS RAYGOZA; ADELA MEJIA,
as next friend of K.D.R.M., a minor,

Plaintiffs-Appellants,

v.

RUSSELL HOTT, in his official capacity as Director of the Immigration
and Customs Enforcement Virginia Field Office; THOMAS HOMAN,
in his official capacity as Acting Director of the Department of Homeland Security;
ELAINE C. DUKE, in her official capacity as Acting Secretary of the
Department of Homeland Security,

Defendants-Appellees.

On Appeal from the United States District Court
For the Eastern District of Virginia (Alexandria Division)
Case No. 1:17-cv-01192-LO-TCB

**Brief of *Amici Curiae* Jack P. Shonkoff, MD, James A. Coan, PhD,
J. H. Pate Skene, JD, PhD, Linda C. Mayes, MD, Joseph Woolston, MD,
the American Academy of Child and Adolescent Psychiatry, and
the American Psychoanalytic Association, in Support of
Plaintiffs-Appellants' Appeal Seeking Reversal**

Erik W. Snapp
Christopher S. Burrichter
Dechert LLP
35 West Wacker Drive, Suite 3400
Chicago, IL 60601
(312) 646-5828

G. Eric Brunstad, Jr.
Dechert LLP
90 State House Square
Hartford, CT 06103
(860) 524-3999

Counsel for Amici Curiae

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Dated: August 22, 2018

By: /s/ G. Eric Brunstad, Jr.
G. Eric Brunstad, Jr.

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INTERESTS OF *AMICI*¹

Amici are Jack P. Shonkoff, MD, James A. Coan, PhD, J. H. Pate Skene, JD, PhD, Linda C. Mayes, MD, Joseph Woolston, MD, the American Academy of Child and Adolescent Psychiatry, and the American Psychoanalytic Association. *Amici* are physicians, professors, researchers, and a research organization that study the health and wellbeing of children. Together, the *amici* include the leading physician authorities on children's mental health, and have conducted clinical work, researched, written, and lectured extensively on the biological, bio-behavioral, mental, and physical health consequences of excessive stress system activation, the neuroscience of emotional expression and trauma response, and best practices to mitigate negative stress responses. *Amici* are deeply interested in this litigation because ICE's Separation Policy will likely have a dramatic impact on issues that are central to their missions and work.

SUMMARY OF ARGUMENT

This litigation involves the constitutionality of the U.S. Immigration and Customs Enforcement ("ICE") routine policy and practice of transferring parent-detainees of U.S. citizen children into detention facilities away from their children without notice or any meaningful opportunity to be heard ("ICE's Separation

¹ *Amici* certify that no party's counsel authored this brief in whole or in part, no party and/or party's counsel contributed money intended to fund preparation or submission of this brief, and no person other than *amici* and their counsel contributed money intended to fund preparation or submission of this brief. The parties have consented to the filing of this brief.

Policy”). Plaintiffs-Appellants (“Appellants”) represent two distinct classes, a class of detainees with U.S. citizen children (the “Detainees’ Class”) and a separate class comprised of U.S. citizen children (the “Children’s Class”). (Am. Compl., 1:17-cv-01192-LO-TCB, Doc. No. 12 at ¶57). The District Court improperly dismissed Appellants’ action, prematurely ruling that ICE’s Separation Policy does not violate the substantive due process rights of either class, but not allowing Appellants the opportunity to develop the factual record necessary to establish that in-person parental visits are an essential component of providing care and nurture to one’s children, and such visits are essential to children in order to receive that care and nurture. (Opinion and Order, No. 1:17-cv-01192, Doc. No. 37 at 8).

Amici Jack P. Shonkoff, MD, James A. Coan, PhD, J. H. Pate Skene, JD, PhD, Linda C. Mayes, MD, Joseph Woolston, MD, the American Academy of Child and Adolescent Psychiatry (AACAP), and the American Psychoanalytic Association (APA) submit this amicus brief in support of the Appellants with the goal of informing the Court regarding the devastating, long term consequences of separating young children from their parents, as well as the benefits of allowing children to grow under the nurturing care of their parents. *Amici* have collectively dedicated themselves to decades of research on children and families, and have thoroughly studied the costs borne by children who are separated from their family members. Based on their research and experience, *amici* believe that in-person parental visits

are essential to the healthy care and development of children, and by preventing such contact, ICE's Separation Policy *dramatically* increases the risk of lifelong harm to children. In light of this heightened risk of serious, lasting harm to children caused by enforcement of ICE's Separation Policy, *amici* urge this Court to reverse the District Court's ruling, and remand for further proceedings.

ARGUMENT

I. ICE's Separation Policy Dramatically Increases The Risk Of Lifelong Psychological And Physical Harm To Children.

Children are best positioned to cultivate a strong developmental foundation through frequent, in-person contact with supportive parents. Children raised by supportive parents are best equipped to process the inevitable stresses of life in a healthy manner. Conversely, children separated from their parents by ICE's Separation Policy—including Appellants J.F.G., K.G., J.D.V., J.D.V., M.V.R.C., and K.D.R.M.—face a dramatically increased likelihood of both short and long term psychological and physical harm, including increased risks of serious mental illness and related medical sequelae. (*See generally* Vincent J. Felitti et al., *Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults, The Adverse Childhood Experiences (ACE) Study*, 14 Am. J. Prev. Med. 245 (1998)).

a. Children Respond to Positive Stress and Toxic Stress in Fundamentally Different Ways.

Learning how to cope with stress in a positive way is crucial to healthy child development. (National Scientific Counsel on the Developing Child, *Excessive Stress Disrupts the Architecture of the Developing Brain*, at 1 (2009) (hereafter EXCESSIVE STRESS)).² Childhood stress, here defined as “events or conditions that threaten, or are perceived to threaten, physiological equilibrium,” (Michelle M. Loman & Megan R. Gunner, *Early experience and the development of stress reactivity and regulation in children*, 34 *Neurosci. & Biobehav. Rev.* 867, 868 (2010) (hereafter EARLY EXPERIENCE)) may manifest itself in a number of different ways. Typically, when faced with a stressful situation, a child’s body responds by increasing its heart rate, stress hormones, blood pressure, and inflammatory activation. (EXCESSIVE STRESS at 1). Such a reaction is expected, but is also extraordinarily complex. A child’s day-to-day stress responses “involve activity in the central nervous system to mobilize endocrine, automatic, and behavior systems to support protection from and/or adaptation to threat.” (EARLY EXPERIENCE at 868).

Many sources of stress are an unavoidable reality of childhood, but a child’s ability to maintain regular, in-person contact with their parents plays a crucial role in determining how children process that stress. For young children, when stress is

² Available at https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp-content/uploads/2005/05/Stress_Disrupts_Architecture_Developing_Brain-1.pdf.

activated in an environment that includes supportive parental relationships, the stress effects are buffered by those parental relationships and the child's biological stress response returns to its baseline levels. This buffered experience leads to the development of a child's healthy stress response system. (See Melissa Nachmias & Megan Gunnar et al., *Behavioral inhibition and stress reactivity: The moderating role of attachment security*, 67 Child Dev. 508 (1996)). "[A]dverse events that provoke positive stress responses tend to be those that a child can learn to control and manage well ***with the support of caring adults***, and which occur against the backdrop of generally safe, warm, and positive relationships." (EXCESSIVE STRESS at 1 (emphasis added)). The key to these positive stress experiences is that they occur within the confines of healthy, stable relationships with adult caregivers.

An alternative form of stress, referred to as "toxic stress," carries no benefits and is physically and psychologically destructive to children. Toxic stress is the "strong, frequent, or prolonged activation of the body's stress response systems ***in the absence*** of the buffering protection of a supportive, adult relationship." (Jack P. Shonkoff et al., *The Lifelong Effects of Early Childhood Adversity and Toxic Stress*, 129 Am. Acad. of Pediatrics e232, e235 (2012) (*hereafter* LIFELONG EFFECTS) (emphasis added)). This means that the same stressor in a child's life could result in a stress response that is toxic to the developing brain and other biological systems or one that is tolerable and does not cause lasting harm, depending largely on

whether that child's stressful experience is buffered by a supportive, attentive parental relationship.

The neural circuits for dealing with stress are particularly malleable during early childhood, which is especially concerning for Appellants M.V.R.C., who is an infant, and K.D.R.M., the two-year-old son of a detainee. (EXCESSIVE STRESS at 2). Early experiences shape how readily these children's stress response is activated and how well it can be contained and turned off. Toxic stress during such early stages of life is likely to affect developing brain circuits and hormonal systems in ways that lead to poorly controlled stress response systems that will be overly reactive or slow to shut down when faced with threats throughout the lifespan. (EARLY EXPERIENCE at 867-876). As a result, young children like M.V.R.C. and K.D.R.M. face the lifelong prospect of feeling threatened or responding impulsively to situations where no real threat exists, or they may remain excessively anxious long after a threat has passed. Such behaviors are especially likely to appear in children who experience toxic stress at a young age.

b. In-person Interaction With Parents Is Key for Children to Process Stress in a Positive Manner.

Meaningful and reliable, protective relationships with parental caregivers—the type of in-person contact that is denied to children by ICE's Separation Policy—are in fact crucial to healthy childhood development. “[C]aregiving experienced early in life regulates the activity of critical stress sensitive systems, which in turn

influence the development of systems involved in rapid appraisal and response to threat.” (See EARLY EXPERIENCE at 869). Noted developmental psychologist Urie Bronfenbrenner explained the absolute necessity for parental involvement in a child’s life:

In order to develop normally, a child requires progressively more complex joint activity with one or more adults who have an irrational emotional relationship with the child. ***Somebody’s got to be crazy about that kid.*** That’s number one. First, last, and always.

(EXCESSIVE STRESS at 2 (emphasis added)). “The sine qua non of attachment across ages is that the partner,” here a parent, “serves as a source of reassurance and enhanced confidence in the face of perceived stress or threat.” (Harry T. Reis et al., *The Relationship Context of Human Behavior and Development*, 126 Am. Psychological Assoc. Psychological Bulletin 844, 851 (2000)).

This health-promoting dynamic between a young child and his or her parents is often referred to as “serve and return” interaction. (National Scientific Counsel on the Developing Child, *Young Children Develop in an Environment of Relationships*, at 1 (2004) (*hereafter* ENVIRONMENT OF RELATIONSHIPS)).³ “Serve and return” occurs when a young child naturally reaches out for interaction through babbling, facial expressions, gestures, and words, and adults respond with the same

³ Available at <https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp-content/uploads/2004/04/Young-Children-Develop-in-an-Environment-of-Relationships.pdf>.

kind of vocalizing and gesturing. (*Id.*) This “serve and return” behavior continues back and forth like a game of tennis or volleyball. If the responses are unreliable, inappropriate, or simply absent (as in the case of a child whose parent is detained in a far off state), the developing architecture of the brain will likely be disrupted, and later learning, behavior, and health is often impaired. (*See infra* at 11-19).

Decades of child development research have demonstrated that children develop best in the context of reliably available, supportive and nurturing caregiving relationships. Children who have reliable, in-person serve and return interactions with their primary caregivers “are more likely to develop insights into other people’s feelings, needs and thoughts, which form a foundation for cooperative interactions with others and an emerging conscience.” (ENVIRONMENT OF RELATIONSHIPS at 2). These relationships are both developmentally expected and biologically essential. (*See* National Scientific Counsel on the Developing Child, *The Science of Neglect: The Persistent Absence of Responsive Care Disrupts the Developing Brain*, at 1 (2012) (*hereafter* SCIENCE OF NEGLECT)).⁴

To be clear, this need for intimate contact between young children and their parents is not fulfilled through occasional phone calls and/or letter writing with parents held in far-off detention centers, as suggested by the District Court (*see Op.*

⁴ Available at <https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp-content/uploads/2012/05/The-Science-of-Neglect-The-Persistent-Absence-of-Responsive-Care-Disrupts-the-Developing-Brain.pdf>.

at 10-11, n.2), and instead every effort must be made to keep these families physically together. “Multiple research studies have concluded that *touch* is critical to child development, and deprivation of tactile stimulation in early life causes developmental delays, as well as impaired growth and cognitive development.” (Howard A. Zucker et al., *Potential Child Health Consequences of the Federal Policy Separating Immigrant Children From Their Parents*, 320 JAMA 541, 542 (2018) (emphasis added); see also Julie M. Linton et al., *American Academy of Pediatrics Policy Statement: Detention of Immigrant Children*, 139 Pediatrics 4, 7 (2017) (“Separation of a parent or primary caregiver from his or her children should never occur, unless there are concerns for safety of the child at the hand of parent. Efforts should always be made to ensure that children separated from other relatives are able to maintain contact with them during detention.”)).

A child’s relationship with his or her parent must be stable and secure in the child’s mind. “Multiple studies have demonstrated that it is difficult to elevate cortisol [levels] in young children when a parent with whom they have a *secure* attachment relationship is present. In contrast, infants in insecure relationships appear to have difficulty using their parent’s presence to prevent cortisol increases to emotionally distressing events.” (EARLY EXPERIENCE at 871). This is important, as high cortisol levels in the human brain correlate to feelings of helplessness, loss of control, fear, and anxiety. (See Melissa Nachmias & Megan Gunnar et al.,

Behavioral inhibition and stress reactivity: The moderating role of attachment security, 67 *Child Dev.* 508, 509 (1996); see also Sonja J. Lupien et al, *Cortisol levels during human aging predict hippocampal atrophy and memory deficits*, 1 *Nat. Neurosci.* 69 (1998)).

Stable, predictable, and responsive in-person relationships are critical because they are the basis for a variety of essential developmental outcomes. These positive outcomes include “self-confidence and sound mental health, motivation to learn, achievement in school and later in life, the ability to control aggressive impulses and resolve conflicts in non-violent ways, knowing the difference between right and wrong, having the capacity to develop and sustain casual friendships and intimate relationships, and ultimately to be a successful parent oneself.” (ENVIRONMENT OF RELATIONSHIPS AT 1). Further, stable caregiver relationships are associated with stronger cognitive skills, enhanced social competence, and advanced work skills.

While individual responses to early childhood stress can vary dramatically due to genetic differences, positive parenting can decrease the likelihood of toxic stress and related behavioral difficulties, even in children who may be genetically more sensitive to adverse experiences. (See Christina S. Barr et al., *Interaction between serotonin transporter gene variation and rearing condition in alcohol preference and consumption in female primates*, 61 *Archives of Gen. Psych.* 1146 (2004)) Children who have secure parental relationships have more control over the

activation of stress hormones when they are stressed or frightened. “This means that they are able to explore the world, meet challenges, and be frightened at times without sustaining the adverse neurological impacts of chronically elevated levels of [stress] hormones.” (EXCESSIVE STRESS at 4.) For children who experience serious traumas, in-person contacts with parents provide an essential protective shield that buffers them from the effect of traumas and helps them regulate their emotions and maintain feelings of safety.

c. The Absence of Strong Parental Relationships Dramatically Increases The Likelihood of Physical And Mental Trauma in Children.

The disruption of in-person, responsive “serve and return” parental interactions constitutes a serious threat to a child’s well-being, particularly during the child’s earliest years. *See National Scientific Counsel on the Developing Child, Supportive Relationships and Active Skill-Building Strengthen the Foundations of Resilience*, at 2 (2012) (*hereafter* SUPPORTIVE RELATIONSHIPS) at 2 (“When these experiences are unavailable or repeatedly disrupted, the body perceives their absence as a serious threat, and activates its stress response systems.”). Herein lies an immense danger for children and their families subject to ICE’s Separation Policy, as this family separation increases the risk of lasting mental and physical harm to children, and *the longer the separation the greater the harm*.

The loss of vital parental relationships early in life can result in “wide-spread dysregulation of physiological and behavioral responses during development

resulting in disturbances in circadian rhythms, growth...and hormone levels.” (EARLY EXPERIENCE at 868). Furthermore, “inadequate parental care shapes a more reactive stress-response system in infants of many species and might contribute to hypersensitivity of the developing threat appraisal system, thus increasing vulnerability to stressors throughout life.” (*Id.* at 871).

The loss of “serve and return” interactions may specifically activate the body’s stress response systems, and extensive evidence indicates that the loss of a supportive parental stimulation is one of the most powerful stressors a child could experience early in life. (Seymour Levine, *Developmental determinants of sensitivity and resistance to stress*, 30 *Psychoneuroendocrinology* 939 (2005)). This threat is well documented:

Low parental nurturance results in chronic stress to the infant. This biases the developing threat system to rapidly orchestrate larger defense responses (fight/flight/freeze). Over activity of both stress and threat-response systems may then impact the development of prefrontal regulatory systems, hence increasing the risk for both attention- and emotion-regulatory problems.

(EARLY EXPERIENCE at 869). When this lack of responsive interaction with parents persists, a child’s stress system is activated for extended periods of time, leading to toxic stress. (EXCESSIVE STRESS at 2-3). Children with insecure parental relationships also experience higher stress hormone levels at only mildly frightening events. *Id.* This can alter the development of the brain in a way that makes a child

less capable of dealing with stress as he or she grows older. (*Id.*)

The lack of in-person parental relationships deprives children of person-to-person interaction that is critical for the healthy wiring of the brain and can even alter gene expression. (SCIENCE OF NEGLECT at 1). The architecture of the brain is composed of highly integrated connections among brain cells that are “wired” under the continuous and mutual influences of both genetics and the environment of experiences, relationships, and physical conditions in which children live. (*Id.*) Lived experiences “authorize” genetic instructions to be carried out and shape the formation of the circuits as they are being constructed. This developmental progression depends on appropriate sensory input and stable, responsive relationships to build healthy brain architecture. (*Id.*)

d. Toxic Stress Caused By Separation From Parents Is Likely to Have Long Term Negative Effects on Children.

Toxic stress dramatically increases the risk of long term physical and psychological injuries in children. Appellants J.F.G., K.G., J.D.V., J.D.V., M.V.R.C., and K.D.R.M. face a significantly higher likelihood of experiencing toxic stress, and thus the negative effects discussed herein, due to ICE’s Separation Policy.

Factors that determine the impact of toxic stress include “the duration, intensity, and timing of the stressful experience, as well as its context, such as whether the experience is controllable, how often and for how long the body’s stress system has been activated in the past, and whether the affected child has safe and

dependable relationships to turn to for support.” (EXCESSIVE STRESS at 2-3.) Generally speaking, the greater the severity and duration of the stressful situation, the greater the risk for developmental disruptions and delays. Therefore, maintaining responsive adult relationships—with caregivers who are a consistent, supportive presence in a child’s life—is an essential ingredient in preventing lasting harm that comes from excessive stress. (Cornelis F. M. van Lieshout et al., *Interpersonal Support and Individual Development*, 30 *Relationships as Developmental Contexts* 37, 47-48 (1999)).

Research shows that toxic stress is extremely detrimental to the architecture of a child’s developing brain. (See Sonia J. Lupien et al., *Effects of stress throughout the lifespan on the brain, behavior and cognition*, 10 *Nat. Rev. Neurosci.* 434 (2009)). At an early age, the brain is in a sensitive period of development, and proper development depends on the brain producing the appropriate number of strong neural connections in different cognitive areas. (*Id.* at 438). When children experience toxic stress as a result of separation from buffering relationships, especially with parents, the regions of the brain dedicated to fear and anxiety may overproduce neural connections. (Jack P. Shonkoff, *Neuroscience, Molecular Biology, and the Childhood Roots of Health Disparities: Building a New Framework for Health Promotion and Disease Prevention*, 301 *JAMA* 2252 (2009)). At the same time, the regions dedicated to reasoning, planning, and behavioral control may

produce fewer neural connections. (*Id.*) This imbalance can have a lasting impact on a child's stress response system. "Extreme exposure to toxic stress can change the stress system so that it responds at lower thresholds to events that might not be stressful to others, and, therefore, the stress system activates more frequently and for longer periods than necessary." (EXCESSIVE STRESS at 2). This can be compared to revving a car engine for hours at a time, leading to wear and tear that increases the risk of stress-related physical and mental illness later in life. (*Id.*)

The longer the stress response is activated, the greater the risk of a wide range of lifelong problems in learning, behavior, and health. Frequent or sustained activation of brain systems that respond to stress can lead to heightened vulnerability to a range of behavioral and physiological disorders over a lifetime. These undesirable outcomes include a number of stress-related disorders affecting both mental health (*e.g.*, depression, anxiety disorders, alcoholism, and drug abuse) and physical health (*e.g.*, cardiovascular disease, diabetes, and stroke). (Bruce S. McEwen, *Central effects of stress hormones in health and disease: Understanding the protective and damaging effects of stress and stress mediators*, 583 *Euro. J. Pharma.* 174 (2008)).

Toxic stress also affects a child's ability to successfully navigate fear-triggering events. Early exposure to intense and persistent fear-triggering events impacts learning capability. (National Scientific Counsel on the Developing Child,

Persistent Fear and Anxiety Can Affect Young Children's Learning and Development (2010), at 5 (*hereafter* PERSISTENT FEAR)).⁵ Growing scientific evidence indicates that continuous exposure to fear and anxiety often translates into poor performance in school. (*Id.*)

Recent neuroimaging studies have shown that toxic stress affects parts of the developing brain that regulate emotions. Certain studies focused on two structures located in the brain—the amygdala and the hippocampus. (*Id.*) Both of these structures are involved in fear conditioning. (*Id.*; *see also* Joseph LeDoux, *Emotion Circuits in the Brain*, 23 *Ann. Rev. Neurosci.* 155 (2000)). The hippocampus connects a particular fear response to the context in which it occurs, and the amygdala determines whether a certain person or event is threatening. (PERSISTENT FEAR at 2-3). Both of these structures then determine how the body responds to the threat. (*Id.* at 3). “Elevated stress hormones . . . have been shown to affect the growth and performance of the hippocampus and the activity of the amygdala . . . and early and persistent activation of the stress response system adversely affects brain architecture in these critical regions.” (*Id.* at 3).

Prolonged exposure to toxic stress likewise impairs the development of the prefrontal cortex. This region of the brain is responsible for the development of

⁵ Available at <https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp-content/uploads/2010/05/Persistent-Fear-and-Anxiety-Can-Affect-Young-Childrens-Learning-and-Development.pdf>.

executive functions. These are a cluster of abilities such as making, following, and altering plans; controlling and focusing attention; inhibiting impulsive behaviors; and developing the ability to hold and incorporate new information in decision-making. (*Id.* at 3). These skills are obviously important for success in school and throughout adulthood. Research has shown that the prefrontal cortex is highly sensitive to prolonged stress exposure, furthering the risk that there will be developmental impairments to executive functions. (*Id.*) As a result, separation from meaningful support systems can impede the healthy development of a child's brain architecture and biological systems.

These risks are not limited to early childhood. Development of the human brain continues for at least the first two decades of life. Adolescence is a particularly important period for growth and maturation of brain structures important for executive functions, including the prefrontal cortex and its connections with structures like the hippocampus and amygdala. (B.J. Casey et al., *The Adolescent Brain*, 1124 *Annals N.Y. Acad. of Sci.* 111 (2008)). During this time, adolescents show greater response to stress-related hormones and adolescent brains appear to be especially vulnerable to prolonged periods of stress. (Sonia J. Lupien et al., *Effects of stress throughout the lifespan on the brain, behavior and cognition*, 10 *Nat. Rev. Neurosci.* 434 (2009); Russell D. Romeo, *The impact of stress on the structure of the adolescent brain: implications for adolescent mental health*, 1654 *Brain*

Research 185 (2017); Susan L. Andersen & Martin H. Teicher, *Stress, sensitive periods and maturational events in adolescent depression*, 31 Trends in Neurosci. 183 (2008)).

But not all injuries relate to the brain. Toxic stress has also been shown to increase dramatically the likelihood of a vast array of other physical harm to children, including lasting injury to the cardiovascular system, immune function, and metabolic regulatory systems. (SUPPORTIVE RELATIONSHIPS at 2-3; Jack P. Shonkoff, *Neuroscience, Molecular Biology, and the Childhood Roots of Health Disparities: Building a New Framework for Health Promotion and Disease Prevention*, 301 JAMA 2252 (2009); LIFELONG EFFECTS at 238). Traumatic experiences and chronic stress in childhood can lead to long-term changes in gene expression by immune cells and even to chemical changes in DNA that of genes that regulate stress responses (M.E. Levine et al., *Childhood and later life stressors and increased inflammatory gene expression at older ages*, 130 Soc. Sci. & Med. 16 (2015); Gustavo Turecki & Michael J. Meaney, *Effects of the social environment and stress on glucocorticoid receptor gene methylation: a systematic review*, 79 Bio. Psych. 887 (2016)). This can lead to outcomes such as “cardiovascular disease, liver cancer, asthma, chronic obstructive pulmonary disease, autoimmune diseases, poor dental health, and depression.” (See Shonkoff (2009) at 2252-59). Thus, children who experience toxic stress at an early age are at a higher risk for serious health

threats and stress-related diseases throughout their lives.

These injuries not only affect individual children, but society as a whole. “The multiple dimensions of these costs extend from differential levels of civic participation and their impacts on the quality of community life to the health and skills of the nation’s workforce.” (LIFELONG EFFECTS at 238).

Separation from parents dramatically increases the likelihood of children experiencing toxic stress and other mental and physical injuries, and these injuries carry onward out of childhood, leading to damaging long term effects that manifest themselves during adulthood.

II. Restoring The Availability Of Parents To Nurture Their Children In Person Is The Most Important Way To Mitigate A Toxic Stress Response.

ICE’s Separation Policy creates a highly threatening and hazardous environment for children, and restoring those children to familiar, in-person, responsive family relationships *as rapidly as possible* is the most effective way to mitigate damages to their stress response systems. When responsive interactions with caring adults are restored, children’s stress response systems return to their healthy baselines. (See generally Charles A. Nelson III et al., *Cognitive Recovery in Socially Deprived Young Children: The Bucharest Early Intervention Project*, 318 Sci. 1937 (2007)). “To date, there is little evidence that [altered cortisol level] patterns continue once young children are removed from [early life stress]

conditions.” (EARLY EXPERIENCE at 870). Once these children are reunited with their parents, their developing brains and other maturing organ systems are again protected from disruption, and these children will be able to continue developing the coping skills needed to deal with adversity. The net result of these protective effects is that what could have been a toxic stress experience for a child becomes what is considered tolerable stress. (Megan R. Gunnar et al., *Stress Reactivity and Attachment Security*, 29 Dev. Psych. 191 (1996); Michelle M. Loman & Megan R. Gunnar, *Early experience and the development of stress reactivity and regulation in children*, 34 Neurosci. & Bio. Rev. 867 (2010)).

The timing of intervention is a critically important predictor of outcomes. If appropriate intervention occurs very early—in various studies the benchmark age for removal from extreme deprivation has been identified as 6, 12, or 24 months—substantially improved functioning in cognition, attention, memory, and executive functioning can be achieved. (See SCIENCE OF NEGLECT at 9). However, improvement often requires more than simply the cessation of neglectful caregiving. Rather, systematic, empirically supported, and often long-term (six to nine months or longer) interventions are often needed to promote effective healing. (*Id.*)

To the extent these children have developed an understandable level of fear and/or anxiety following forced separation from their parents, science indicates that reducing a child’s fears requires active work and evidence-based treatment.

Children who have been traumatized, in this case children whose parents have been taken away and who have no in-person access to their parents due to ICE's Separation Policy, need to be in highly responsive and secure environments *as quickly as possible* to restore their sense of safety, control, and predictability—and supportive interventions are needed to assure the provision of these environments. (See PERSISTENT FEAR at 2; *see also* Carrie E. DePasquale et al., *Parenting Predicts Strange Situation Cortisol Reactivity Among Children Adopted Internationally*, 89 *Psychoneuroendocrinology* 86 (2018)). Unlearning fear is a fundamentally different process from fear learning in very young children—it is possible to *learn* fear before the brain functionality is able to *unlearn* it, and active intervention over time is required to teach the brain to overcome an overactive fear response. (*Id.*) Fear must be actively unlearned over time, and early fear learning can have a significant impact on the physical and mental health of a young child that can take years to remediate.

It is true that children are able to establish healthy relationships with other adults besides their parents. However, prolonged physical separation from parents is extremely problematic. (*Id.* at 3). It is essential that these children be reunited quickly with their families. While it is true that “[if] the child’s care improves, stress and threat systems have the possibility to re-organize in order to become less reactive and more modulated,” it must also be noted that “children exposed to particularly severe and prolonged inadequate nurturance may be less capable of reorganizing

with improved care and this, in turn, may make it difficult for caregivers to sustain appropriate responsiveness to the child’s needs.” (EARLY EXPERIENCE at 869). The cycle of being separated from caregivers and cared for by different adults is known as “detaching” and “re-attaching.” (*Id.*) This process is emotionally stressful and can have a lasting negative impact, especially for children who have already experienced significant adversity. (*Id.*)

III. The Experiences of The Children’s Class Demonstrate the Importance of In-Person Parental Contact and the Harm That Occurs Without It.

In its district court briefing, ICE argued that Appellants cannot show that ICE’s Separation Policy shocks the conscience because such a policy is simply part of the enforcement of America’s immigration laws. (Defs’ Mot. to Dismiss at 13-16). Nowhere did ICE acknowledge the lasting harm to both parents and children caused by denying parents the right to provide care and nurturement to their children through in-person visits. The district court dedicated just one paragraph to this issue, agreeing with ICE that “[t]he Court cannot find that the conduct at issue shocks the conscience.” (3/20/18 Opinion at 8). The court acknowledged that children may be harmed due to ICE’s detainment transfers, but stated “any harm to family unit is incidental to the exercise of that discretion.” (*Id.*) The district court, like the ICE defendants, ignored the question of what harm is actually experienced by the children.

Appellants J.F.G., K.G., J.D.V., J.D.V., M.V.R.C., and K.D.R.M. seek to

represent a Children’s Class of “all U.S. citizen children residing in the state of Virginia, and who, as of October 20, 2017 or any time thereafter, have a parent detained within the state of Virginia by [ICE].” (Am. Compl. at 12-13.) These children’s stories, as set forth in the Amended Complaint (Dkt. 12) and Declaration of Areli Vega Reyna (Dkt. 9-4), are consistent with the *amici*’s research into child-parent separation.

For example, J.F.G. is “deeply attached” to and “dependent on” his stepfather, Mr. Morales (Reyna Decl. ¶13), which would typically be signs of a healthy “serve and return” relationship. However, J.F.G. was “seriously traumatized by the experience” of being separated from his stepfather, and thereafter “frequently cried and asked for his stepfather.” (Am. Compl. ¶40). J.F.G. became “reluctant to leave the house to do anything since Mr. Morales’ detention.” (*Id.*) This emotional reaction is consistent with a potentially harmful stress response to Mr. Morales’ detention, particularly if the separation is prolonged. After J.F.G. was able to visit with Mr. Morales in detention, he “is now less withdrawn having visited his stepfather.” (*Id.*) J.F.G.’s response to this visit with Mr. Morales demonstrates the essential bond between children and parents that helps buffer stress, and is consistent with research showing that reuniting children with their caregiver parents increases the likelihood of converting potentially toxic stress (with its lifelong consequences) into tolerable stress (which has a more hopeful prognosis).

Mr. Morales' other children also display obvious deep bonds with their father. J.D.V. and J.D.V. both maintained extremely close relationships with their father Mr. Morales, and since his detention they have gone to sleep each night holding a photo of him. (Reyna Decl. ¶¶11-12). K.G. was also cared for by Mr. Morales as a son, and was traumatized by witnessing his stepfather's arrest. (Am. Compl. at ¶¶ 41-44.)

Ms. Reyna, J.F.G, J.D.V., J.D.V., and K.G.'s mother, brings her children to visit their stepfather in incarceration. (Reyna Decl. ¶14.) According to Ms. Reyna, "[o]ur visits have been incredibly important to each of my children, who look forward to them and talk about them the whole week before and after we see their father." (*Id.*) If ICE were to transfer Mr. Morales out of Virginia, Ms. Reyna believes her children "would be devastated and traumatized." (*Id.*)

Mr. Raygoza's two children, M.V.R.C. and K.D.R.M., also need to have their father nearby. M.V.R.C. is Mr. Raygoza's infant daughter who is at an age when the need to facilitate frequent "serve and return" interactions with her father is crucial. M.V.R.C.'s mother "fears that M.V.R.C.'s inability to see her father will cause harm to their parent-child relationship and will deprive M.V.R.C. of access to her father during these vital early months in her development." (Am. Compl. at ¶¶ 51-52). These fears are warranted, as children's relationships with their parents during early life are fundamentally important to their long term physical and mental

health. (*See* Sec. I(b), *supra.*) K.D.R.M., Mr. Raygoza’s son, has a “strong and loving relationship” with his father, and was unable to visit Mr. Raygoza following his move to Texas. (Am. Compl. at ¶¶ 54-56). This made it extremely unlikely that Mr. Raygoza would be able to provide the stable emotional support that K.D.R.M. needs.

Together, Appellants J.F.G., K.G., J.D.V., J.D.V., M.V.R.C., and K.D.R.M. are being forced to cope with the loss of a vital parental-caregiver relationship, a loss that has been caused by ICE’s Separation Policy. As explained above, such separation often leads to negative short- and long-term effects on the lives of children. Mr. Morales and Mr. Raygoza’s absences are detrimental to their children’s mental and physical health, and the injuries to J.F.G, J.D.V., J.D.V., and K.G. are likely to be even worse if Mr. Morales is eventually transferred out of state under ICE’s Separation Policy.

CONCLUSION

ICE’s current Separation Policy is detrimental to the health, development, and well-being of children who are separated from their parents. Extensive scientific evidence built over decades of rigorous research shows that this Policy will be responsible for lifelong problems with learning, behavior, and physical and mental illnesses that would not have occurred if these children had not been suddenly and forcibly separated from their parents for prolonged periods of time without

opportunities for in-person visits. For the reasons set forth above, *amici* respectfully urge this Court to reverse the decision of the district court.

Respectfully submitted.

Dated: August 22, 2018

DECHERT LLP

By: /s/ G. Eric Brunstad, Jr.
G. Eric Brunstad, Jr.

Attorneys for *Amici*
Jack P. Shonkoff,
MD, James A. Coan, PhD,
J. H. Pate Skene, JD, PhD,
Linda C. Mayes, MD,
Joseph Woolston, MD,
American Academy of Child and
Adolescent Psychiatry, and
American Psychoanalytic Association

ATTESTATION

This certifies that all *amici* joining in this document concur in its contents and have authorized this filing.

Dated: August 22, 2018

By: /s/ G. Eric Brunstad, Jr.
G. Eric Brunstad, Jr.

CERTIFICATE OF COMPLIANCE

1. This brief complies with the Fed. R. App. P. 29(a)(5) limit because it contains 5,779 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(f).
2. This brief complies with the typeface and style requirements Fed. R. App. P. 32(a)(5) because it has been prepared using a proportionally spaced typeface using Microsoft Office Word in 14-point Times New Roman.

Dated: August 22, 2018

By: /s/ G. Eric Brunstad, Jr.
G. Eric Brunstad, Jr.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 22 day of August, 2018, the foregoing Amici Curiae Brief for Jack P. Shonkoff, MD, James A. Coan, PhD, J. H. Pate Skene, JD, PhD, Linda C. Mayes, MD, Joseph Woolston, MD, the American Academy of Child and Adolescent Psychiatry, and the American Psychoanalytic Association was filed electronically through the Court's CM/ECF system. Notice of this filing will be sent through e-mail to all parties by operation of the Court's CM/ECF system.

Dated: August 22, 2018

By: /s/ G. Eric Brunstad, Jr.
G. Eric Brunstad, Jr.

UNITED STATES COURT OF APPEALS FOR THE FOURTH CIRCUIT
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