

Opportunity Title: Rodent Behavior and Cognition: From Earth Simulation to Spaceflight

Opportunity Reference Code: 0114-NPP-NOV23-ARC-BioSci

Organization National Aeronautics and Space Administration (NASA)

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How to Apply All applications must be submitted in [Zintellect](#)

Application Deadline 11/1/2023 6:00:59 PM Eastern Time Zone

Description Description:

Work with co-mentors Joshua S. Alwood, PhD, and April E. Ronca, PhD of NASA Ames Research Center in Moffett Field, CA.

The NPP fellow will benefit from this valuable and diverse experience and contribute to the development of new knowledge and technologies that could help astronauts safely travel to the moon and beyond by participating in and leading spaceflight-relevant research.

In this project, the candidate should lead research projects across all aspects of the research lifecycle and develop their independence as a scientist. The fellow should aim to study the basic biological effects of spaceflight and/or gravity as a continuum in the rodent, employing established or emerging ground-based models for simulated weightlessness via hindlimb unloading or hypergravity generated using chronic centrifugation, in combination with either acute or chronic low-dose irradiation and/or social isolation, or other spaceflight-relevant environmental conditions. For example, hypothesis-driven changes in behavior/cognitive function, associated neurotransmitter or signaling molecule levels, and/or circulating biomarkers could be assessed. Prior rodent handling experience required.

The fellow would contribute emerging and complementary cognitive/behavior, neuroscientific, and epigenetic/transgenerational experience into our joint research group and catalyze research productivity for the Space Biology and Human Research Program funded projects. Additionally, this fellowship would potentially support the science planning/preparation for future spaceflight missions.

In this position, the fellow will work with a highly productive team of scientists and engineers, including senior civil servant PIs, senior and early-career contractors; conduct research at key domestic institutions across the nation; participate in computational modeling for astronaut risk prediction; & interact with recognized university and industry collaborators.

Field of Science: Biological Sciences

Advisors:

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Jonathan Galazka



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Applications with citizens from Designated Countries will not be accepted at this time, unless they are Legal Permanent Residents of the United States. A complete list of Designated Countries can be found at:

<https://www.nasa.gov/oiiir/export-control>.

Eligibility is currently open to:

- U.S. Citizens;
- U.S. Lawful Permanent Residents (LPR);
- Foreign Nationals eligible for an Exchange Visitor J-1 visa status; and,
- Applicants for LPR, asylees, or refugees in the U.S. at the time of application with 1) a valid EAD card and 2) I-485 or I-589 forms in pending status

Eligibility Requirements

- **Degree:** Doctoral Degree.