

# HOUSE . . . . . No. 4016

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## The Commonwealth of Massachusetts

PRESENTED BY:

*Russell E. Holmes*

*To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:*

The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill:

An Act regarding human nature.

PETITION OF:

NAME:	DISTRICT/ADDRESS:	DATE ADDED:
<i>Russell E. Holmes</i>	<i>6th Suffolk</i>	<i>1/15/2025</i>

# HOUSE . . . . . No. 4016

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By Representative Holmes of Boston, a petition (accompanied by bill, House, No. 4016) of  
Russell E. Holmes relative to neuroscience in criminal proceedings. The Judiciary.

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## The Commonwealth of Massachusetts

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In the One Hundred and Ninety-Fourth General Court  
(2025-2026)  
\_\_\_\_\_

An Act regarding human nature.

*Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority  
of the same, as follows:*

1           SECTION 1. The General Laws are hereby amended by inserting after chapter 233 the  
2 following chapter:-

3           CHAPTER 233A.

4           NEUROSCIENCE IN CRIMINAL PROCEEDINGS.

5           Section 1. As used in this chapter, the following words shall, unless the context clearly  
6 requires otherwise, have the following meanings:-

7           "Fight or flight response", an involuntary physiological reaction occurring in response to  
8 a perceived harmful event, attack or threat to survival that may temporarily overwhelm a person's  
9 capacity for reason, conscience control and judgment rendering the person temporarily incapable  
10 of resisting or controlling an impulse that leads to the commission of an act without the  
11 occurrence of a mind directing it thereby impairing the ability to exercise deliberate restraint or  
12 select alternative means of avoiding a physical confrontation..

"Neuroscience evidence", scientific evidence derived from the study of the structure or function of the nervous system, brain and neural development, including but not limited to, neuroimaging, neuropsychological assessments and empirical research findings regarding brain function, development and trauma responses offered to demonstrate cognitive impairment or limitations at the time of the alleged criminal act.

Section 2. In any criminal proceeding, evidence regarding the activation of fight or flight responses shall be admissible when relevant to the issue of a defendant's criminal liability, intent or culpability.

Section 3. Neuroscience evidence regarding fight or flight responses may be presented to establish that a defendant, at the time of the alleged criminal act, had fight or flight responses activated such that the defendant could not control their conduct and so did not have the capacity to use their conscious mind but reacted based on instincts, with their conscience and judgment overwhelmed by fight or flight responses.

Section 4. (a) In any criminal proceeding in which a defendant asserts self-defense, the defendant shall be permitted to introduce neuroscience evidence to demonstrate that, due to the involuntary fight-or-flight response, it may have been cognitively impossible for the defendant to:

(i) avail themselves of proper means to avoid physical combat, and

(ii) use no more force than was necessary under the circumstances.

(b) When credible neuroscience evidence is presented establishing that an involuntary fight-or-flight response impaired the defendant's cognitive capacity at the time of the incident,

the court shall consider that impairment as mitigating the defendant's inability to meet the requirements described in subsection (a).

(c) In such instances, the burden shall shift to the prosecution to prove, beyond a reasonable doubt, that the defendant's actions exceeded what was objectively necessary despite the demonstrated cognitive limitations.

Section 5. In cases involving provocation, neuroscience evidence may be introduced to establish the impact of fight or flight responses on a defendant's capacity for reflection or restraint, consistent with the principles articulated in *Commonwealth v. Escobar*, 493 Mass. 694 (2024).

Section 6. In felony-murder cases, neuroscience evidence may be introduced to address the application of constructive malice where a defendant had no intention to commit a violent act outside of the underlying felony, but whose fight or flight responses were triggered during the commission of the felony.

Section 7. When there is evidence indicating that fight or flight responses were triggered and caused a lack of criminal responsibility or mitigated culpability, the court shall provide proper instructions to the jury explaining the impact of fight or flight responses on a defendant's ability to make a conscious decision.

Section 8. Nothing in this chapter shall be construed to create a new affirmative defense, but rather to provide for the admissibility of scientific evidence relevant to existing legal standards of criminal responsibility, intent, and culpability.

SECTION 2. Section 79 of chapter 233 of the General Laws, as appearing in the 2022 Official Edition, is hereby amended by adding the following paragraph:-

Records and reports of examinations related to a defendant's neurological functioning, including assessments of fight or flight responses, shall be admissible as evidence of the condition of the defendant, subject to the provisions of chapter 233A.

SECTION 3. Chapter 278 of the General Laws, as so appearing, is hereby amended by adding the following section:-

Section 36. (a) In any criminal case where the evidence raises the issue of the impact of fight or flight responses on a defendant's mental state, the court shall instruct the jury on the relationship between neuroscience evidence regarding fight or flight responses and the legal standards for criminal liability, in accordance with the standards established in chapter 233A.

(b) In cases where neuroscience evidence is introduced, the court shall instruct the jury that:

(i) credible neuroscience evidence may show that an involuntary fight-or-flight response can significantly impair an individual's cognitive ability to make rational decisions in the heat of the moment; and

(ii) such evidence must be given due weight in determining whether the defendant's actions met or fell short of the statutory self-defense requirements.

(c) The jury shall be further instructed that if neuroscience evidence establishes a marked impairment in the defendant's cognitive functioning at the time of the incident, this impairment

- 74 may negate, in whole or in part, the failure to adhere to the requirements of avoiding physical
- 75 combat or using no more force than necessary.