

- **Gaps and opportunities in our fundamental understanding of biobehavioral mechanisms of aggression in humans and animals**

As identified in the article [Biobehavioral Approaches to Aggression Implicate Perceived Threat and Insufficient Sleep: Clinical Relevance and Policy Implications - Edelyn Verona, Melanie L. Bozzay, 2017 \(sagepub.com\)](https://journals.sagepub.com/doi/full/10.1177/2372732217719910) (<https://journals.sagepub.com/doi/full/10.1177/2372732217719910>), sleep insufficiency is a gap in our fundamental understanding of mechanisms of aggression.

- **Gaps and opportunities in the development and use of methods, tools, technology, or other research resources to enable better characterization of the *biological, psychological, and environmental mechanisms underlying aggressive behaviors and the biobehavioral impact of those experiencing aggression***
 - Aggressive behavior is understood to be very strongly conditional on the developmental stage and life-course history of the perpetrator. Accordingly, longitudinal studies are critical to studying aggression.
 - FABBS encourages the use of modern causal inference methods.
- **Gaps and opportunities in the identification of biomedical, behavioral, and psychosocial intervention targets for preventing *and treating aggressive behavior and mitigating its impact on health and well being***
 - When considering psychological intervention targets, research underscores the importance of differentiating between interventions to mitigate a particular behavior and those designed to address persistence and relapse. [Beyond Intervention: Shaping Policy for Addressing Persistence and Relapse of Severe Problem Behavior - Christopher A. Podlesnik, Michael E. Kelley, 2017 \(sagepub.com\)](https://journals.sagepub.com/doi/full/10.1177/2372732216683403) (<https://journals.sagepub.com/doi/full/10.1177/2372732216683403>) observes that “interventions designed to quickly mitigate behavior may have the unintended consequence of exacerbating persistence and relapse” suggesting that interventions that target acute threat responding and cognitive control deficits could have a greater impact.
 - The above cited article also encourages early screening and assessment for children broadly, rather than waiting until parents and pediatricians, many without commensurate training in behavioral health, have identified concerns.
 - As raised in [Biobehavioral Approaches to Aggression Implicate Perceived Threat and Insufficient Sleep: Clinical Relevance and Policy Implications - Edelyn Verona, Melanie L. Bozzay, 2017 \(sagepub.com\)](https://journals.sagepub.com/doi/full/10.1177/2372732217719910) (<https://journals.sagepub.com/doi/full/10.1177/2372732217719910>), treatments that target maladaptive emotional and cognitive responses often exclusively treat depression or anxiety disorders.

- **Gaps and opportunities in the characterization of multimodal / multivariate approaches applicable to either primary or secondary data to understanding how other *biological, behavioral and/or social/environmental factors* such as alcohol and substance use or gender norms interact to influence aggression**

No Comment

- **Gaps and opportunities in the considerations of ethical, legal, and social implications for research investigating the biobehavioral mechanisms of aggression, including implications for applied work in human research**

No Comment

- **Any other issues that NIH should consider that may advance research on identifying neurobiological mechanistic approaches and potential intervention targets for preventing/treating aggressive behavior and/or mitigating its impacts across the lifespan.**

FABBS appreciates the opportunity to comment and the interdisciplinary approach and Institutes included in this RFI. However, recognizing that human aggression is strongly dependent on social context and developmental social history we encourage including “bio-social research” in addition to biomedical and biobehavioral. In addition, we did note the absence of the National Institute on Drug Abuse and hope that will not lessen the attention to how aggressive behavior may interact with substance abuse.