DEPARTMENT OF HEALTH & HUMAN SERVICES

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Office of Laboratory Animal Welfare
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FOR EXPRESS MAIL:
Office of Laboratory Animal Welfare
6700B Rockledge Drive, Suite 2500
Bethesda, Maryland 20817
Telephone: (301) 496-7163
Facsimile: (301) 480-3387

October 26, 2022

Re: Animal Welfare Assurance
A3431-01 [OLAW Case 9O]

MEMORANDUM FOR RECORD

The Office of Laboratory Animal Welfare (OLAW) has determined that the October 12, 2022 letter from (b) (6) of People for the Ethical Treatment of Animals (PETA) regarding the NEI sponsored study (5R01EY025670) at the Harvard Medical School contains no allegations of noncompliance with the PHS Policy and OLAW will therefore not initiate an investigation. This case is thereby administratively closed as of this date.

Signed,

Brent C. Morse -S

Digitally signed by Brent C. Morse -S
Date: 2022.10.26 16:34:27 -04'00'

Brent C. Morse, DVM
Director
Division of Compliance Oversight
Office of Laboratory Animal Welfare

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A3431-90

AN INTERNATIONAL ORGANIZATION DEDICATED TO PROTECTING THE RIGHTS OF ALL ANIMALS

PETA

PEOPLE FOR
THE ETHICAL
TREATMENT
OF ANIMALS

Washington
1536 16th St. N.W.
Washington, DC 20036
202-483-PETA

Los Angeles
2154 W. Sunset Blvd.
Los Angeles, CA 90026
323-644-PETA

Norfolk
501 Front St.
Norfolk, VA 23510
757-622-PETA

Info@peta.org
PETA.org

October 12, 2022

Michael F. Chiang, M.D.
Director
National Eye Institute
National Institutes of Health

Via e-mail: michael.chiang@nih.gov

Dear Dr. Chiang:

Good morning. I'm writing as a neuroscientist and on behalf of People for the Ethical Treatment of Animals (PETA) regarding a series of experiments funded by the National Eye Institute (NEI) being performed on infant rhesus macaques in a Harvard Medical School (HMS) laboratory. The experiments in question, led by Principal Investigator Margaret Livingstone, subject newborn rhesus macaques to both maternal and sensory deprivation.

After reviewing the publications from this laboratory, I'm deeply concerned that the harm caused to the animals far outweighs any potential benefits to human or animal health. I urge NEI to discontinue its support of this project in favor of modern, humane research.

The experiments supported by Project 5R01EY025670, titled "Development of Domains in Inferotemporal Cortex," involve removing infant monkeys from their mothers at birth and subjecting them to various sensory deprivation procedures, including binocular deprivation and monocular deprivation. In addition, the faces of individuals seen by the infants are obscured from their vision. In some experiments, newborn monkeys' eyes are sutured closed for their entire first year of life. In other experiments, monkeys are denied the opportunity to view the faces of conspecifics or even the laboratory workers feeding them.[1] In fact, these laboratory workers were required to wear welding masks during their limited interactions with the infants. Monkeys in this laboratory are subjected to multiple major life surgeries so that head posts can be affixed to their skulls[2] or eye coils[3] and/or multiple intracranial electrode arrays can be implanted.[4] For multiple experiments, their heads are immobilized using helmets, chin straps, and bite bars,[5] and in some experiments the monkeys are killed and dissected.

It's well established that mother-deprived infant monkeys, whether they're raised by surrogates, by lab staff, or in peer groups, experience both immediate and long-term effects from this deprivation. Monkeys separated from their mothers exhibit excessive fearfulness and/or aggression,[6] produce excess stress hormones,[7] display abnormal reproductive behavior, and frequently rank at the bottom of the social-dominance hierarchy.[8] Maternally deprived macaques are more likely to engage in self-injurious behavior,[9] exhibit motor stereotypies indicative of frustration and stress,[10] experience abnormal sleep patterns,[11] and

Entities:
- PETA Asia
- PETA India
- PETA France
- PETA Australia
- PETA Germany
- PETA Switzerland
- PETA Netherlands
- PETA Foundation (U.K.)

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demonstrate increased startle and stress responses to threatening stimuli,[12] and they are more susceptible to infection.[13]

Additionally, maternal deprivation affects brain structure and function. Monkeys "hand-reared" in a laboratory setting exhibit altered serotonin pathway function[14,15] and cerebral blood flow[16] as well as altered levels of brain-derived neurotrophic factor and nerve growth factor critical for normal brain function.[17] Maternal deprivation also has long-term effects on brain morphology,[18] including in the cortical regions that Livingstone is studying.[19] These substantive brain alterations not only reflect the atypical development these animals are being forced to experience but also influence the generalizability of Livingstone's own neurological data. As the purported purpose of these experiments is to selectively study the impact of visual deprivation on these animals' cortical and visual processing development, ignoring the various neurological effects of the additional maternal deprivation is problematic and potentially misleading.

The purported purpose of these experiments is to "explore how specific abnormal early visual experience changes neuronal selectivity." However, there are a multitude of projects using noninvasive methods with humans to study the impact of early sensory experience on neural and visual development. For example, research with humans who experience early transient congenital blindness,[20,21,22,23] amblyopia,[24] and visual impairments[25] have investigated the effects of abnormal early visual experience on the development of vision and other senses, eye-tracking behavior, neural reorganization, and domain-specific visual abilities. Researchers have also studied the effect of short-term monocular deprivation in human volunteers and its effects on binocular rivalry,[26] visual evoked potentials,[27] and BOLD activity in the visual cortex[28] and have assessed the neurochemical mechanisms associated with plasticity in the visual cortex.[29] In addition to being more human-relevant, these studies don't have the numerous confounds of maternal deprivation introduced by the experiments performed in Livingstone's laboratory.

It's possible that members of the grant review committee may have been unaware of the express harm that these experiments cause or the available alternatives when scoring the application. Publications from this laboratory don't provide any detailed descriptions of the various surgical procedures performed on the monkeys, nor do they indicate what, if any, type of pre-surgical analgesia, anesthesia, or post-operative pain medication or monitoring are provided.[30,31,32,33] These same publications also omit whether these animals were deprived of food or water to ensure their cooperation on behavior tests with rewards of juice. Also absent is any detailed information about the specific "hand-rearing" procedures that these monkeys experience, including whether a surrogate is provided, what types of enrichment these monkeys may or may not receive, or what socialization with peers they are allowed or disallowed. In fact, papers coming out of this laboratory are so absent of any methodological detail that it's hard not to assume some sort of deliberate obfuscation is taking place. Regardless, the experimenters in this laboratory do not appear interested in sharing the methodological details or the full impact of their experiments with the scientific community.

Given the cruelty inherent in the procedures performed under Project 5R01EY025670 and the availability of non-invasive methods, it's concerning that NEI has invested $3,775,193 into these experiments. Please discontinue your support of this project. I would be happy to meet with you to discuss this important matter.

Sincerely,

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DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

National Institutes of Health
Bethesda, Maryland 20892

October 12, 2022

(b) (6)

Re: Your letter of October 12

Dear (b) (6)

I am in receipt of your letter of October 12, 2022, which you addressed to Dr. Michael Chiang, Director of the National Eye Institute (NEI).

NIH takes seriously the welfare of laboratory animals. If you have particular concerns about the welfare of laboratory animals, please contact the Director of the Office of Laboratory Animal Welfare at 6700B Rockledge Drive, Suite 2500, MSC 6910, Bethesda, MD 20892 (20817 zip code for delivery service or hand delivery) or by email at olaw@od.nih.gov.

Sincerely yours,

Michael S. Lauer -S Digitally signed by Michael S. Lauer -S
Date: 2022.10.12 12:44:44 -04'00'

Michael S Lauer, MD
NIH Deputy Director for Extramural Research
Director, NIH Office of Extramural Research

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## McCoy, Devora (NIH/OD) [E]

**From:** Morse, Brent (NIH/OD) [E]
**Sent:** Friday, October 21, 2022 2:08 PM
**To:** McCoy, Devora (NIH/OD) [E]
**Subject:** FW: Letter from PETA
**Attachments:** 2022-10-12-Letter to NEI[2].pdf; PETA response 10 12 22[1].pdf

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

Hello Devora,

Please open a case file (A3431) and assign it to me. Thank you.

Brent C. Morse, DVM, DACLAM
Director, Division of Compliance Oversight
Office of Laboratory Animal Welfare
National Institutes of Health

**From:** Lauer, Michael (NIH/OD) [E] <michael.lauer@nih.gov>
**Sent:** Wednesday, October 12, 2022 3:51 PM
**To:** Brown, Patricia [OLAW] (NIH/OD) [E] <brownp@od.nih.gov>
**Cc:** Bundesen, Liza (NIH/OD) [E] <lbundese@mail.nih.gov>; Morse, Brent (NIH/OD) [E] <morseb@mail.nih.gov>; Lauer, Michael (NIH/OD) [E] <michael.lauer@nih.gov>
**Subject:** Re: Letter from PETA

Excellent, Pat and Brent, thanks so much!

Mike

---

**From:** "Brown, Patricia [OLAW] (NIH/OD) [E]" <brownp@od.nih.gov>
**Date:** Wednesday, October 12, 2022 at 3:49 PM
**To:** "Lauer, Michael (NIH/OD) [E]" <michael.lauer@nih.gov>
**Cc:** "Bundesen, Liza (NIH/OD) [E]" <lbundese@mail.nih.gov>, "Morse, Brent (NIH/OD) [E]" <morseb@mail.nih.gov>
**Subject:** RE: Letter from PETA

Good afternoon Mike,

I have reviewed the letter from PETA and referred it to the Division of Compliance Oversight for their review of the allegations and to take further steps as necessary.

Sincerely,

Pat
Patricia Brown, VMD, MS, DACLAM (she/her)
Director, Office of Laboratory Animal Welfare,
Office of Extramural Research, Office of the Director, NIH



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301-451-4209, brownp@mail.nih.gov

**From:** Lauer, Michael (NIH/OD) [E] <michael.lauer@nih.gov>
**Sent:** Wednesday, October 12, 2022 12:50 PM
**To:** Brown, Patricia [OLAW] (NIH/OD) [E] <brownp@od.nih.gov>
**Cc:** Lauer, Michael (NIH/OD) [E] <michael.lauer@nih.gov>; Bundesen, Liza (NIH/OD) [E] <lbundese@mail.nih.gov>
**Subject:** FW: Letter from PETA

Hi Pat – bringing this to your attention.

Many thanks, Mike

---

**From:** "Lauer, Michael (NIH/OD) [E]" <michael.lauer@nih.gov>
**Date:** Wednesday, October 12, 2022 at 12:48 PM
**To:** (b) (6)
**Cc:** "Lauer, Michael (NIH/OD) [E]" <michael.lauer@nih.gov>
**Subject:** Re: Letter from PETA

Dear (b) (6)

Please see attached.

Sincerely,
Michael S Lauer, MD

Michael S Lauer, MD
NIH Deputy Director for Extramural Research
Director, NIH Office of Extramural Research
1 Center Drive, Room 144, Bethesda MD 20892
Michael.Lauer@nih.gov

---

**From:** (b) (6)
**Date:** Wednesday, October 12, 2022 at 10:41 AM
**To:** Michael Chiang <michael.chiang@nih.gov>
**Subject:** [EXTERNAL] Letter from PETA

Dear Dr. Chiang:

Good morning. I'm writing as a neuroscientist and on behalf of People for the Ethical Treatment of Animals (PETA) regarding a series of experiments funded by the National Eye Institute (NEI) being performed on infant rhesus macaques in a Harvard Medical School (HMS) laboratory. Please see the attached letter for more details.

Thank you.

(b) (6)



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