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ARIZONA SUPREME COURT

STATE OF ARIZONA,	)	
	)	No.
Respondent/Appellee,	)	
	)	Arizona Court of Appeals
vs.	)	No. 2-CA-CR-2021-0105
	)	
EVAN MCCARRICK JERALD,	)	Pima County Superior Court
	)	Crim. Cause No. CR20180255
Petitioner/Appellant.	)	
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AMICUS CURIAE PETITION FOR REVIEW OF THE CENTER FOR LAW, BRAIN AND BEHAVIOR

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- A.R.S. § 13-705 (Dangerous Crimes Against Children)

Neuroscientific and Criminological Studies:

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- Reitzel, L. R., & Carbonell, J. L. (2006). The effectiveness of sexual offender treatment for juveniles as measured by recidivism: A meta-analysis. Sexual Abuse: A Journal of Research and Treatment, 18(4), 401-421.
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- St. Amand, A., Bard, D. E., & Silovsky, J. F. (2008). Meta-analysis of treatment for child sexual behavior problems: Practice elements and outcomes. Child Maltreatment, 13(2), 145-166.
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INTEREST OF AMICI CURIAE

The Center for Law, Brain and Behavior (CLBB) of the Massachusetts General Hospital, Harvard Medical School, has expertise in neuroscience applied to matters of law and public policy, including interactions of youth and young adults with justice systems in furtherance of their well-being and community safety. Amicus offers a unique perspective on interplay between legal rights and interests, and developmental brain and social sciences for youth encountering the legal system.

SUMMARY OF ARGUMENT

Evan McCarrick Jerald is sentenced to a minimum 208 years in prison before parole eligibility following conviction on multiple counts of sexual misconduct with two minors under the age of 15 (life terms as discretionary sentences) and molestation of a minor (presumptive sentences). He was 15 - 16 years old at the time of his offenses but tried as an adult. Arizona law precludes consideration of consecutive sentences in a *de facto* life sentence analysis when the offender's conduct was at the core of the criminal misconduct. The Arizona Court of Appeals affirmed that (a) this *de facto* life sentence cannot be reviewed on the basis of the *actual* outcome of imposition of individual consecutive sentences, (b) each sentence is not "grossly disproportionate" to the crimes committed, and (c) his trial as an adult was proper under A.R.S. § 13-705 (Dangerous Crimes Against

Children) (State v. Jerald, No. 2 CA-CR 2021-0105 (Ariz. Ct. App. Apr. 15, 2024)). The court opined that Evan's severe punishment is justified by the impact of his crimes and that it saw "no basis for second guessing" a mitigation analysis by the sentencing court.[1] Evan will die in prison for his crimes.

Nonetheless, substantial developmental brain and social science support a view that the sentence imposed in this case is excessively "lengthy, flat and consecutive" although not mandatory, and also "grossly disproportionate" given his age and developmental stage at the time of his offenses, minimal likelihood of sexual recidivism, and the responsiveness of sexually abusive youth to evidence-based interventions.[2]

Robust brain and social sciences show that juveniles are neurologically and socially distinct from adults yet uniquely capable of positive growth, and so warrant different sentencing considerations.[3] Adolescents (puberty–age 17) and emerging young adults (ages 18–25) demonstrate significant capacities for change

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[1] The Court also rejected equal protection and due process arguments offered by Evan.

[2] Notably, in Evan's situation, while a 35 to life sentence was discretionary, the non-discretionary minimum would otherwise have been 92 years—an amount of time in prison that is similarly a de facto life sentence that Evan would be unlikely to outlast.

[3] Casey, B. J., Jones, R. M., & Somerville, L. H. (2011). Braking and accelerating of the adolescent brain. *Journal of Research on Adolescence*, *21*(1), 21-33; Statsenko, et al., Brain Morphometry and Cognitive Performance in Normal Brain Aging: Age- and Sex-Related Structural and Functional Changes. *Frontiers in Aging Neuroscience* 13, 1-32.

through social learning, social maturation, improved decision-making, and increased emotional and behavioral control reflecting profound brain maturation.[4] Maturational changes improve impulse control, risk assessment, planning, and self-regulation—capabilities most relevant to criminal acts.[5] Our youthful selves simply neither determine nor predict our adult lives.

The Court of Appeals upheld a sentence confining Evan for a minimum 208 years. This sentence is not required to achieve general (especially among juvenile offenders) or specific deterrence, nor community safety by lifelong incapacitation given treatment responsiveness of juvenile sexual offenders. It abandons rehabilitation. The sole penal justification is punishment, but the onerous sentence imposed is unnecessary to achieve even that goal and therefore grossly disproportionate. Adolescent sexual recidivism rates are between 2 - 7 percent[6] and these individuals respond extremely well to evidence-based treatment.[7] Evan's

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[4] Arain, M., Haque, M., Johal, L., Mathur, P., Nel, W., Rais, A., Sandhu R., & Sharma, S. (2013). Maturation of the adolescent brain. *Neuropsychiatric disease and treatment*, *9*, 449.

[5] Icenogle, G., & Cauffman, E. (2021). Adolescent decision making: A decade in review. *Journal of research on adolescence*, *31*(4), 1006-1022.

[6] Caldwell, M. F. (2016). Quantifying the decline in juvenile sexual recidivism rates. Psychology, Public Policy, and Law, 22(4), 414–426.

[7] Reitzel & Carbonell, The Effectiveness of Sexual Offender Treatment for Juveniles as Measured by Recidivism: A Meta-analysis, 18 Sexual Abuse: A Journal of Research and Treatment, 401 (2006)

sex offenses as a teenager - as serious as they are - should not dictate his death in prison.

The legal landscape has shifted due to consistent findings in neuroscience, developmental behavioral sciences, and criminology. The weight of this science has moved courts and legislatures to bar mandatory life without possibility of parole even for juvenile homicides, reconsider discretionary life and *de facto* life sentences as developmental immaturity itself mitigates culpability, and to focus on the rehabilitation of youth and emerging young adults.[8] This shift is reflected in landmark United States Supreme Court decisions such as *Roper v. Simmons*, 543 U.S. 551 (2005), *Graham v. Florida*, 560 U.S. 48 (2010), and *Miller v. Alabama*, 567 U.S. 460 (2012). These cases reflect the Supreme Court's reliance upon science to require sentencing courts to consider the unique mitigating attributes of youth, (e.g., immaturity, impulsivity, recklessness, peer influences, emotionally driven decision-making, remarkable capacities for change with maturation).[9]

Amicus urges the Court to reconsider the *reality* of Evan's sentence in light of robust science findings in neurodevelopment, developmental psychology and social sciences, and criminology

[8] Shen, F. X. et al. (2022). Justice for Emerging Adults after Jones: The Rapidly Developing Use of Neuroscience to Extend Eighth Amendment Miller Protections to Defendants Ages 18 and Older. NYUL Rev. Online, 97, 101.
[9] *Miller*, 567 U.S. at 471.

ARGUMENT

I. THE NEUROSCIENCE OF ADOLESCENCE HIGHLIGHTS BOTH VULNERABILITIES AND A SIGNIFICANT CAPACITY FOR CHANGE.

A. Adolescent Vulnerabilities Reflect Brain and Social Development

The paradigmatic teenager is well-described in brain and developmental sciences as more impulsive and reckless, novelty and sensation-seeking, over-focused on immediate rewards to their own future detriment, less capable of assessing risks or applying risk judgments to their own situations, more sensitive to peer influences, and more susceptible to emotional turmoil.[10] [11] However, adolescents also exhibit remarkable capacities for positive growth and change as they mature into young adulthood. even if they have engaged in persistent or dangerous misconduct. Risky and impulsive behaviors based in still-developing

[10] Icenogle, G., & Cauffman, E. (2021). Adolescent decision making: A decade in review. *Journal of research on adolescence*, *31*(4), 1006-1022.
[11] Steinberg, L., & Chein, J. M. (2015). Multiple accounts of adolescent impulsivity. *Proceedings of the National Academy of Sciences*, *112*(29), 8807-8808.

neural pathways peak in adolescence but diminish through young adulthood[12] [13] with maturation of the frontal cortex.[14] [15] [16]

Adolescents also tend to discount future positive or negative consequences in favor of short-term gains ("temporal discounting").[17] Those aged 12–20 exhibit diminished capacities to weigh the likely long-term outcomes of their actions[18] that obstruct the ability to reliably assess risk and make good decisions (particularly when applying those appraisals to themselves). This amplified sensitivity to

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[12] Peeters, M., Oldehinkel, A., Veenstra, R., & Vollebergh, W. (2019). Unique developmental trajectories of risk behaviors in adolescence and associated outcomes in young adulthood. *PloS one*, *14*(11), e0225088.

[13] James V Ray & Shayne Jones, Aging out of crime and personality development: A review of the research examining the role of impulsiveness on offending in Middle and late adulthood Psychology research and behavior management (2023),

[14] Ogilvie, J. M., Shum, D. H., & Stewart, A. (2020). Executive functions in late adolescence and early adulthood and their relationship with risk-taking behavior. *Developmental neuropsychology*, *45*(7-8), 446-468.

[15] Forrest W, Hay C, Widdowson AO, Rocque M. Development of impulsivity and risk-seeking: implications for the dimensionality and stability of self-control. Criminology. 2019; 57(3): 512–543.

[16] Argyriou E, Um M, Carron C, Cyders MA. Age and impulsive behavior in drug addiction: a review of past research and future directions. Pharmacol Biochem Behav. 2018;164:106–117. doi:10.1016/j.pbb.2017.07.013

[17] Fields, S. A., Lange, K., Ramos, A., Thamotharan, S., & Rassu, F. (2014). The Relationship Between Stress and Delay Discounting: A Meta-Analytic Review. Behavioural Pharmacology, 25, 434–444.

[18] Banich, M.T., De La Vega, A., Andrews-Hanna, J.R., et al. (2013). Developmental trends and individual differences in brain systems involved in intertemporal choice during adolescence. Psychology of Addictive Behaviors, 27, 416–430.

rewards that biases risk appraisal and decision-making[19] makes them vulnerable to reckless behavior.These features attenuate with maturation as accelerated prefrontal cortex development improves impulse control, planning, and anticipation of likely outcomes.[20]

B. Adolescents Demonstrate Capacities for Positive Growth As They Mature.

For nearly all adolescents, the aforementioned traits recede with maturation into early adulthood. This reflects the brain's mutability and reorganization as teens mature.[21] Connections between the striatum and prefrontal cortex are strengthened in late adolescence—reducing impulsivity while improving risk-appraisal and decision-making towards short- and long-term goals.[22] This improves capacities to control emotions, consider the consequences of actions, and

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[19] Leah Somerville, *Searching for Signatures of Brain Maturity: What Are We Searching For?*, 92 Neuron 1164, 1164–67 (2016). Noting lags in the frontal cortex and associated frontoparietal network that impact evaluative decision-making, impulse control, and emotional regulation.

[20] Diekema, D. S. (2020). Adolescent brain development and medical decision-making. Pediatrics, 146(Supplement_1), S18-S24;

[21] Fuhrmann, D., Knoll, L. J., & Blakemore, S. J. (2015). Adolescence as a sensitive period of brain development. *Trends in cognitive sciences*, *19*(10), 558-566.

[22] Van Den Bos, W., Rodriguez, C. A., Schweitzer, J. B., & McClure, S. M. (2015). Adolescent impatience decreases with increased frontostriatal connectivity. *Proceedings of the National Academy of Sciences*, *112*(29), E3765-E3774.

plan for the future.[23] Personality traits contributing to misconduct also change with maturation.[24] Negative emotions and emotional instability decrease[25] while agreeableness, conscientiousness, and openness to new experiences increases.[26] Even youth with callous-unemotional youth traits earlier labeled as "psychopathic" show positive personality changes as they age.[27]

C. Youth Who Engaged in Criminal Conduct Routinely Self-Desist With Age.

Adolescents tend to make better decisions and adopt positive adult roles as they mature. Even most youth who are chronically engaged in violent and/or

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[23] Prencipe, A., Kesek, A., Cohen, J., Lamm, C., Lewis, M. D., & Zelazo, P. D. (2011). Development of hot and cool executive function during the transition to adolescence. *Journal of experimental child psychology*, *108*(3), 621-637.

[24] A. O. Cohen, et al., When Is an Adolescent an Adult? Assessing Cognitive Control in Emotional and Nonemotional Contexts, 27 Psychol Sci (2016).; Roberts, B. W., & Mroczek, D. (2008). Personality trait change in adulthood. *Current directions in psychological science*, *17*(1), 31-35; Roberts, B. W., Walton, K. E., & Viechtbauer, W. (2006). Patterns of mean-level change in personality traits across the life course: a meta-analysis of longitudinal studies. *Psychological bulletin*, *132*(1), 1; Roberts, B. W., & Wood, D. (2006). Personality Development in the Context of the Neo-Socioanalytic Model of Personality.

[25] Aldinger, M., Stopsack, M., Ulrich, I., Appel, K., Reinelt, E., Wolff, S., ... & Barnow, S. (2014). Neuroticism developmental courses-implications for depression, anxiety and everyday emotional experience; a prospective study from adolescence to young adulthood. *BMC psychiatry*, *14*, 1-13.d

[26] Roberts, B. W., & Mroczek, D. (2008). Personality trait change in adulthood. *Current directions in psychological science*, *17*(1), 31-35.

[27] Hawes, S. W., Mulvey, E. P., Schubert, C. A., & Pardini, D. A. (2014). Structural coherence and temporal stability of psychopathic personality features during emerging adulthood. *Journal of abnormal psychology*, *123*(3), 623.

sexual misconduct tend to self-desist from crime as they mature - regardless of whether or not they have been punished through justice systems for those behaviors.[28] One consistent finding in criminology is the "age-crime curve" — misconduct sharply increases with the onset of puberty but then sharply decreases in early adulthood.[29] Both violent and property crime markedly decrease upon entering the early 20's[30], tracking closely the interplay of brain and social development. .

II. NEARLY ALL JUVENILE SEX OFFENDERS SELF-DESIST FROM SEX CRIMES AND/OR RESPOND TO EVIDENCE-BASED TREATMENT

Very few juveniles who commit sex offenses sexually reoffend. Caldwell's (2016) meta-analysis examined 106 studies of adolescent sex offender recidivism from 2000 to 2015 and found a sexual recidivism rate of 2.75 percent,[31] substantially lower than adults with sexual recidivism rates of 24%. Adolescents

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[28] Appleton, S. F., Barch, D. M., & Schaefer, A. M. (2018). The developing brain: New directions in science, policy, and law. *Washington University Journal of Law and Policy*, *57*; Copp, J. E., Giordano, P. C., Longmore, M. A., & Manning, W. D. (2020).

[29] Desistance from crime during the transition to adulthood: The influence of parents, peers, and shifts in identity. *Journal of Research in Crime and Delinquency*, *57*(3), 294-332.

[30] Casey, B. J., Simmons, C., Somerville, L. H., & Baskin-Sommers, A. (2022). Making the sentencing case: Psychological and neuroscientific evidence for expanding the age of youthful offenders. *Annual Review in Criminology, 5*, 1-23.

[31] Caldwell, M. F. (2016). Quantifying the decline in juvenile sexual recidivism rates. Psychology, Public Policy, and Law, 22(4), 414–426.

tend to have less fixed sexual behaviors, interests, and arousal patterns. They are more amenable to change than adults and very few commit new sex offenses after detection. As with most other adolescent offenders, juvenile sexual offenders self-desist with maturation and are also amenable to evidence-based interventions.[32] Indeed, (1) adolescents with abusive sexual behavior are remarkably responsive to treatment services, and (2) evidence-based treatment models are highly effective at reducing sexually abusive behavior among youth.[33] Adolescent treatment programs for sexual misbehavior typically yield dramatic reductions in sexual offense behavior.[34]

CONCLUSION

Amici ask that the court consider the reality of Evan's *de facto* life sentence in light of extensive developmental social and neuroscience. Evan was a juvenile at the time of his sexual offenses. This may first seem a negative prognostic factor for

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[32] Lussier, P., McCuish, E., Chouinard Thivierge, S., & Frechette, J. (2024). A meta-analysis of trends in general, sexual, and violent recidivism among youth with histories of sex offending. Trauma, Violence, & Abuse, 25(1), 54-72.

[33] Cognitive Behavioral Therapy (CBT) and Multisystemic Therapy (MST) are two effective treatments. Dopp, A. R., Borduin, C. M., & Brown, C. E. (2015). Evidence-based treatments for juvenile sexual offenders: Review and recommendations. *Journal of Aggression, Conflict and Peace Research*, *7*(4), 223-236.

[34] St. Amand, Bard & Silovsky, Meta- Analysis of Treatment for Child Sexual Behavior Problems: Practice Elements and Outcomes, 13 Child Maltreatment, 145 (2008); Walker, McGovern, Poey & Otis, Treatment Effectiveness for Male Adolescent Sexual Offenders: A Meta-analysis and Review, 13 Journal of Child Sexual Abuse, 281 (2004).

reoffense risk.[35] However, robust research demonstrates that nearly all juvenile sex offenders desist upon detection and as they mature and that their sexual misconduct is ordinarily extremely responsive to evidence-based intervention. Consideration of his developmental immaturity, youthful capacities for rehabilitation, and likelihood of responsiveness to intervention are warranted to avoid the "gross disproportionality" of a sentence that is —in reality—a sentence of life without hope of eventual consideration for parole.

RESPECTFULLY SUBMITTED this ___ day of June, 2024.

LAW OFFICES OF HENRY JACOBS

By_____

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Center for Law, Brain and Behavior
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[35] Importantly, Evan was found to be a "low risk" to re-offend during his pre-sentence evaluation.

CERTIFICATE OF COMPLIANCE

Petitioner submits that this Petition for Review is in compliance with the Rules of Criminal Appellate Procedure. This Petition uses a proportionately spaced font type, Times New Roman, font size 14, is double spaced and contains approximately 3500 words.

DATED this ____ day of June, 2024.

LAW OFFICES OF HENRY JACOBS

By_____

Henry L. Jacobs, Esq.
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at Massachusetts General Hospital

CERTIFICATE OF SERVICE

The undersigned attorney for the Amicus Curiae, Henry Jacobs, Esq., hereby certifies that the foregoing Amicus Petition for Review has been e-filed with the Clerk of the Arizona Supreme Court using AZTurbo Court, and copies of this Petition for Review were delivered either electronically this ____ of June, 2024, to:

Clerk, Arizona Supreme Court
Via Arizona Turbo Court

Jana Zinman
Arizona Attorney General's Office
Jana.Zinman@azag.gov

DATED this _____ day of June, 2024.

LAW OFFICES OF HENRY JACOBS

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