Citizens for Alternatives to Animals Research & Experimentation
PO Box 102 • Ardsley, NY 10502 • 914-839-0857 • www.caareusa.org

August 5, 2026

Re: Failure to Implement and Enforce Humane Endpoints and Call for Protocol Termination

Dear Director Mellini and Members of the NYU IACUC:

We are writing on behalf of Citizens for Alternatives to Animal Research & Experimentation (CAARE) to express our grave concern regarding the evident failure of NYU Langone's Institutional Animal Care and Use Committee (IACUC) to implement and enforce humane endpoints in federally funded research protocols at New York University Langone Health. Publicly available details regarding mice used in experiments at your institution in the Froemke Lab indicate severe, unmitigated animal distress and mortality that directly clash with federal animal welfare mandates. [1] [2]

These experiments genetically engineered mice to lack hormones essential for giving birth and then forced them into life-threatening labor without intervention. Allowing these animals to suffer to the point of preventable and unnecessary death constitutes a serious, reportable violation of federal animal welfare regulations and of the PHS Policy on Humane Care and Use of Laboratory Animals.

As a research institution receiving Public Health Service (PHS) funding, NYU is legally and ethically bound to the strict enforcement of the PHS Policy on Humane Care and Use of Laboratory Animals and the standards set forth in the Guide for the Care and Use of Laboratory Animals (the Guide).[3]

Based on our review of the conditions to which these animals were subjected, we conclude these protocols were operating in non-compliance with federal requirements and that the IACUC should take appropriate corrective action.

The lack of a humane endpoint for these experiments is particularly egregious and contradicts the basic ethical standards that are mandated to govern research. Specifically, we draw the Committee's attention to the following regulatory benchmarks:

- **U.S. Government Principle IV:** The U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training explicitly mandates that the "avoidance or minimization of discomfort, distress, and pain when consistent with sound scientific practices, is imperative."[4] Allowing mice to reach advanced stages of moribundity and then to die after prolonged suffering without veterinary intervention represents a fundamental failure to adhere to this principle.
- **Definition and Mandatory Execution of Humane Endpoints:** The Guide (8th Edition) defines a humane endpoint as "the point at which pain or distress in an experimental animal is prevented, terminated, or relieved."[5] The Guide stipulates that protocols involving

severe or chronic distress must establish precise, objective, and physiological indicators (such as specific weight-loss thresholds or behavioral deficits) to trigger early euthanasia or removal from the study.

- **Death as an Endpoint:** Regulatory guidance from the NIH Office of Laboratory Animal Welfare (OLAW) maintains that using death or moribundity as an experimental endpoint is highly discouraged and requires explicit, exhaustive scientific justification to the IACUC.[6] Crucially, the death of the mice was never necessary for the implementation of the experiment and as such was unjustifiable and should not have been permitted.

The IACUC has an unambiguous administrative and statutory obligation to ensure that animal suffering is minimized and that approved humane endpoints are executed by laboratory staff without delay. Leaving animals to suffer and die without the timely intervention mandated by federal guidelines indicates either a deficiency in the protocol's design or a failure of institutional oversight and monitoring.

Furthermore, CAARE asserts that any scientific justification for utilizing death as an endpoint in these protocols is entirely lacking. The primary objective of studying the impact of pregnancy and hormonal transitions on maternal neuroanatomy and cognition does not require, nor does it justify, the use of animal models, much less subjecting mice to prolonged suffering and preventable death.

An extensive and robust body of modern, peer-reviewed scientific literature conclusively demonstrates that the biological and mental impacts of pregnancy can be ethically, safely, and effectively studied directly in human volunteers.

By utilizing advanced neuroimaging techniques, such as Magnetic Resonance Imaging (MRI) and Diffusion Tensor Imaging (DTI), these studies have mapped a transformative biological journey that occurs entirely within the human clinical context, demonstrating that animal models are not necessary for understanding these complex processes.

1. **Hormonal Impacts on the Brain:** Brain-imaging reviews have thoroughly mapped how natural shifts in female hormones (like estrogen and progesterone) safely track changes in human brain structure and function across a woman's life.[7]
2. **Neuroanatomy of Pregnancy:** Using precise imaging, researchers have successfully mapped the human brain before conception, throughout pregnancy, and up to two years after childbirth, capturing major, widespread changes in brain volume and structure.[8]
3. **Long-Lasting Structural Changes:** Scans of first-time mothers show distinct, long-lasting changes in brain regions responsible for social skills and empathy. These natural changes actually predict how strongly a mother bonds with her baby and remain visible for years.[9]
4. **Boosted Memory and Learning:** Behavioral studies show that pregnant women in their third trimester exhibit enhanced long-term memory and a sharper ability to recognize and learn about parenting-related information.[10]
5. **Adapting to Motherhood:** High-resolution scans show physical adjustments in the brain's prefrontal cortex during the first six months after birth, which directly relate to a new mother's confidence and adjustment to parenthood.[11]
6. **Permanent Shifts:** Follow-up studies tracking mothers up to six years after giving birth reveal that most of these pregnancy-induced brain changes are permanent, allowing researchers to accurately identify whether a woman has given birth based solely on a brain scan.[12]

Because these non-invasive, human-centered methodologies provide superior, direct insights into human maternal neurology, the reliance on highly invasive mouse models fails the fundamental scientific and ethical requirement of necessity. There is no justifiable scientific basis for causing severe distress, moribundity, and death in animals to study biological processes that are already being mapped with high precision in humans.

Consequently, we respectfully request that the NYU IACUC immediately intervene to:

- **Investigate the failure of laboratory personnel under the direction of the PI** to establish and execute timely humane endpoints and to report these instances of preventable animal mortality as a non-compliance under OLAW guidelines. Though the experiment referenced in this letter has concluded, there is sufficient reason to be concerned that similar protocols are continuing based on the description of research conducted in the Froemke lab. [13]
- **Order the immediate termination** of the ongoing experimental protocols associated with these highly invasive brain experiments on mice in the Froemke lab, as they lack valid scientific justification and violate core refinement principles.
- **Re-evaluate institutional oversight mechanisms** to ensure that alternative, non-animal research methodologies, such as the human neuroimaging protocols cited above, are rigorously prioritized over invasive animal procedures as required by federal guidelines.

This shift to human-focused research would align with sweeping changes taking place at the federal level to replace animals in research with more physiologically relevant and ethical human biology-based models. Never before has there been so much momentum by regulatory agencies to advance this shift. In April 2025, the U.S. Food and Drug Administration (FDA) announced its plan to phase out animal experiments in favor of "more effective, human-relevant methods" over the next three to five years.

Initially focusing on replacing animals in safety tests for monoclonal antibody therapies, FDA's long-term goal is to **"**make animal studies the exception rather than the norm for preclinical safety and toxicity testing." [14] One year later, in July 2026, FDA announced that it had reached its one-year goal and issued a follow-up report outlining future measures to continue progress for reducing animals in drug development.[15]

Shortly following the FDA announcement in 2025, the U.S. National Institutes of Health (NIH) revealed its own initiative [16] to reduce reliance on animal experiments while expanding human-based research. NIH took its first significant step in July 2025 by announcing it will no longer fund experiments for animal-only protocols, and that all grant submissions must now include non-animal methods for consideration. [17] And last month, NIH opened the Office of Research Innovation, Validation, and Application (ORIVA) to promote the development, validation and use of non-animal research methods, while also expanding funding, training, and infrastructure for non-animal research.[18]These policies were implemented because animal research fails to predict human biological outcomes approximately 90% of the time and new technologies have emerged that can supersede the limited science and ethical issues associated with animal use.

NYU should take immediate steps to replace the invasive, unnecessary experiments on mice in the Froemke Lab with superior, human biology-based alternatives to be in accordance with these imperative governmental initiatives to phase out animals.

Thank you for your prompt attention to this animal welfare and regulatory compliance matter. We look forward to your response regarding the decisive steps NYU is taking to terminate these non-compliant protocols and to align its research practices with modern, ethical science.

Sincerely,
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CC:
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[1] Luisa Schuster, et al. Mouse helpers ensure maternal-infant survival, BioRxiv 2022.12.26.521927; doi: https://doi.org/10.1101/2022.12.26.521927

[2] Call the mouse-wife! Rodent 'midwives' help pregnant friends give birth, study reveals https://www.dailymail.co.uk/sciencetech/article-15313309/mouse-Rodent-midwives-pregnant-friends-birth.html

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[5] "Guide for the Care and Use of Laboratory Animals." Eighth Edition. Retrieved from https://grants.nih.gov/grants/olaw/guide-for-the-care-and-use-of-laboratory-animals.pdf

[6] Office of Laboratory Animal Welfare. "Institutional Animal Care and Use Committee Guidebook." 2nd Edition. Retrieved from https://grants.nih.gov/grants/olaw/guidebook.pdf

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[12] Martínez-García M, et al, Do Pregnancy-Induced Brain Changes Reverse? The Brain of a Mother Six Years after Parturition. Brain Sci. 2021 Jan 28;11(2):168. doi: 10.3390/brainsci11020168. PMID: 33525512; PMCID: PMC7912216.

[13] https://www.froemkelab.org/about-the-lab. "We study reproduction and childcare from conception to post-weaning interactions. We examine circuits and molecular cues (for example, hypothalamic hormones such as oxytocin) throughout the brain and body that are important for neuroplasticity and other changes essential for maternal care of infants, including how other animals might learn or develop alloparenting skills."

[14] Office of the Commissioner. (2025, April 10). FDA announces plan to phase out animal testing requirement for monoclonal antibodies and other drugs. U.S. Food And Drug Administration. https://www.fda.gov/news-events/press-announcements/fda-announces-plan-phase-out-animal-testing-requirement-monoclonal-antibodies-and-other-drugs. https://www.fda.gov/news-events/press-announcements/fda-announces-plan-phase-out-animal-testing-requirement-monoclonal-antibodies-and-other-drugs

[15] Food and Drug Administration. "New Approach Methodologies." Retrieved from https://www.fda.gov/science-research/science-and-research-special-topics/new-approach-methodologies-nams.

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