

Opportunity Title: Defense Health Agency Aerospace Medicine Fellowship:
Medical Evacuation During Sustained Acceleration (MEDUSA)
Opportunity Reference Code: DHA-JBSA-2023-0003

Organization U.S. Department of Defense (DOD)

Reference Code DHA-JBSA-2023-0003

How to Apply Click on *Apply* at the bottom of the opportunity to start your application.

Description Join the US Air Force and Defense Health Agency in cutting edge research to advance the field of medical care in high altitude and space environments!

The National Aeronautics and Space Administration (NASA) has managed medical care in and beyond low Earth orbit (LEO) continuously for decades. The health and safety of astronauts during the International Space Station (ISS) program to date has been exemplary, due to strict astronaut medical selection and mission safety standard adherence. However, the DOD, USSF, and the USAF will have a fundamentally different mission than NASA. Unlike long-duration exploration missions, the DOD's mission in the spaceflight environment is likely to be more kinetic and unregulated, with a focus on suborbital, short-duration, and point-to-point flights. With emerging access to orbital launch and landing capability through commercial space companies, a new field of military space medicine will face unique operational and research challenges. There is limited research supporting medical equipment or medical pathology in sustained acceleration environments, which has implications for the movement of DOD supplies and personnel. The DOD may consider rapid movement of supplies and personnel using vertical take-off and vertical landing (VTVL) reusable spacecraft for global point-to-point transit. The physiologic repercussions of this environment on DOD personnel remain largely unexplored, which may have implications for mission capability. We believe that impacts of sustained acceleration on critical care equipment and pathology must be better understood so that aerospace engineering advancements do not outpace medical capability in these environments.

What will I be doing?

Medical Evacuation During Sustained Acceleration (MEDUSA): Validating Critical Care During Simulated Point-to-Point Spaceflight

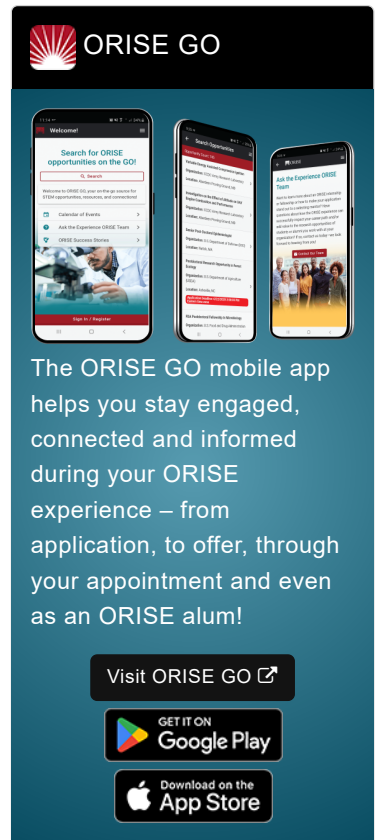
The 59th Medical Wing Clinical and Operational Space Medicine Innovation Consortium (COSMIC) laboratory seeks a qualified researcher in aerospace physiology (or related field) to become a core research team member on a project validating a critical care animal model in a simulated space and re-entry environment by placing a swine animal model in the KBR centrifuge for more high-fidelity, realistic flight testing. This project will include animal model experimentation, centrifuge procedures, data collection, data analysis/processing, presentations at national meetings, and contribution to written publications. You may participate in activities including, but not limited to,

- Maintaining test results, technical information, reports, and briefings on progress, and providing evaluation, analysis, and recommendations from MEDUSA research data
- Performing and completing research activities with diverse and dynamic groups
- Maintaining effective professional relationships with principal investigators, program managers, researchers and support staff involved in the acquisition of medical systems and conduct of aerospace medical research

Why should I apply?


This translational research project will be conducted at Joint Base San Antonio-Lackland to assess the impacts of sustained acceleration on complex medical physiology. You will have access to state


 **OAK RIDGE INSTITUTE**
FOR SCIENCE AND EDUCATION




ORISE GO

The ORISE GO mobile app helps you stay engaged, connected and informed during your ORISE experience – from application, to offer, through your appointment and even as an ORISE alum!

Visit ORISE GO 

GET IT ON
 **Google Play**

Download on the
 **App Store**

Opportunity Title: Defense Health Agency Aerospace Medicine Fellowship:
Medical Evacuation During Sustained Acceleration (MEDUSA)

Opportunity Reference Code: DHA-JBSA-2023-0003

of the art surgical, monitoring, and imaging equipment. The project is the first to assess the impacts of simulated acceleration, using the KBR Brooks Centrifuge, to determine the impacts on injured / intubated research models.

Where will I be located?

Joint Base San Antonio Lackland, Texas

What is the anticipated start date?

Exact start dates will be determined at the time of selection and in coordination with the selected candidate. Applications are reviewed on an ongoing basis and internships or fellowships will be filled as qualified candidates are identified.

What is the appointment length?

This appointment is an 11-month research appointment, with the possibility to be renewed for additional research periods. Appointments may be extended depending on funding availability, project assignment, program rules, and availability of the participant.

What are the benefits?

You will receive a stipend to be determined by DHA-JBSA. Stipends are typically based on a participant's academic standing, discipline, experience, and research facility location. Other benefits may include the following:

- Health Insurance Supplement (*Participants are eligible to purchase health insurance through ORISE*)
- Relocation Allowance
- Training and Travel Allowance

About Defense Health Agency (DHA-JBSA)

The Defense Health Agency is a joint, integrated Combat Support Agency that enables the Army, Navy, and Air Force medical services to provide a medically ready force and ready medical force to Combatant Commands in both peacetime and wartime. The DHA uses the principles of Ready Reliable Care to advance high reliability practices across the Military Health System by improving our system operations, driving innovative solutions, and cultivating a culture of safety. For more information about the Defense Health Agency, please visit [Defense Health Agency | Health.mil](https://www.health.mil).

About ORISE

This program, administered by Oak Ridge Associated Universities (ORAU) through its contract with the U.S. Department of Energy (DOE) to manage the Oak Ridge Institute for Science and Education (ORISE), was established through an interagency agreement between DOE and DoD. Participants do not enter into an employee/employer relationship with ORISE, ORAU, DoD or any other office or agency. Instead, you will be affiliated with ORISE for the administration of the appointment through the ORISE appointment letter and Terms of Appointment. Proof of health insurance is required for participation in this program. Health insurance can be obtained through ORISE. For more information, visit the [ORISE Research Participation Program at the U.S. Department of Defense](https://www.orise.gov).

Qualifications The qualified candidate will possess a Master's or Doctoral degree in aerospace physiology,

Opportunity Title: Defense Health Agency Aerospace Medicine Fellowship:

Medical Evacuation During Sustained Acceleration (MEDUSA)

Opportunity Reference Code: DHA-JBSA-2023-0003

aerospace medicine, or closely related discipline or expect to receive such a degree by December 31, 2023.

Highly competitive applicants will have knowledge of space physiology, human performance, medical research, and human systems integration. Additionally, they will have one or more of the following:

- Prior experience with large animal models / human research models (preferably in aerospace physiology research environments)
- Demonstrated professional competence and success in the form of peer-reviewed publications and presentations
- Displayed excellence in technical writing and final report/PowerPoint presentations
- Familiarity with statistics and graphing software such as SAS, JMP, Graphpad Prism and/or Sigma plot


Application Requirements

A complete application consists of:

- Zintellect Profile
- Educational and Employment History
- Essay Questions (goals, experiences, and skills relevant to the opportunity)
- Resume (PDF)
- Transcripts/Academic Records - Please upload a copy of a transcript for your current or most recent degree program that meets the disciplinary qualifications of the opportunity. [Click here for detailed information about acceptable transcripts.](#)
- One Recommendation. Your application will be considered incomplete and will not be reviewed until one recommendation is submitted. We encourage you to contact your recommender as soon as you start your application to ensure they are able to complete the recommendation form and to let them know to expect a message from Zintellect. Recommender will be asked to rate your scientific capabilities, personal characteristics, and describe how they know you. You can always log back in to your Zintellect account and check the status of your application.
- If you have questions, send an email to orisedod@orise.orau.gov. Please list the reference code of this opportunity [DHA-JBSA-2023-0003] in the subject line of the email. Please understand that ORISE does not review applications or select applicants; selections are made by the sponsoring agency identified on this opportunity. All application materials should be submitted via the "Apply" button at the bottom of this opportunity listing. Please do not send application materials to the email address above.

Connect with ORISE...on the GO! Download the new ORISE GO mobile app in the [Apple App Store](#) or [Google Play Store](#) to help you stay engaged, connected, and informed during your ORISE experience and beyond!

Eligibility Requirements

- **Citizenship:** LPR or U.S. Citizen
- **Degree:** Master's Degree or Doctoral Degree received within the last 60 months or anticipated to be received by 12/31/2023 11:59:00 PM.
- **Discipline(s):**
 - **Engineering** (1 )

Opportunity Title: Defense Health Agency Aerospace Medicine Fellowship:
Medical Evacuation During Sustained Acceleration (MEDUSA)

Opportunity Reference Code: DHA-JBSA-2023-0003

- **Life Health and Medical Sciences** ([51](#) )