

Job Summary

We're hiring! CDRH's Office of Science and Engineering Laboratories is recruiting Regulatory Scientists / Research Engineers to join our **Medical Acoustics Research program** and address technical challenges to advance therapeutic ultrasound device safety evaluation for a wide range of device applications (ultrasound neuromodulation, blood-brain-barrier opening, histotripsy, HITU). Candidates with a major concentration in acoustics or ultrasonics with experience in one or more of the following fields will be considered: transcranial ultrasound, high-intensity therapeutic ultrasound, ultrasound metrology, ultrasound signal processing, and/or ultrasonic materials/tissue characterization. Positions are based at FDA's White Oak campus in Silver Spring, Maryland. U.S. citizenship is required. The position involves a combination of regulatory science laboratory and computational research and consulting support for review of pre-marketing submissions of new medical devices and/or analyses of failures with existing devices.

FDA Office and Location: Full-time positions at the mid-to-senior level are available within the Center for Devices and Radiological Health (CDRH), Food and Drug Administration (FDA), located at Silver Spring, Maryland. Join the FDA's Office of Science and Engineering Laboratories (OSEL) to further advance the regulatory science that ensures therapeutic ultrasound devices are safe and effective before reaching patients.

Background: The FDA's CDRH Medical Acoustics Program ensures safe medical acoustic devices through therapeutic/diagnostic and transcranial sub-programs covering brain treatments, tumor ablation, pain management, and cardiovascular care across all patient populations. The program addresses gaps including lack of transcranial device understanding, absence of standardized acoustic/thermal characterization methods, and insufficient computational models.

Educational Requirements:

Applicants must possess a Ph.D. or equivalent degree in Physics, Engineering or related field. The applicant must also be able to demonstrate mastery of principles, practices, and theories in acoustics. This will enable the incumbent to serve as a technical authority in the scientific analysis on the safety and effectiveness of medical devices and radiological products, provide an authoritative analysis of scientific data submitted to the Agency, and develop new and innovative approaches to scientific testing required for medical device reviews by FDA.

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

1. At least three years of experience planning and conducting state-of-the-art laboratory research, and/or providing technical direction to assess the safety and effectiveness of medical ultrasound devices.
2. Experience reviewing, analyzing, and using scientific data or other information to advance and convey understanding of medical ultrasound device performance.
3. Knowledge of the scientific principles, theories and practices associated with medical ultrasound related to safety and effectiveness evaluation of medical ultrasound devices.
4. Ability to participate in and contribute to multi-disciplinary teams and work groups to resolve difficult or controversial research and regulatory questions/problems.
5. A PhD from an accredited or pre-accredited university in physics, engineering, or related field.
6. Excellent skills in written and oral communication.

For inquiries, please send your CV to osel_medicalacoustics@fda.hhs.gov.