COMMONWEALTH OF MASSACHUSETTS

SUFFOLK, ss.

SUPERIOR COURT
CRIMINAL ACTION
No. 0084CR10975
SJC-09265
No. 1184CR11291
SJC-11693

COMMONWEALTH
vs.

JASON ROBINSON

COMMONWEALTH
vs.

SHELDON MATTIS

FINDINGS OF FACT ON BRAIN DEVELOPMENT AND SOCIAL BEHAVIOR AND RULING OF LAW ON WHETHER MANDATORY LIFE-WITHOUT-PAROLE SENTENCES FOR DEFENDANTS AGE 18 THROUGH 20 AT THE TIME OF THEIR CRIMES VIOLATES THE MASSACHUSETTS DECLARATION OF RIGHTS

I. INTRODUCTION

Pursuant to G.L. c. 265, § 2(a), the Massachusetts statute that governs the penalties for murder, the defendant in Suffolk Co. Case No. 0084CR10975, Jason Robinson ("Robinson"), and the defendant in Suffolk Co. Case No. 1184CR11291, Sheldon Mattis ("Mattis"), are serving mandatory sentences of life in prison without the possibility of parole based on their convictions for first-degree murder in separate crimes committed when they were respectively 19 and 18 years old.

As of December 2021, both cases were pending before the Supreme Judicial Court ("SJC") following evidentiary hearings in the Superior Court before two different judges on

issues related to the brain development and social behavior of 18 through 20-year-olds, in some instances including 21-year-olds.

On December 24, 2021, the SJC issued an order remanding both cases to the Superior Court and assigning the cases to this Court (the undersigned judge) for factual findings and to "consider and address whether the imposition of a mandatory sentence of life without the possibility of parole for . . . those convicted of murder in the first degree who were eighteen to twenty-one at the time of the crime violates article 26 of the Massachusetts Declaration of Rights."

Article 26 of the Massachusetts Declaration of Rights ("article 26") includes the Commonwealth's constitutional ban on "cruel or unusual punishments." After limited additional proceedings described below, the Court now issues Findings of Fact and a Ruling of Law on the article 26 issue.

With regard to the constitutional question that the SJC asked this Court to address, the Court holds that mandatory sentences of life in prison without the possibility of parole ("mandatory life without parole") for defendants who were 18 through 20 years old at the time of their crimes -- *i.e.*, sentences that preclude a judge from granting parole eligibility -- violate article 26 of the Massachusetts Declaration of Rights. Robinson and Mattis are therefore entitled to a new sentencing hearing.

II. PROCEDURAL HISTORY

A. Commonwealth v. Jason Robinson

Robinson is pursuing a direct appeal of his 2002 convictions on charges of first-degree murder and related offenses based on a robbery and fatal shooting committed on March 27, 2000. When the crimes were committed, Robinson was 19 years old. The evidence at trial

established that Robinson and his co-defendant Tanzerius Anderson ("Anderson") agreed to rob the victim, who was known to carry a significant amount of cash, and that during the robbery, Anderson fatally shot the victim.[1] Anderson's conviction was affirmed by the SJC in 2005. See *Commonwealth* v. *Anderson*, 445 Mass. 195, 196 (2005). Robinson filed a timely notice of appeal, but the appeal was stayed in 2007 so that Robinson could move for a new trial.

Eight years later, in 2015, Robinson filed his new trial motion, seeking a new trial on six grounds, including that closure of the courtroom violated his right to a fair trial and that his mandatory life-without-parole sentence constituted cruel or unusual punishment based on his age at the time of the crime. (Paper # 37.2)

A Superior Court judge allowed Robinson's new trial motion after finding that the public was unlawfully barred from the courtroom throughout jury selection. The SJC reversed, holding that Robinson procedurally waived his claim that the courtroom closure constituted structural error by not objecting to the closure at the time it happened. *Commonwealth* v. *Robinson*, 480 Mass. 146, 147 (2018). In addition to reversing the grant of Robinson's motion for a new trial, the SJC remanded the case "for the motion judge to determine whether the improper courtroom closure created a substantial risk of a miscarriage of justice." *Id.* at 155. On remand, in September 2018, the Superior Court found that Robinson had not met his burden of showing that he had suffered any substantial prejudice as a result of courtroom closure. In October 2018, the case was re-assigned to this Court for resolution of the other issues raised by Robinson in his new trial motion.

In a Memorandum of Decision and Order dated November 7, 2018 (Paper # 67), this Court denied the remainder of Robinson's motion for a new trial, except that the Court deferred

[1] Anderson was convicted of first-degree murder on theories of felony murder and extreme atrocity or cruelty. Robinson was convicted of first-degree murder only on a theory of felony murder. See 445 Mass. at 196 and n.1.

to the SJC the issue of whether the evidence was sufficient to convict Robinson of felony murder. The Court deferred this issue primarily because the law of felony murder had changed since the time of Robinson's offense in 2000, and it was unclear to this Court which if any of those changes should be applied to Robinson's case.[2]

On November 19, 2018, Robinson filed a motion to reconsider this Court's November 7, 2018, decision so that he could create a factual record through expert testimony to support his claim that *Miller* v. *Alabama,* 567 U.S. 460, 470 (2012), and *Diatchenko* v. *District Attorney for the Suffolk Dist. ("Diatchenko I"),* 466 Mass. 655, 667-671 (2013), should be applied to defendants who were 19 years old at the time of their crimes, as was Robinson (Paper # 68). *Miller* held that "mandatory life without parole for those under the age of 18 at the time of their crimes violates the Eighth Amendment's prohibition on 'cruel and unusual punishments.' " 567 U.S. at 465. *Diatchenko I* held that "mandatory imposition of a sentence of life in prison without the possibility of parole on individuals who were under the age of eighteen when they committed the crime of murder in the first degree violates the prohibition against 'cruel or unusual punishments' in art. 26 of the Massachusetts Declaration of Rights, and that the discretionary imposition of such a sentence on juvenile homicide offenders also violates art. 26 because it is an unconstitutionally disproportionate punishment when viewed in the context of the unique characteristics of juvenile offenders." 466 Mass. at 658–659 (footnote omitted).

[2] This Court notes that the SJC has declined to apply *Commonwealth* v. *Brown,* 477 Mass. 805, cert. denied,139 S. Ct. 54 (2018), retroactively, see *Commonwealth* v. *Sun,* 490 Mass. 196, No. SJC-12870, 2022 WL 2517173, at *16 (Mass. July 7, 2022) (slip op. at 50), and the SJC did not ask this Court to address that issue in its December 24, 2021 remand order.

Additional delay resulted from several factors, including consideration of creating a factual record without the need for an evidentiary hearing, which prudently was abandoned, followed by the creation of a factual record through hearings and the COVID-19 pandemic.[3]

On October 30, 2020, this Court held an evidentiary hearing via Zoom, at which Professor Laurence Steinberg ("Dr. Steinberg"), a developmental psychologist, testified on behalf of Robinson, and a binder of articles on adolescent brain development authored or co-authored by Dr. Steinberg (Exhibit 1) was admitted in evidence.[4] The Court set a schedule for the submission of post-hearing briefs.

On April 12, 2021, Robinson filed his post-hearing brief, arguing that the holding in *Diatchenko I* should be extended to defendants who, like him, were 19 years old at the time of their crimes, and that the evidence at trial was insufficient to convict him of felony murder. (Paper # 109) On April 14, 2021, the Commonwealth filed its response. (Paper # 110) In it, the Commonwealth changed the position on the constitutional question that it had held throughout Robinson's appeal and agreed with Robinson's position to the extent that, absent an individualized sentencing hearing, a sentence of life without parole for a defendant who was 19 years old at the time of his crime was unconstitutional. In effect, the Suffolk County District Attorney took the position that *Miller,* but not *Diatchenko I,* should be extended to defendants who were 18 through 20 years old at the time of their crimes.

On May 7, 2021, this Court ordered the record to be transmitted to the Clerk for the Commonwealth. (Paper # 111) The Court's primary reason for transmitting the case was its opinion that the issue of mandatory life-without-parole sentences for individuals who were 19

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[3] See *Committee for Pub. Counsel Servs.* v. *Chief Justice of the Trial Court*, 484 Mass. 431, 433-434 (2020) (explaining generally disruption of pandemic).

[4] Dr. Steinberg's credentials are set forth below.

years old at the time of their crimes should be decided on a broader factual record than the testimony of Dr. Steinberg and articles authored by him.

The subsequent procedural history of this case and the *Mattis* case is set forth in Section C below.

B. Commonwealth v. Sheldon Mattis

Mattis is seeking a reduction in his sentence for his 2013 convictions on charges of first-degree murder and related offenses based on a fatal shooting committed in September 2011. Mattis and his co-defendant Nyasani Watt ("Watt") were tried together and convicted in November 2013 of first-degree murder and related offenses. When the crimes were committed, Mattis was 18 years old. The Commonwealth's theory of the case was that Watt followed the two young pedestrian victims on a bicycle and shot them in the back as they ran away from him. Mattis was tried as Watt's joint venturer.[5]

In 2014, in conjunction with an appeal of his conviction, Mattis filed an omnibus motion in the SJC ("First Motion"). Upon consideration of the First Motion, the SJC stayed the case and remanded the First Motion to the Superior Court for disposition. In a portion of the First Motion, Mattis sought a hearing pursuant to *Commonwealth* v. *Fidler*, 377 Mass. 192 (1977), as to alleged extraneous influence on a deliberating juror. A Superior Court judge (Roach, J.) denied the First Motion in a Memorandum and Order dated March 27, 2015. (Paper # 118)

Following the SJC's ruling in *Commonwealth* v. *Moore*, 474 Mass. 541 (2016), which addressed issues of post-verdict contact with jurors, Mattis and Watt renewed their request for juror contact to pursue their *Fidler* motion. Judge Roach conducted individual voir dire of two

[5] Because Mattis turned 18 years old eight months before the murder, he is serving a life sentence without the possibility of parole. Watt turned 18 years old ten days after the murder, and therefore is now eligible for parole no sooner than fifteen years from sentencing, pursuant to the SJC's ruling in *Diatchenko I*. See *Commonwealth* v. *Watt*, 484 Mass. 742, 753-754 (2020), citing *Diatchenko I*, 466 Mass. at 672-673.

jurors and issued Preliminary Findings of Fact Following Juror Inquiry in March 2017. (Paper # 139)

Mattis subsequently sought further inquiry of all jurors on the questions of "racial animus in the jury room and black gangs," and a court order. (Paper # 141) Mattis also filed Defendant's Memorandum in Support of Motion for New Trial, Reduction in Verdict, and/or Resentencing (Paper # 147), and the Commonwealth filed an opposition. (Paper # 148) Mattis' co-defendant, Watt, sought relief, as well. On October 31, 2017, Judge Roach issued Memorandum of Decision and Order on Defendants' Renewed Motion for New Trial in both cases, denying the new trial motions and declining to grant other relief. (Paper # 150)

Both defendants then appealed their convictions and the denial of their motions for a new trial. In June 2020, the SJC affirmed the defendants' convictions and declined to grant either defendant extraordinary relief pursuant to G.L. c. 278, § 33E. However, the Court stated:

> it likely is time for us to revisit the boundary between defendants who are seventeen years old and thus shielded from the most severe sentence of life without the possibility of parole, and those who are eighteen years old and therefore exposed to it. We can only do so, however, on an updated record reflecting the latest advances in scientific research on adolescent brain development and its impact on behavior. See *Diatchenko I*, 466 Mass. at 669-670.

Commonwealth v. *Watt*, 484 Mass. 742, 755-756 (2020). The SJC remanded Mattis' case to the Superior Court "for development of the record with regard to research on brain development after the age of seventeen." *Id.* at 756.

Between January 14, 2021 and March 1, 2021, Judge Roach conducted an evidentiary hearing via Zoom, at which two volumes of exhibits were admitted and Professor Adriana Galvan ("Dr. Galvan"), a developmental cognitive neuroscientist, and Professor Robert Kinscherff ("Dr. Kinscherff"), an attorney and forensic psychologist, testified for Mattis, and Professor Stephen Morse ("Dr. Morse"), an attorney and forensic psychologist, testified for the

Commonwealth.[6] Thereafter, Judge Roach ordered the record to be transmitted to the Clerk of the Commonwealth (Paper # 187), as this Court had done in the *Robinson* case.

C. Procedural History of Cases Following December 2021 Remand Order

On December 24, 2021, the SJC issued an order remanding the *Robinson* case and the *Mattis* case to the Superior Court and assigning the cases to the undersigned for factual findings on brain development after the age of 17, and to "consider and address whether the imposition of a mandatory sentence of life without the possibility of parole for . . . those convicted of murder in the first degree who were eighteen to twenty-one at the time of the crime violates article 26 of the Massachusetts Declaration of Rights." See 12/24/21 Order in SJC-09265 and SJC-11693 ("December 2021 Remand Order").

This Court gave the parties in both cases an opportunity to supplement the record, which the parties declined. On April 8, 2022, the Court, on its own initiative, heard limited additional testimony, and the defendants offered one additional exhibit in evidence, after which the Court heard oral argument.

III. POSITION OF THE PARTIES

The Commonwealth takes the position, consistent with *Miller*, that *mandatory* life-without-parole sentences for defendants who were under age 21 at the time of their crimes, *i.e.*, sentences that preclude a judge from granting parole eligibility, violate article 26 of the Massachusetts Declaration of Rights. Put another way, in the Commonwealth's view, life-without-parole sentences for defendants convicted of first-degree murder who were 18 through

[6] The credentials of Dr. Galvan, Dr. Kinscherff, and Dr. Morse are set forth below.

20 years old at the time of their crimes comply with article 26, "as long as there is an individualized sentencing hearing." (Paper # 194 at 9)[7]

At the April 8, 2022 hearing, Robinson and Mattis took the position that *any* sentence of life without parole for a defendant who was under age 21 at the time of the crime violates article 26 of the Massachusetts Declaration of Rights.

Because the SJC has asked this Court only to address the constitutionality of *mandatory* life-without-parole sentences for defendants who were under age 21 at the time of their crimes, this Court does not decide the issue of whether *any* sentence of life without parole for a defendant convicted of first-degree murder who was under age 21 at the time of the crime violates articles 26. However, the Court briefly addresses this issue near the end of Part V of this decision.

IV. FINDINGS OF FACT

1. The Court has made two types of findings of fact in this opinion. First, the Court has made Preliminary Findings on the expertise and credibility of the witnesses and the reliability of other evidence that provide support for the Court's findings about age and brain development. Second, the Court has made Core Findings about age and brain development.

Preliminary Analysis and Findings

2. At its core, the issue in this case is whether the science of brain development in 18 through 20-year-olds has progressed to the point that it provides a reliable basis to answer the SJC's question, and if it has, how the Court should rule on the question. The Court begins by looking at the principles that govern admissibility of expert testimony.

[7] The Suffolk District Attorney's Office speaks on behalf of the Commonwealth in these cases. The Court recognizes that the positions of other offices representing the Commonwealth, including the other District Attorney's Offices and the Attorney General's Office, may not necessarily be in accordance with the view of the Suffolk District Attorney.

3. To be admissible, expert witness testimony must satisfy five foundational requirements. See *Commonwealth* v. *Barbosa*, 457 Mass. 773, 783 (2010), *cert. denied*, 563 U.S. 990 (2011); Mass. Guide Evid. § 702 (2022). First, the expert witness testimony must assist the trier of fact. Second, the expert witness must be qualified as an expert in the relevant area of inquiry. Third, the facts or data in the record must be sufficient to enable the expert witness to give an opinion that is not merely speculation. Fourth, the expert opinion must be based on a body of knowledge, a principle, or a method that is reliable. Fifth, the expert's opinion must reflect a reliable application of the body of knowledge, the principle, or the method to the particular facts of the case. The overarching issues are the expertise of the witness and the scientific validity of the principles that underlie the proffered evidence. See *Daubert* v. *Merrell Dow Pharms., Inc.*, 509 U.S. 579, 592-595 (1993); *Commonwealth* v. *Lanigan*, 419 Mass. 15, 24-25 (1994). As discussed below, the requirements for admission of the expert evidence relied upon by the Court have been met.

4. The four experts who testified in *Robinson* and *Mattis* can provide the opinions that support the findings below to a reasonable degree of scientific certainty based on their qualifications and experience, extensive study results and clinical observations supported by peer-reviewed publications, and evolving but recognized principles that have been subjected to rigorous testing.

5. The core findings of fact in this decision about age and brain development are based on (1) the October 30, 2020 testimony and Supplemental Affidavit (Paper # 79) of Dr. Steinberg in *Robinson* (see *infra* ¶ 6); (2) the January 14, 2021 testimony in *Mattis* and brief April 8, 2022 testimony in both cases of Dr. Galvan (see *infra* ¶ 7); (3) the February 19, 2021 testimony in *Mattis* of Dr. Kinscherff (see *infra* ¶ 8); (4) the March 1, 2021 testimony in *Mattis* of Dr. Morse

(see *infra* ¶ 9); and (5) seven scholarly journal articles, the first six of which were co-authored by Dr. Steinberg and/or Dr. Galvan.[8]

6. Dr. Steinberg, a PhD in human development and family studies and tenured professor at Temple University, is a renowned leader in the field of developmental psychology and adolescence. For over 40 years, he has been the sole author, lead author, or co-author of scores of studies published in peer-reviewed journals, including top journals in his field. See 10/30/20 Hearing, Ex. 1. Dr. Steinberg is the lead author of "Around the World," a peer-reviewed article that addressed a far-reaching international study on youth and brain maturation. (10/30/20 Hearing, Ex. 1, Tab U) He has received numerous honors and awards. Steinberg at 15-16.[9] He has been qualified as an expert in the field of developmental psychology approximately 30 times. *Id.* at 16. His research was cited in two of the leading Supreme Court cases on the Eighth Amendment ban on cruel and unusual punishment as applied to juveniles, including *Miller*. See

[8] The seven articles are: (a) Steinberg, et al., "Around the World, Adolescence is a Time of Heightened Sensation Seeking and Immature Self-Regulation," *Developmental Science* (March 2018) (*Robinson* Exhibit No. 1, Tab U), cited herein as Steinberg, et al., "Around the World"; (b) Icenogle, Steinberg, et al., "Adolescents' Cognitive Capacity Reaches Adult Levels Prior to Their Psychosocial Maturity: Evidence for a 'Maturity Gap' in a Multinational, Cross-Sectional Sample," *Law and Human Behavior*, Vol 43, No. 1 at 69-85 (2019) (*Mattis* Exhibits, Vol. 1, Ex. 2; Bates 000036-000070), cited herein as Icenogle, et al., "Adolescents' Cognitive Capacity"; (c) Rudolph, et al. (including Steinberg and Galvan), "At risk of being risky: The relationship between 'brain age' under emotional states and risk preference," *Developmental Cognitive Neuroscience*, Vol 24 (April 2017) at 93-106 (*Mattis* Exhibits, Vol. 1, Ex. 7; Bates 000192-000208), cited herein as Rudolph, et al., "At risk of being risky"; (d) Cohen, et al., "When Is an Adolescent an Adult? Assessing Cognitive Control in Emotional and Nonemotional Contexts," 27 *Psych. Sci.* 549 (2016) (*Robinson* Exhibit 1, tab O), cited herein as Cohen, et al., "When Is an Adolescent an Adult?"; (e) Steinberg, "A Social Neuroscience Perspective on Adolescent Risk-taking," *Devel. Rev.* Vol 28(1): 78-106 (*Mattis* Exhibits, Vol. 2, Ex. 19; Bates 000854-000880), cited herein as Steinberg, "A Social Neuroscience Perspective"; (f) Galvan, "Adolescent Brain Development and Contextual Influences: A Decade in Review," Journal of Research on Adolescence, Vol. 31(4): 843-869 (2021), Exhibit 3 to Commonwealth's Supplemental Response to Defendants' Motion for New Trial ("Comm. Supp. Resp.") (Paper # 120 in *Robinson;* Paper # 184 in *Mattis*), cited herein as Galvan, "Adolescent Brain Development: Decade in Review"; and (g) Casey, et al., "Making the Sentencing Case: Psychological and Neuroscientific Evidence for Expanding the Age of Youthful Offenders," *Annual Rev. of Criminol.* (2022) 5:321-343, Exhibit 1 to Comm. Supp. Resp., cited herein as Casey, et al., "Making the Sentencing Case."

[9] Cites to transcripts of the expert testimony in this case refer to the expert's name and the pages in the transcript, *e.g.*, Steinberg at 15-16.

Roper v. *Simmons*, 543 U.S. 551, 572-575, 578 (2005) (death penalty for those under 18 at time of crime violates Eighth Amendment); *Miller*, 567 U.S. at 489.

7. Dr. Galvan, a PhD in neuroscience, is a tenured Professor of Psychology and Director of the Developmental Neuroscience Lab at U.C.L.A. Dr. Galvan is a recognized leader in the field of developmental cognitive neuroscience, and a co-author of over 100 book chapters and studies published in peer-reviewed journals, including top journals in her field. Galvan at 25-26. She has received numerous honors and awards, including the Presidential Early Career Award for Scientists and Engineers, bestowed by the White House, and the Troland Award from the National Academy of Sciences. *Id.* at 26-27.

8. Dr. Kinscherff is a law school graduate and PhD in clinical psychology. Kinscherff at 10, 16. He is a professor in the doctoral psychology program at William James College. *Id.* at 6-7. Dr. Kinscherff has testified as an expert in the field of psychology dozens of times. *Id.* at 12. He is a former Assistant Commissioner for Forensic Mental Health of the Massachusetts Department of Mental Health. *Id.* at 15.

9. Dr. Morse is an attorney and PhD in psychology and social relations. Morse at 8-9, 16. He is a tenured professor of law and professor of psychology and law at the University of Pennsylvania. *Id.* at 13. He has testified as an expert in at least 20 cases since 1977. *Id.* at 15. He is a licensed attorney in Pennsylvania and Massachusetts and is a board-certified forensic psychologist. *Id.* at 16. His special appointments have included Legal Director of the MacArthur Foundation Law and Neuroscience Project in the mid to late 2000s. *Id.* at 24-25. He has written scores of articles including many in leading journals on neuroscience and the law. *Id.* at 26-27.

10. Today, neuroscientists and behavioral psychologists know significantly more about the structure and function of the brains of 18 through 20-year-olds[10] than they did 20 years ago, for three primary reasons. First, although structural magnetic resonance imaging (sMRI) of the brain's anatomy has existed for almost 50 years, functional magnetic resonance imaging (fMRI), which measures physiological changes in the brain, has been widely available in university labs for only the last 15 to 20 years. See Morse at 30-31. Second, until the late 2000s, far more studies focused on the brains of juveniles, *i.e.*, those under age 18, than on the brains of 18 through 20-year-olds or 18 through 21-year-olds. See Steinberg at 104-105. Third, the number, scope and sophistication of developmental cognitive neuroscience studies and developmental psychology studies has continually increased. In March 2018, Dr. Steinberg (as lead author) and others published "Around the World" in *Developmental Science*. See 10/30/20 Hearing, Ex. 1, Tab U. The study, by far the largest study of its kind, used a combination of behavioral tests and self-reporting regarding 5,404 individuals between the ages of 10 and 30 from 11 countries on five continents. *Id.* at 1-2, 4.[11] Both Dr. Galvan, a defense expert in *Mattis*, and Dr. Morse, the Commonwealth's expert in *Mattis*, praised the study and found it authoritative and statistically sound. See Galvan at 94-95; Morse at 89. The study showed similar results across countries with

[10] The Court's age-based findings are made as to 18, 19, and 20-year-olds, referred to herein as "18 through 20-year-olds." Many of Dr. Galvan's studies included 21-year-olds in the group of "late adolescents" who were studied, whereas many of Dr. Steinberg's studies did not. Because the Court puts great weight on the similarity in results of studies conducted in two different disciplines, *i.e.*, developmental cognitive neuroscience and developmental psychology, using the different methods of behavioral study and brain imaging, the Court's findings include only that age range that was included in both experts' studies. Put another way, for purposes of assessing the constitutionality of mandatory life-without-parole sentences, the brain science relied upon by the Court lends some support for treating 18 through 21-year-olds differently than older persons, but much stronger support for treating 18 through 20-year-olds differently than older persons.

[11] The study was conducted in China, Colombia, Cypress, India, Italy, Jordan, Kenya, the Philippines, Sweden, Thailand, and the United States. *Id.* at 4.

different cultural views about accepted and encouraged behavior in teenagers and discipline of children and teenagers. "Around the World" at 3-4, 13.

11. The Court finds that the four experts who testified in *Robinson* and *Mattis* can provide and have provided expert opinions grounded on reliable theories that support the findings in paragraphs 13-20 below to a reasonable degree of scientific certainty based on their qualifications and experience, and the extensive study results and real-world observations that support their opinions, as noted herein. Consistencies in the results of many behavioral studies, consistencies in the results of many brain imaging studies, and consistencies between the results of these two types of studies, all conducted in different labs in different parts of the country and increasingly in other countries[12], give Dr. Steinberg and Dr. Galvan a high degree of confidence in the validity of their theories, study results, and opinions. See Steinberg at 49-50; Galvan at 191-193. See also brief testimony of Galvan at April 8, 2022 hearing. The increasing scientific rigor of many studies has further increased the confidence of Dr. Steinberg and Dr. Galvan in the validity of their theories, study results, and opinions. See Steinberg at 148-149, 175; Galvan at 54-59, 118, 137-138. The real-world behaviors of 18 to 20-year-olds, as reflected in F.B.I. crime statistics and Centers for Disease Control statistics on addiction and accidents, among other measures of harmful conduct, provide confirmatory support for the brain science findings. See Kinscherff at 104-106; Galvan at 99.

12. While there are limitations to the study results supporting the Core Findings in paragraphs 13-20 below, set forth in paragraph 22, they are inherent in behavioral science research, rapidly evolving scientific research, and/or all scientific research, see Steinberg at 87;

[12] Some studies have included both behavioral and brain imaging components. Steinberg at 91-92.

Morse at 30-35, and do not undermine the reliability of the expert opinions on which the Court relies or the Core Findings of Fact it reaches.

Core Findings of Fact

13. As a group, 18 through 20-year-olds in the United States and other countries have less "self-regulation," *i.e.*, they are less able to control their impulses in emotionally arousing situations, than individuals age 21-22 and older; their reactions in these situations are more similar to those of 16 and 17-year-olds than they are to those age 21-22 and older. See Galvan at 73-74, 78-84, 85-89, 100-101, 104-105, 214-216, 221-222; Steinberg at 30, 41, 49; Steinberg Supp. Aff. ¶ 21; Steinberg, et al., "Around the World" at 1-4, 15-17 (finding these results in 9 of 11 countries studied); Cohen, et al., "When Is an Adolescent an Adult?" at 549; Icenogle, et al., "Adolescents' Cognitive Capacity" at 70 (Bates 000037); Rudolph, et al., "At risk of being risky," §§ 2.11, 3.4, 4.1.

14. As a group, 18 through 20-year-olds in the United States and other countries are more prone to "sensation seeking," which includes risk-taking in pursuit of rewards, than are individuals under age 18 and over age 21. Because risk-taking in pursuit of rewards peaks during the late teens, rising steadily before this age range and falling steadily thereafter, developmental psychologists and developmental cognitive neuroscientists frequently refer to this phenomenon as the "upside-down U" or "inverted U," due to its shape on a graph where age is plotted on the x-axis and level of sensation-seeking is plotted on the y-axis. Galvan at 68-70, 73-74, 91-93; Steinberg at 62, 66; see, generally, Galvan, "Adolescent Brain Development: Decade in Review." See also Steinberg Supp. Aff. ¶ 20; Steinberg, et al., "Around the World" at 1-4, 11-13 (finding these results in 9 of 11 countries studied).

15. As a group, 18 through 20-year-olds are more susceptible to peer influence than are individuals age 21-22 and older, and the presence of peers makes 18 to 20-year-olds more likely to engage in risky behavior. See Steinberg at 43-44, 160-161; Steinberg Supp. Aff. ¶ 24; Galvan at 106, 245-246; Morse at 82; Steinberg, "A social neuroscience perspective" at 91-92, 98; Galvan, "Adolescent Brain Development: Decade in Review" at 852-853.

16. As a group, 18 through 20-year-olds have greater capacity to change than older individuals because of the plasticity of the brain during these years. Galvan at 42-44, 60, 62-63, 67-73, 109-110, 113-114; Casey, et al., "Making the Sentencing Case" at 329.

17. Consistent and reliable results have been obtained in many behavioral studies, sMRI studies, and/or fMRI studies (based on blood flow) that support the findings set forth in paragraphs 13 to 16. Galvan at 60-61, 63-64, 66-69, 76-80, 91-92, 98-101; Steinberg, et al., "Around the World" at 1-4, 7-8, 11-19; Steinberg Supp. Aff. ¶ 20; Steinberg at 65-66. See also additional articles cited *supra* at ¶¶ 13-15.

18. The primary anatomical (brain structure) and physiological (brain function) explanations for the findings set forth in paragraphs 13 to 16 are (1) the influence on the brain of the sharp increase during puberty of certain hormones; (2) the lack of a fully developed prefrontal cortex, the part of the brain that most clearly regulates impulses; and (3) the lack of fully developed connections (or connectivity) between the prefrontal cortex and other parts of the brain, including the ventral striatum, the part of the brain that most clearly responds to rewards and reward-related decision making. Galvan at 42-44, 63-65, 214-216; Steinberg at 22-25, 29-30; Steinberg, "A social neuroscience perspective" at 83-91.

19. The combination of heightened sensation seeking, less than fully developed self-regulation in emotionally arousing situations, and susceptibility to peer pressure, all of which are

associated with a less than fully developed prefrontal cortex and less than fully developed brain connectivity, makes 18 through 20-year-olds as a group particularly vulnerable to risk-taking that can lead to poor outcomes. The real-world behaviors of 18 through 20-year-olds, as reflected in measures of harmful conduct such as F.B.I. crime statistics and Centers for Disease Control statistics on addiction and accidents, support the brain science findings in this regard. Kinscherff at 28-32, 38; Steinberg, "A social neuroscience perspective"; Steinberg Supp. Aff. ¶¶ 25-26.

20. In contrast to how 18 through 20-year-olds respond in emotionally arousing situations, decision making in the absence of emotionally arousing situations, *i.e.*, "cold cognition," reaches adult levels around age 16. See Icenogle, et al., "Adolescents' Cognitive Capacity" at 82; Steinberg Supp. Aff. ¶¶ 22-23; Steinberg, "Why we should lower the voting age to 16," *New York Times* (March 2, 2018) (*Robinson* Hearing Ex. 1, Tab W).

21. Consistent with the above scientific findings, and cognizant of forensic research showing that most individuals who commit crimes in their late teens do not continue to commit crimes after their mid-20's, forensic psychologists have reduced their preparation of and reliance on long-term risk assessments of criminal defendants who commit violent crimes in their late teens and early 20s because of the reduced utility of such studies. See Kinscherff at 48, 51-52; Casey, et al., "Making the Sentencing Case" at 331-332, 335-336. See also 4/8/22 Hearing Exhibit 1 (age-crime curve).

22. Caveats this Court notes to the study results supporting the Core Findings in paragraphs 13-21 include the following. First, there are significant differences between the subjects in the studies discussed below as a whole and individuals who commit murder as a whole, including but not limited to the fact that potential subjects with serious mental illness are excluded from most studies. See Galvan at 193-195. Second, the subjects who participate in

behavioral and brain scan studies are not a fully randomized pool of the general population. See generally Galvan at 169-174; Morse at 33-34; Steinberg at 92, 177-178, 187-188, 199, 201-202, 208-209. Third, behavioral and brain scan study results look at the individuals in any age bracket as a group; there are significant differences in brain development among the individuals of any particular age or age bracket. See Steinberg at 136-175; Morse at 48-50, 60-61; Galvan at 213-218. Fourth, the conditions of brain science studies, *e.g.*, viewing images on a computer screen and/or being scanned in a lab, differ markedly from the real-world situations in which adolescents commit crimes, Galvan at 142, 219.[13] Fifth, the brain scan study results in the record establish *correlations* between the anatomy and function of certain parts of the brain and certain behaviors, which is different than establishing actual *causation* of those behaviors. Sixth, historically there were machine and human error problems with some early fMRI studies, but these problems were largely resolved by around 2013. See Steinberg at 52-54; Morse at 73-74. Lastly, while the results of many behavioral and brain scan studies discussed herein reinforce each other, each study is somewhat different and therefore the results do not constitute "replication" strictly speaking, as scientists often use the term. Morse at 44-45, 59-60. These caveats, individually and collectively, do not undermine the Core Findings of Fact.

V. RULING OF LAW AND LEGAL DISCUSSION

Proportionality is the touchstone for analyzing cruel and unusual punishment under the Eighth Amendment to the U.S. Constitution and the Commonwealth's counterpart to the Eighth Amendment, article 26 of the Massachusetts Declaration of Rights. See *Diatchenko I,* 466 Mass. at 669. See also *Commonwealth v. Concepcion*, 487 Mass. 77, 86 (2021). Moreover, "a

[13] That said, three of the experts testified that the studies on which they relied accurately predicted real-world behaviors. Galvan at 120; Steinberg at 99; Morse at 36.

sentencer [must] have the ability to consider the mitigating qualities of youth." *Diatchenko I*, 466 Mass. at 661, quoting *Miller*, 567 U.S. at 476 (internal quotation and additional citation omitted).

In *Miller*, the Supreme Court banned mandatory sentences of life in prison without the possibility of parole for defendants who were under age 18 at the time of their crimes, as cruel and unusual punishment in violation of the Eighth Amendment. 567 U.S. at 489. The Supreme Court held that judges could impose life-without-parole sentences for juveniles in the exercise of their discretion, but not mandatorily based solely on the provisions of a state or federal statute. *Id.*

In *Diatchenko I*, the SJC took the holding in *Miller* one significant step further, holding that *all* life-without-parole sentences for defendants who were under age 18 at the time of their crimes were "cruel or unusual punishment"[14] in violation of article 26 of the Massachusetts Declaration of Rights. 466 Mass. at 671. "The point of [the SJC's] departure from the Eighth Amendment jurisprudence was [its] determination that, under art. 26, the 'unique characteristics of juvenile offenders' should weigh more heavily in the proportionality calculus than the United States Supreme Court required under the Eighth Amendment." *Commonwealth* v. *Perez*, 477 Mass. 677, 683 (2017), citing *Diatchenko I*, 466 Mass. at 671.

The SJC has asked this Court to decide, in effect, whether the Supreme Court's holding in *Miller* should be extended in Massachusetts to all defendants who were age 18 through 20 at the time of their crimes. The Court concludes that it should. Both the Supreme Court and the SJC have established "categorical bans on sentencing practices based on mismatches between the culpability of a class of offenders and the severity of a penalty." *Diatchenko I*, 466 Mass. at 659.

[14] The SJC has not found any legal significance in the language difference between the Eighth Amendment, which bans "cruel *and* unusual punishment," and art. 26, which bans "cruel *or* unusual punishment." See, *e.g.*, *Michaud* v. *Sheriff of Essex Cnty.*, 390 Mass. 523, 533-534 (1983), and cases cited.

In the nine years since *Diatchenko I* was decided, extensive research in the fields of developmental cognitive neuroscience and developmental psychology has established that, as a class or group, the brains of 18 through 20-year-olds are not as fully developed as the brains of older individuals in terms of their capacity to avoid conduct that is seriously harmful to themselves and others. These scientific findings clearly bear on the "culpability of [this] class of offenders... ." *Id.* As applied to juveniles, the SJC considers life-without-parole sentences to be "strikingly similar, in many respects, to the death penalty... ." *Id.* at 670. Applying the Findings of Fact in this case to this SJC precedent, this Court holds that the non-discretionary (*i.e.*, mandatory) imposition of life-without-parole sentences for defendants who were age 18 through 20 at the time of their crimes is a "sentencing practice[ ] based on mismatches between the culpability of a class of offenders and the severity of a penalty." *Id.* at 659. Without minimizing the violence that is almost always involved in the crimes committed by 18 through 20-year-olds that result in first-degree murder convictions, including the crimes at issue in these two cases, the Court concludes that there is a mismatch between the culpability of 18 through 20-year-old offenders as a class and mandatory life-without-parole sentences, *i.e.*, sentences that preclude a judge from granting parole eligibility. Therefore, as applied to 18 through 20-year-olds, the statute that mandates such sentences, G.L. c. 265, § 2, violates article 26 of the Massachusetts Declaration of Rights. This does not mean that, under a given set of facts, a life-without-parole sentence cannot be imposed on such a defendant. The SJC has not asked this Court to decide whether *any* life-without-parole sentence for a defendant who was under age 21 at the time of the crime violates article 26, and therefore the Court does not decide this issue. This ruling means that requiring imposition of a mandatory life sentence in every case, without an individual, case-by-case factual assessment, is unconstitutional.

As noted above, this Court bases its constitutional ruling primarily on 15 years of extensive scientific research establishing that, as a class or group, 18 through 20-year-olds have brains that are not as developed as those of older individuals, and this lack of full brain development makes them more susceptible to behavior harmful to themselves and others. Eighteen through 20-year-olds have less "self-regulation," *i.e.*, they are less able to control their impulses in emotionally arousing situations, than individuals age 21-22 and older. Their reactions in these situations are more similar to those of 16 and 17-year-olds than they are to those age 21-22 and older. As a group or class, 18 through 20-year-olds are also more prone to "sensation seeking," *i.e.*, risk-taking in pursuit of rewards, than are individuals under age 18 and over age 21. And 18 through 20-year-olds are more susceptible to peer influence than are individuals age 21-22 and older; the presence of peers makes them more likely to engage in risky behavior than they otherwise would be. Consistent results have been obtained in many behavioral studies, sMRI studies, and fMRI studies. See *supra* at 15-17.

The primary anatomical (brain structure) and physiological (brain function) explanations for these phenomena are the influence on the brain of the sharp increase during puberty of certain hormones, the lack of a fully developed prefrontal cortex, the part of the brain that most clearly regulates impulses, and the lack of fully developed connections (connectivity) between the prefrontal cortex and other parts of the brain including the ventral striatum, the part of the brain that most clearly responds to rewards and reward-related decision making. See *supra* at 16-17.

The combination of heightened sensation seeking, less than fully developed self-regulation in emotionally arousing situations, and susceptibility to peer pressure, all of which are associated with a less than fully developed prefrontal cortex and less than fully developed brain connectivity, makes 18 to 20-year-olds as a group particularly vulnerable to risk-taking that can

lead to poor outcomes. The real-world behaviors of 18 through 20-year-olds, as reflected in F.B.I. crime statistics, Centers for Disease Control statistics on addiction and accidents, and many other measures of harmful conduct, support the brain science findings in this regard. See *supra* at 16-17.

The brain science and forensic science study results described in this opinion lend direct support to the conclusion that mandatory life-without-parole sentences for defendants who were age 18 through 20 at the time of their crimes constitute cruel or unusual punishment under article 26. Perhaps equally important, these study results also comport with the three reasons why the Supreme Court and the SJC drew the line at age 18 for purposes of applying the most severe penalties in our federal and state legal systems, the death penalty (federal) or mandatory life without parole (Massachusetts).

When the Supreme Court ruled in *Roper v. Simmons*, 543 U.S. 551 (2005), that applying the death penalty to defendants who were under age 18 at the time of their crimes constituted cruel and unusual punishment under the Eighth Amendment, the Court cited three general differences between juveniles (*i.e.*, persons under age 18) and adults. The first difference noted between juveniles and adults was that "lack of maturity and an underdeveloped sense of responsibility are found in youth more often than in adults and are more understandable among the young." *Roper*, 543 U.S. at 569. The second difference was that "juveniles are more vulnerable or susceptible to negative influences and outside pressures, including peer pressure." *Id.*, citing Steinberg & Scott, Less Guilty by Reason of Adolescence: Developmental Immaturity, Diminished Responsibility, and the Juvenile Death Penalty, 58 *Am. Psychologist* 1009, 1014 (2003). "The third broad difference is that the character of a juvenile is not as well formed as that of an adult. The personality traits of juveniles are more transitory, less fixed." *Roper*, 543

U.S. at 570. The SJC adopted all three of these differences as reasons for its ruling in *Diatchenko I.* See *Diatchenko I,* 466 Mass. at 660.

The scientific study results in the record in this case call into question why, for purposes of applying these three factors, the line between juveniles and adults should be drawn between age 17 and age 18. A range of study results shows that 18 through 20-year-olds are more subject to peer pressure than older individuals, and brain imaging shows that 18 through 20-year-olds have greater capacity to change than older individuals because of the plasticity of the brain during these years. These study results also provide a reason for why "lack of maturity and an underdeveloped sense of responsibility" are "found in [this age group] more often than in adults and are more understandable... ." *Roper*, 543 U.S. at 569.

That the Supreme Court has expressly limited the protections of *Roper* and *Miller* to defendants under age 18, see *Jones* v. *Mississippi*, 141 S. Ct. 1307, 1314 (2021); *Roper*, 543 U.S. at 574, is not dispositive, for two reasons. First, the Court does not assume those decisions are fixed in stone, and their conclusions may change as the science changes. See *Watt*, 484 Mass. at 755-756. Second, and leaving future developments aside, the SJC has noted that it "often afford[s] criminal defendants greater protections under the Massachusetts Declaration of Rights than are available under corresponding provisions of the Federal Constitution." See *Diatchenko I*, 466 Mass. at 668-669, and cases cited therein.[15]

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[15] See, *e.g.*, *District Attorney for the Suffolk Dist.* v. *Watson*, 381 Mass. 648 , 650, 665 (1980) (concluding that death penalty contravened prohibition against cruel or unusual punishment in art. 26, notwithstanding constitutionality under Eighth Amendment); *Commonwealth* v. *Mavredakis*, 430 Mass. 848, 855-860 (2000) (defendant's right under art. 12 of Massachusetts Declaration of Rights to be informed of attorney's efforts to render assistance broader than rights under Fifth and Sixth Amendments to United States Constitution); *Commonwealth* v. *Gonsalves*, 429 Mass. 658, 660-668 (1999) (privacy rights afforded drivers and occupants of motor vehicles during routine traffic stops broader under art. 14 of Massachusetts Declaration of Rights than under Fourth Amendment to United States Constitution); *Commonwealth* v. *Amirault*, 424 Mass. 618, 628-632 (1997) (confrontation rights greater under art. 12 than under Sixth Amendment to United States Constitution). See also Scott L. Kafker, *State Constitutional Law Declares Its Independence: Double Protecting Rights During a Time of Federal Constitutional Upheaval*, 49 Hastings Const. L.Q. 115, 119 (2022) ("state supreme courts have significant, if not unlimited

In ruling on defendants' motions, the Court has considered but has not strictly applied the three-pronged analysis adopted by the SJC in *Commonwealth v. Jackson*, 369 Mass. 904, 910 (1976), for deciding when a sentence is so disproportionate to the crime that it constitutes cruel or unusual punishment. This analysis "requires (1) an inquiry into the nature of the offense and the offender in light of the degree of harm to society, (2) a comparison between the sentence imposed here and punishments prescribed for the commission of more serious crimes in the Commonwealth, and (3) a comparison of the challenged penalty with the penalties prescribed for the same offense in other jurisdictions." *Commonwealth* v. *Sharma*, 488 Mass. 85, 89 (2021) (internal quotations and citations omitted). This approach does not apply neatly here; it appears that the SJC has used this three-part analysis solely to determine whether a *particular* sentence violates article 26, not to determine whether a sentencing *practice* violates art. 26. Compare *Cepulonis* v. *Commonwealth*, 384 Mass. 495, 497-499 (1981) (three-part analysis used to determine that 40-50 year sentence for possession of machine gun did not violate art. 26 or Eighth Amendment); *Perez*, 477 Mass. at 683-686 (three-part analysis used to determine that sentence in non-murder case with parole eligibility after 27 ½ years presumptively disproportionate); *Concepcion*, 487 Mass. at 86-89 (three-part analysis used to determine that life sentence with parole eligibility after 20 years for defendant convicted of first-degree murder committed at age 15 did not violate art. 26 or Eighth Amendment); and *Sharma*, 488 Mass. at 89-92 (sentences imposed on defendant age 17 at time of crimes of life in prison with parole eligibility after 15 years, followed by 7-10 year sentences -- concurrent with each other -- for armed assault with intent to murder remanded for individual determination using three-part test),

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freedom of action to provide greater protection under state constitutions") *id.* at 120 & n.20 (giving examples of *Diatchenko I* and *Monschke*).

with *Diatchenko I,* 466 Mass. at 667-671 (not applying three-part test while holding that *all* life-without-parole sentences for defendants under age 18 at the time of their crimes violates art. 26); *id.* at 672 (describing *Cepulonis* as addressing "punishment for particular offense"). The limitation of the three-pronged test in this case, as in *Diatchenko I,* is that first-degree murder is the most serious offense in the Commonwealth, and mandatory life in prison without parole is the most serious punishment in the Commonwealth, so these first two prongs do not lend themselves to a proportionality analysis. See *Commonwealth* v. *LaPlante*, 482 Mass. 399, 404 n.4 (2019) (deliberate murder case warranting "most severe punishment ... defies direct application of" this test). This leaves this third part of the test, *i.e.*, what has been done in other jurisdictions. Depending on one's perspective, application of this third prong can either support extending *Miller* to 18 through 20-year-olds or discourage it.

Only one state high court has held that mandatory life-without-parole sentences for defendants who were 18 through 20 years old at the time of their crimes violates the state analog to the Eighth Amendment, a constitutional ban on "cruel punishments." See *Matter of Monschke*, 197 Wash. 2d 305, 325 (2021), discussed *infra.* However, there are states in which some or all defendants of *any* age who are convicted of the most serious murder charge may receive parole eligibility as part of a life sentence, or a sentence of less than life in prison.[16] In seven states, there is no death penalty and a sentence of life in prison with parole eligibility is always a possible sentence for an adult defendant convicted of the most serious murder charge.[17] In New Jersey and New York, two other states that have no death penalty, life in prison with

[16] This Court endeavored to identify the statutes governing the most serious murder charge in all 50 states and the penalties for each such charge. However, court decisions have modified the law in some states, and this Court lacks the resources to monitor recent developments in the law of 50 different jurisdictions.

[17] Maine, Maryland, North Dakota, Rhode Island, Vermont, West Virginia, and Wisconsin.

parole eligibility is a possible sentence for a defendant convicted of the most serious murder charge unless the judge or jury finds specified aggravating factors. In two of the nine above-referenced states, Maine and New Jersey, a defendant convicted of the most serious murder charge may also be sentenced to a determinate term of years that, based on the defendant's age and the length of the sentence, is often not a *de facto* life sentence. And in Illinois, which does not have the death penalty, a defendant convicted of the most serious murder charge may receive a determinate term of years but may *not* receive a sentence of life with the possibility of parole.[18]

Massachusetts is one of only 11 states in which life in prison without parole is the only possible sentence after an adult conviction on the most serious murder charge.[19] Death is the only alternative to a life-without-parole sentence after an adult conviction on the most serious murder charge in sixteen states.[20, 21] In Alaska, conviction of aggravated first-degree murder carries a mandatory 99-year sentence, which is a *de facto* life without parole sentence.

In 11 of the states that have the death penalty, some defendants convicted of the most serious murder charge may be sentenced to life in prison with parole eligibility.[22] However, a sentencing regime that includes the death penalty differs so significantly from a sentencing

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[18] See 730 ILCS 5/5-4.5-20(a); 730 ILCS 5/3-3-3(c).

[19] Colorado, Connecticut, Delaware, Hawaii, Iowa, Massachusetts, Michigan, Minnesota, New Hampshire, New Mexico, and Virginia. There were 12 states, but the high court of one of those 12 states, Washington, ruled that mandatory sentences of life without parole for defendants who were age 18 through 20 at the time of their crime violate the state constitutional ban on "cruel punishments." See *Matter of Monschke*, *infra* at 27.

[20] Alabama, Arizona, Arkansas, California, Florida, Indiana, Kansas, Louisiana, Mississippi, Missouri, Nebraska, North Carolina, Pennsylvania, South Dakota, Texas, and Wyoming.

[21] California and Pennsylvania currently have moratoriums on the death penalty. As a result, at this time, life without parole is the only possible sentence upon conviction of the most serious murder offense.

[22] Georgia, Idaho, Kentucky, Montana, Nevada, Ohio, Oklahoma, Oregon, South Carolina, Tennessee, and Utah.

regime without the death penalty that this Court does not consider the sentencing laws in those states as support for its holding in this case.

As noted above, in *Matter of Monschke*, 197 Wash. 2d 305 (2021), the Supreme Court of Washington ruled (by a 5-4 vote) that the state's aggravated murder statute was unconstitutional as applied to 18 through 20-year-olds because it denied trial judges discretion to consider the mitigating qualities of youth. *Id.* at 306-307, 326. The court noted that constitutional protections for youthful criminal defendants have grown more protective over the years, *id.* at 313-317, and that the Washington courts would not necessarily defer to legislative line drawing when determining what constitutes cruel punishment, *id.* at 317-319. The court also discussed how what it called the "age of majority"[23] is inherently and necessarily flexible. *Id.* at 319-321. Finding no meaningful developmental difference between the brain of a 17-year-old and the brain of an 18-year-old, the court held that drawing an arbitrary line between these ages for sentencing purposes did not pass constitutional muster. See *id.* at 313, 329. [24]

In sum, the law in other jurisdictions on mandatory life-without-parole sentences can be used to support or to question the holding reached by this Court.

A principal argument against extending the protections of juvenile sentencing to 18 through 20-year-olds has been that the law recognizes these individuals as adults, and therefore criminal courts should treat them as adults. See, *e.g.*, *Matter of Monschke*, 197 Wash. 2d at 330 (Owens, J., dissenting) ("at this same moment [that individuals obtain the privileges of adulthood], they also obtain the full responsibilities and consequences of adulthood, and the

[23] The term "age of majority" is ambiguous. See *infra*.

[24] The dissent noted, among other things, that the majority's ruling does not eliminate line-drawing, it merely changes where the line is drawn, and emphasized the inherent difficulty in deciding which 18 through 20-year-old offenders should receive life-without-parole sentences. *Id.* at 330-331, 333 (Owens, J., dissenting).

court will no longer intervene on their behalf on the basis of age."). The SJC adopted this reasoning in declining to extend the constitutional ban on life-without-parole sentences for juveniles to this age group:

> The age of eighteen ..."is the point where society draws the line for many purposes between childhood and adulthood." *Roper* [], 543 U.S. [at] 574 []. That such line-drawing may be subject "to the objections always raised against categorical rules," *id.*, does not itself make [an 18-year-old's life-without-parole] sentence unconstitutional.

Commonwealth v. *Chukwuezi*, 475 Mass. 597, 610 (2016). See *Watt*, 484 Mass. at 756 n.17.

However, while society draws the adulthood line at age 18 for "many purposes," *Chukwuezi*, 475 Mass. at 610, there are significant exceptions to this rule. Through legislation, "the Commonwealth has recognized that merely attaining the age of eighteen years does not by itself endow young people with the ability to be self-sufficient in the adult world." *Eccleston* v. *Bankosky*, 438 Mass. 428, 436 (2003). In a variety of contexts, Massachusetts law treats individuals age 18 and slightly older the same as it treats juveniles. See, *e.g.*, *id.* (child support); *Commonwealth* v. *Cole C.*, 92 Mass. App. Ct. 653, 659 n.8 (2018) (juvenile court jurisdiction); *id.* at n.9 (state custody of delinquent child); G.L. c. 119, § 23(f) (state responsibility for former foster child); G.L. c. 138, § 34A (drinking age). See also *Eccelston*, 438 Mass. at 435 n.13 ("An individual may be considered emancipated for some purposes but not for others" and giving the example of the right to vote versus the end of parental support).

Moreover, the age of legal adulthood has changed between 21 and 18 in various contexts for reasons "unrelated to capacity." See *Matter of Monschke*, 197 Wash. 2d at 314-315. The ages for military conscription, voting and drinking alcohol provide important examples. For most of the nation's history, the "age of majority" was 21, not 18. See Vivian E. Hamilton, *Adulthood in Law and Culture*, 91 Tul. L. Rev. 55, 64 (2016). "In 1942 wartime needs prompted Congress to lower the age of conscription from twenty-one to eighteen, a change

that would eventually lead to the lowering of the age of majority generally." *Id.* See also *Eccleston*, 438 Mass. at 435 n.14 (voting age lowered from 21 to 18 because age of conscription for service in Vietnam War was 18). Similarly, the drinking age has fluctuated, decreasing from 21 to 18 before reverting back to 21. See *Barboza* v. *Decas*, 311 Mass. 10, 12 (1942) (citing 1937 legislation which punished persons giving alcohol to individuals under 21); *McGuiggan* v. *New England Tel. & Tel. Co.*, 398 Mass. 152, 159 n.7 (1986) (noting "[t]he legal drinking age [had been] eighteen" but had been raised to 21 pursuant to a 1984 amendment). The 1984 increase in the drinking age was unmistakably due not to any new understanding about brain maturation but rather the incentive of federal funding. See 23 U.S.C. § 158; St.1984, c. 312, amending G.L. c. 138, §§ 12, 14, 30E, 34, 34A, 34B, 34C, and 64. See also *S. Dakota* v. *Dole*, 483 U.S. 203, 205 (1987) (states' federal highway funds partially contingent on state legislation compliance with congressional goal of national minimum drinking age).

As the foregoing show, the "age of majority" is a malleable concept that is not consistently based on science, as the decision in the cases at issue here must be. It thus should not mechanically govern highly consequential decisions about application of the criminal law. Further, the decision about what constitutes "cruel or unusual punishment" is a matter for the state courts, not the Legislature. See *Watson*, 381 Mass. at 666-667. See also *id.* at 686-687 (Quirico, J., dissenting); *Matter of Monschke*, 197 Wash. 2d at 325 (limit of judicial deference is violation of constitution under Washington state law); *Goodridge* v. *Dep't of Pub. Health*, 440 Mass. 309, 338-339 (2003) ("To label the court's role as usurping that of the Legislature ... is to misunderstand the nature and purpose of judicial review. We owe great deference to the Legislature to decide social and policy issues, but it is the traditional and settled role of courts to decide constitutional issues.").

This Court recognizes that incomplete brain development is far from determinative of violent behavior. The great majority of 18 through 20-year-olds do not commit violent crimes. Moreover, dramatically different crime rates in different geographic areas indicate that many factors other than brain age contribute to violent crime. Based on the record in this case, these aggravating factors include access to drugs, access to guns, high childhood stress levels, negative peer influence including affiliating with others involved in criminal activity, mental illness, unstable housing, lack of emotional attachment, and absence of lawful means of earning income, as well as the absence of positive factors such as stable relationships, education, and access to youth and adult programs. See Kinscherff at 91-96, 118-120.[25] Having the brain of an average 18 through 20-year-old is neither a satisfactory explanation nor an excuse for the intentional killing of another human being. However, the reality that many factors other than brain development contribute to violent crime does not change the Court's constitutional analysis, for two reasons.

First, the Court's holding does not in any way excuse acts of violence by 18 through 20-year-olds. The consequence of the Court's ruling is that all individuals convicted of first-degree murder in Massachusetts who were 18 through 20 years old at the time of their crime will continue to receive sentences of life in prison and serve at least 15 years in prison, but some of them may become eligible for parole after serving 15 or more years of their sentences. Others, depending on the facts, may be sentenced to life without the possibility of parole, but only if that sentence is warranted.

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[25] Sociologists observe that "as people move into the roles of adulthood – as they become full-time employees, as they become spouses, as they become parents – there are all kinds of factors that make it less attractive to live a criminal lifestyle." Steinberg at 68. Adults have more "latitude to engage in emotionally meaningful relationships . . . [and] at some point most people decide that the costs and consequences of continued serious criminal misconduct is not preferable to living a more productive life." Kinscherff at 40.

Second, the presence of aggravating factors that increase the likelihood of committing a violent crime is largely beyond the control of any 18 through 20-year-old. The economic circumstances of one's parents or guardians, racial and other discrimination, and other individual and systemic inequalities ensure that some late teens are far more likely than others to live with these aggravating factors, and therefore more likely to perpetrate - and to be victimized by - violent crime. In deciding what constitutes cruel or unusual punishment, a court should consider the systemic impact of its ruling, particularly where the ruling involves a class of persons who, based on their age, have greater capacity than older persons to change.

As noted above, the SJC has not asked this Court to decide whether *any* life-without-parole sentence for a defendant who was under age 21 at the time of the crime violates article 26, and therefore the Court does not decide this issue. There are three separate theories under which intentional killings can be prosecuted as first-degree-murder, *i.e.*, premeditated murder, murder committed with extreme atrocity or cruelty, and felony murder.[26] The neuroscience and behavioral science supporting the Court's ruling do not apply with equal force to killings under all three theories. Nor do they apply with equal force to the wide range of individual conduct that can be prosecuted under each of the theories of first-degree murder.

VI. CONCLUSION AND ORDER

Article 26 of the Massachusetts Declaration of Rights establishes "categorical bans on sentencing practices based on mismatches between the culpability of a class of offenders and the severity of a penalty." *Diatchenko I*, 466 Mass. at 659. Moreover, as applied to juveniles, the SJC considers life-without-parole sentences to be "strikingly similar, in many respects, to the death penalty... ." *Id.* at 670. On the record of brain science and social science in this case, the

[26] The Legislature has enacted different lengths of time before parole eligibility for convictions under each of these three theories. See G.L. c. 127, § 133A; G.L. c. 279 § 24.

imposition of non-discretionary (*i.e.* mandatory) life-without-parole sentences for defendants who were age 18 through 20 at the time of their crimes constitutes a "sentencing practice[ ] based on mismatches between the culpability of a class of offenders and the severity of a penalty." *Id.* at 659 . Therefore, this sentencing practice constitutes "cruel or unusual punishment" in violation of article 26 of the Massachusetts Declaration of Rights.

Because Jason Robinson and Sheldon Mattis were respectively 19 years old and 18 years old at the time of their crimes, they are each entitled to a new sentencing hearing.

Dated: July 20, 2022

Robert L. Ullmann
Justice of the Superior Court