



Staff Fellow (Engineering Researcher, Orthopedic Devices)

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 (Engineering Researcher, Orthopedic Devices) in the Division of Applied Mechanics ([DAM](#)), Office of Science and Engineering Laboratories ([OSEL](#)). The division identifies and uses applied mechanics to investigate interactions between the human body and medical devices or radiation-emitting products.

POSITION SUMMARY: DAM is recruiting Staff Fellow to study the biomechanical performance of orthopedic medical devices. In this position, the staff fellow will be an integral part of a team conducting cutting-edge regulatory science that directly impacts public health and promotes medical device safety and innovation.

DUTIES / RESPONSIBILITIES: As a Staff Fellow, you will perform the following duties:

- Perform laboratory research to develop standardized test methods to characterize the mechanical performance of a variety of orthopedic devices such as joint arthroplasty implants and spinal instrumentation.
- Develop original research projects that advance science surrounding orthopedic devices and promote findings through conferences, meetings, publications, and workshops.
- Provide subject matter expertise and regulatory support in the form of consulting reviews of new medical devices and accompanying test reports.
- Generate written technical and scientific documents for peer-reviewed publications and consulting support activities.
- Utilize expert scientific and technical knowledge to serve as an advisor or consultant on regulations and policies involving complex and high priority matters affecting the regulation of orthopedic devices.

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:

- Demonstrated independent and collaborative experience leading, planning, and conducting biomechanical research of orthopedic medical devices and materials (e.g., mechanical bench testing, failure analysis, and computational modeling).
- Experience in reviewing, analyzing, and using scientific data or other information to advance and convey (orally and in writing) understanding of biomedical materials, processes, and medical devices.
- Ability to participate in and contribute to multi-disciplinary teams and work groups to resolve difficult or controversial research questions.
- Extensive hands-on and modeling biomechanical research experience of orthopedic medical materials and devices.
- Experience in mechanical bench testing (load frame operation), computational modeling (finite element analysis), failure analysis, cadaveric preparation and testing, sensors or instrumentation technology (SMART devices), advanced manufacturing, materials analysis, optical and electronic microscopy, and/or motion capture analysis.

BASIC QUALIFICATIONS: Applicants must meet the specific qualification requirements of the following applicable occupational series: [General Engineering \(0801\)](#); [Materials Engineering \(0806\)](#); [Mechanical](#)



[Engineering \(0830\)](#); [Bioengineering and Biomedical Engineering \(0858\)](#)

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).*

CONDITIONS OF EMPLOYMENT

- One-year probationary period may be required.
- This position is for a **three-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](#).

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

SALARY: Salary is commensurate with education and experience.

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 "**CDRH-OSEL-DBP-038**" in the email subject line.
- Email applicant package to CDRH-OSEL-Opportunities@fda.hhs.gov.
- Applications and all supporting documentation will be accepted through **July 11, 2022**.
- Visit [CDRH Jobs](#) to see additional opportunities.

HHS/FDA is an equal opportunity and affirmative action employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, or protected veteran status.

