



**Department of Health and Human Services (HHS)
Food and Drug Administration (FDA)
Center for Devices and Radiological Health (CDRH)
Office of Science and Engineering Laboratories (OSEL)**

Position Title: Staff Fellow/Therapeutic Ultrasound

Location: Silver Spring, Maryland

Application Period: September 20, 2021 through October 20, 2021

Salary Range: \$87,198 - \$134,798 (commensurate with education and experience)

Position Information: Full-Time – appointment term of 3 years, with possibility of being extended.

Who may be considered: US Citizens; Permanent Residents; and Non-Citizens

Introduction: The Food and Drug Administration ([FDA](#)) is the regulatory, scientific, public health and consumer protection agency responsible for ensuring all human and animal drugs, medical devices, cosmetics, foods, food additives, drugs and medicated feeds for food producing animals, tobacco and radiation emitting devices safe, and effective. The mission of [CDRH](#) is to protect and promote the public health by performing essential public health tasks by making sure that medical devices and radiological health products are safe for people in the United States. [OSEL](#) is dedicated to promoting patient access to innovation, safe and effective medical devices through best-in-the-world regulatory science. The Division of Applied Mechanics ([DAM](#)) within CDRH's OSEL, identifies and uses applied mechanics to investigate interactions between the human body and medical devices or radiation-emitting products.

Position Summary: The DAM has an opening for a Staff Fellow in the Therapeutic Ultrasound Program. The candidate is expected to perform original research in the development of tools for assessing safety and effectiveness of ultrasound therapies. This includes evaluating any novel ultrasound-based bioeffects including, but not limited to, neuromodulation, disruption of the blood brain barrier (BBB), amplification of cancer biomarkers, sonoporation, stem cell trafficking, immune cell trafficking, immunomodulation, and others. The staff fellow will also serve as a subject matter expert and assist with the regulatory evaluation of ultrasound devices. The applicant must be team oriented and an outstanding communicator. Excellent speaking and writing skills in English are required.

Educational Requirements: Applicants must possess a Ph.D. or equivalent degree in mechanical engineering, biomedical engineering, electrical engineering, applied mathematics, or physics with biomedical-specific training in experimental techniques. This will enable the staff fellow to serve as a technical authority in the scientific analysis of the safety and effectiveness of medical devices, develop new and innovative approaches to scientific testing required for medical device reviews by FDA, and provide an authoritative analysis of scientific data submitted to FDA. Applicants who have completed part or all of their education outside the U.S. must have their foreign education evaluated by an accredited organization to ensure the foreign education is comparable to education received in accredited educational institutions in the U.S. This evaluation must also be provided by midnight Eastern Time on the closing date of this vacancy announcement.

Qualifications: Please document knowledge, skills, and abilities relevant to each area described below:

- A Ph.D. or equivalent degree in mechanical engineering, biomedical engineering, electrical engineering, applied mathematics, or physics with biomedical-specific training in experimental techniques.



- Experience conducting biomedical research of therapeutic ultrasound devices. Demonstration of independent and collaborative research work will be given preference.
- Experience in benchtop experimental design and hardware configuration as well as instrument control, measurement, and troubleshooting.
- Demonstrated knowledge of cell biology, including experience in cell culturing, *in vitro* cell work, and microscopy will be given preference.
- Demonstrated experience performing in *in vivo* ultrasound experiments and laboratory techniques will be given preference.
- Computer programming/modeling skills, including experience in numeric simulation of acoustic and/or electromagnetic fields will be given preference.
- Experience in reviewing, analyzing, and using scientific data or other information to advance and convey understanding of medical devices.
- Ability to participate in and contribute to multi-disciplinary teams and work groups to resolve difficult or controversial research questions.
- Excellent written and spoken English.

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

- Documents to submit: electronic resume or curriculum vitae, cover letter describing why you are uniquely qualified for this, and copy of transcripts
- Compile all applicant documents into one combined document (i.e., Adobe PDF)
- Include Job Reference code “2020-OSEL-DAM-014” in the email subject line.
- Email applicant package to CDRH-OSEL-Opportunities@fda.hhs.gov.

Additional Announcement Information

- 1. Security and Background Requirements:** All candidates must meet applicable security requirements which include a background check and a minimum of 3 out of the past 5 years’ residency status in the US. If not previously completed, a background security investigation will be required for all appointees. Appointment will be subject to the applicant’s successful completion of a background security investigation and favorable adjudication. Failure to successfully meet these requirements may be grounds for appropriate personnel action. In addition, if hired, a background security reinvestigation or supplemental investigation may be required at a later time. Applicants are also advised that all information concerning qualifications is subject to investigation. False representation may be grounds for non-consideration, non-selection, or appropriate disciplinary action.
- 2. Benefits:** The Federal Government offers a comprehensive benefits package. Explore the major benefits offered to most Federal employees at <https://www.usa.gov/benefits-for-federal-employees>
- 3.** For more information about Office of Science and Engineering Laboratories (OSEL) at FDA/CDRH: <https://www.fda.gov/about-fda/cdrh-offices/office-science-and-engineering-laboratories>.
- 4.** Travel, transportation and relocation expenses **will not** be paid.