

## 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: Biomedical/ Electrical/ Mechanical Engineer for Wearables Research - (Staff Fellow)

Location: Silver Spring, Maryland, FDA Headquarters, White Oak Campus

**Application Period:** Wednesday, March 2, 2022, through Friday, March 18, 2022

**Salary Range:** \$106,823 - \$138,868 (commensurate with education and experience)

**Position Information:** Full-Time – Appointment term of three (3) years, with the possibility of being extended

Who may be Considered: U.S. Citizens; Permanent Residents; and Non-Citizens

**Introduction:** The Food and Drug Administration (<u>FDA</u> or Agency) 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 <u>CDRH</u> 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. <u>OSEL</u> is dedicated to promoting innovation for the development of new lifesaving medical devices. OSEL is composed of scientists and engineers who have a broad diversity of expertise from microbiology to artificial intelligence and machine learning. The Division of Biomedical Physics (<u>DBP</u>) within CDRH's OSEL, helps drive the FDA mission by performing best in the world regulatory science on the biophysical interactions between medical devices and the human body.

Position Summary: DBP has an immediate opening for an Engineer who has experience wearable sensors applied to capturing and monitoring movement and physiological data. In this position, you will perform laboratory and/or clinical research to advance the regulatory science of wearable sensors and digital biomarkers in medical device development with a focus on biomechanics of human movement. Candidates with strong technical skills and experience in one or more of the following areas will be considered: Biomechanics of human movement, clinical research involving acquisition and analysis of wearable sensor data, 3D motion capture acquisition and analysis, design and testing of digital biomarkers from wearable sensor data, and artificial intelligence and machine learning applied to human movement and physiologic data. You will also participate in regulatory review of medical devices involving wearable sensors and related products. The successful candidate will generate written technical and scientific documents for peer-reviewed publications and consulting support activities.

**Educational Requirements:** Applicants must possess a Ph.D., or equivalent degree in Engineering, Physics or related scientific field. Applicants who have completed part or all their education outside the U.S. must have their foreign education evaluated by an accredited organization to ensure that 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. For more information on Foreign Education verification, visit the U.S. Department of Education. Another listing of services that can



perform this evaluation is available at the National Association of Credential Evaluation Services (NACES) website.

**Desirable Education, Experience, and Qualifications**: Please document knowledge, skills, and abilities relevant to each area described below:

- Ph.D. or equivalent degree from an accredited university in Biomedical Engineering, Computer Engineering, Electrical Engineering, General Engineering, Mechanical Engineering, Computer Science, or related health science field. Postdoctoral research experience is preferred.
- Research experience related to wearable sensors for measurement of human movement and/or designing and testing digital biomarkers from wearable sensor data.
- Demonstration of a track record of scientific independence and collaborative research work.
- Excellent scientific writing and oral communication skills.

How to Apply: Submit an electronic resume or curriculum vitae, cover letter detailing why you are uniquely qualified for this position, based on the above Education, Experience, and Qualifications, compensation requirements, names and contact information of three (3) references, and a copy of unofficial transcripts all in one document (Adobe PDF) to CDRH-OSEL-Opportunities@fda.hhs.gov, with Job Reference Code "2020-OSEL-DBP-046-Wearables-001" in the subject line. Applications will be accepted through March 18, 2022.

Note: All supporting documents should include the Job Reference Code listed above.

## **Additional Announcement Information**

- 1. COVID-19: Due to COVID-19, the Agency is currently in an expanded telework posture. If selected, you may be expected to temporarily telework, even if your home is located outside the local commuting area. Once employees are permitted to return to the office, you will be expected to report to the duty station listed on this announcement within 45 days. At that time, you may be eligible to request to continue to telework one or more days a pay period depending upon the terms of the agency's telework policy. To ensure compliance with an applicable preliminary nationwide injunction, which may be supplemented, modified, or vacated, depending on the course of ongoing litigation, the Federal Government will take no action to implement or enforce the COVID-19 vaccination requirement pursuant to Executive Order 14043 on Requiring Coronavirus Disease 2019 Vaccination for Federal Employees. Safer Federal Workforce Task Force guidance on other Federal agency safety protocols based on vaccination status—including guidance on protocols related to masking, distancing, travel, testing, and quarantine—remains in effect.
- 2. 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.
- **3. Benefits:** The Federal Government offers a comprehensive benefits package. Explore the major benefits offered to most Federal employees at <a href="https://www.usa.gov/benefits-for-federal-employees">https://www.usa.gov/benefits-for-federal-employees</a>



- **4.** For more information about Office of Science and Engineering Laboratories (OSEL) at FDA/CDRH: <a href="https://www.fda.gov/about-fda/cdrh-offices/office-science-and-engineering-laboratories">https://www.fda.gov/about-fda/cdrh-offices/office-science-and-engineering-laboratories</a>.
- 5. Travel, transportation, and relocation expenses will not be paid.