Summer Internship Description

**ORGANIZATION: National Aeronautics and Space Administration**

**LOCATION: Ames Research Center, Moffett Field, California**

**DIVISION: Human Systems Integration**

**LABORATORY: Fatigue Countermeasures Laboratory**

**Please complete this internship interest form to be considered:** [https://sjsu.qualtrics.com/jfe/form/SV\_3a8X6Lo4LmGuVUO](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsjsu.qualtrics.com%2Fjfe%2Fform%2FSV_3a8X6Lo4LmGuVUO&data=05%7C02%7Cerin.e.flynn-evans%40nasa.gov%7Cc1b8d991afbc419a144c08dc58113967%7C7005d45845be48ae8140d43da96dd17b%7C0%7C0%7C638482078190540180%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=KFglE0U8YjnOG8mxxF7p34e0jAM5BYg7VaVCap7ovZM%3D&reserved=0)

**GENERAL NATURE OF POSITION:**

The Fatigue Countermeasures Laboratory at NASA Ames Research Center studies the relationship between alertness, performance, circadian misalignment (being out of sync with one's internal clock), acute sleep loss (insufficient sleep over a short period of time), chronic sleep loss (insufficient sleep over a long period of time), and sleep inertia (grogginess following sleep).

This summer we will be conducting a study to evaluate countermeasures to help people sleep and to help improve alertness. When individuals work in safety-sensitive occupations, such as in spaceflight and long-haul aviation, sleep opportunities may not occur at optimal times. Similarly, it may be necessary for such individuals to perform cognitively demanding tasks following insufficient sleep and during the night. As a result, people in safety sensitive occupations need tools and strategies that they can use to help them fall asleep and stay asleep and to maintain alertness when they are awake. To test such tools and strategies, we will study participants who will live in our laboratory for a few days. While in the lab, participants will wear electrodes to measure their brain activity while they are awake and asleep, they will provide saliva and urine samples so that we can assess their hormones, and they will take frequent cognitive tests so that we can assess their alertness and performance.

Interns will assist with all aspects of data collection during these overnight sleep studies including preparing study materials, interacting with study participants, applying electrodes, monitoring sleep and waking, administering cognitive tests, and collecting biological specimens. The intern will also assist with data analysis and processing of cognitive performance and sleep data. **Importantly, interns will be required to work overnight and weekend shifts (but never more than 40 hours a week) during the internship**.

Each intern will have the opportunity to attend lectures and seminars on a variety of topics at NASA Ames Research Center. Interns will also participate in weekly lab meetings and will present a journal club article once during the summer. Finally, each intern will choose a topic to investigate (this could be an analysis of existing data or a literature review on a new topic) and will write an abstract and present a poster at NASA at the end of the summer.

No prior experience is necessary; however, the best candidates will be open to new experiences and learning new things, able to work independently and with a team, punctual, and reliable.