

Staff Fellow - Interdisciplinary Scientist- Therapeutic Ultrasound Transcranial Applications (DAM)

Locations: [FDA's White Oak Campus](#) in Silver Spring, Maryland

Salary: Salary is commensurate with education and experience.

Introduction: The Center for Devices and Radiological Health ([CDRH](#)), a major regulatory component of the Food and Drug Administration ([FDA](#)) and the Department of Health and Human Services, is inviting applications for a **Staff Fellow (Interdisciplinary Scientist)** to serve in the Division of Applied Mechanics ([DAM](#)), Office of Science and Engineering Laboratories ([OSEL](#)). OSEL is dedicated to promoting patient access to innovation, safe and effective medical devices through best-in-the-world regulatory science. The division identifies and uses applied mechanics to investigate interactions between the human body and medical devices or radiation-emitting products.

Position Summaries:

As a Staff Fellow in the [Therapeutic Ultrasound Program](#) you will perform original research in the development of regulatory science tools for assessing safety and effectiveness of ultrasound therapies, specifically for transcranial applications. This includes evaluating novel ultrasound-based bioeffects such as neuromodulation, blood-brain barrier opening for drug delivery, amplification of cancer biomarkers, sonoporation, stem cell and immune cell trafficking, and immunomodulation. The Staff Fellow will also serve as a subject matter expert and assist with the regulatory evaluation of ultrasound devices, particularly neurological devices involving ultrasound.

Professional Experience / Key Requirements: To qualify for this position, you must demonstrate in your resume the necessary experience for this position, which is equivalent to the following:

- Experience conducting biomedical research of therapeutic ultrasound devices, with a focus on transcranial applications (e.g., neuromodulation, blood-brain barrier opening).
- Experience in benchtop experimental design and hardware configuration as well as instrument control, measurement, signal processing techniques, and troubleshooting.
- Experience in reviewing, analyzing, and using scientific data or other information to advance and convey the understanding of medical devices.
- Ability to participate in and contribute to multi-disciplinary teams to resolve difficult or controversial research questions.

Desired Qualifications/Experience:

- Demonstrated experience of independent and collaborative research work, and clinical research.
- Experience in neuroscience techniques including electrophysiology, cell culture and microscopy for both in vitro and in vivo experiments.
- Computer programming/modeling skills in numerical simulation of acoustic and thermal fields.

Basic Qualifications: Applicants must meet the specific qualification requirements of the following applicable occupational series: [Mechanical Engineering \(0830\)](#); [Electrical Engineer \(0850\)](#); [Bioengineering and Biomedical Engineering \(0858\)](#); [Physics \(1310\)](#); [Mathematics \(1520\)](#); [Computer Science \(1550\)](#).

Additional Qualifications: To qualify as a Staff Fellow, you must: be a US Citizen, Permanent Resident, or Non-Citizen with residency status in the U.S., three (3) out of the last five (5) years; possess a doctoral-level degree from an accredited institution of higher learning, including: Ph.D., M.D., D.V.M., D.D.S., D.M.D., Sc.D., or other research doctoral-degree widely recognized in U.S. academe as equivalent to a Ph.D.. (*In limited instances non-doctoral candidates, and/or candidates with less experience may be acceptable*).

Foreign Education: Candidates who have completed part or all of their education outside the United

States must, in order to meet qualification requirements, have their foreign education evaluated by an accredited organization to ensure the foreign education is comparable to education received in the United States. It is the responsibility of the candidate or employee to provide written proof of his/her foreign education accreditation prior to appointment or placement in a different occupational series from which placed. *For further information, visit the [U.S. Department of Education - Foreign Education Evaluation](#).*

Conditions of Employment

- One-year probationary period may be required.
- This position is for a **two-year** appointment and will be filled through [FDA's Staff Fellowship Program](#)
- Background and/or Security investigation required.
- Applicants who are U.S. Citizens and born male, on (or after) 12/31/1959, must be registered with the [Selective Service System](#) OR have an approved exemption.
- This position may require financial disclosure reporting and will be subject to FDA's prohibited financial interest regulation. If you are hired, you may be required to divest of certain financial interests. You are advised to seek additional information on this requirement from the hiring official before accepting any job offers. For additional information, please visit the [FDA Ethics and Integrity Office](#).

How to Apply: Prior to applying, please see the following instructions:

- Submit an electronic resume or curriculum vitae and a cover letter describing why you are uniquely qualified for this job.
- Include Job Reference code **“Therapeutic Ultrasound-Transcranial Applications”** in the email subject line.
- Email applicant package to CDRHRecruitment@fda.hhs.gov.
- Applications and all supporting documentation will be accepted through **May 8, 2023**.
- Visit [CDRH Jobs](#) to see additional opportunities.

The United States Government [equal opportunity employer](#) and does not discriminate on the basis of race, color, religion, sex (including pregnancy and gender identity), national origin, political affiliation, sexual orientation, marital status, disability, genetic information, age, membership in an employee organization, retaliation, parental status, military service or other non-merit factor.