

Announcement Number: CDRH-OSEL-2020-DBP-01

Position Title: Electrical Engineer/Electronic Engineer

Salary Range: \$102,663 - \$133,465 (depending upon education and experience)

Open Date: February 5, 2020

Close Date: April 5, 2020

Position Information: Full time

Duty Location: Silver Spring, MD

Who may be considered: US Citizens, Permanent Residents, and Non-Citizens with residency status in the US, 3 out of the last 5 years

Security Clearance: Public Trust - Background

Job Summary

The Division of Biomedical Physics of the FDA's Center for Devices and Radiological Health, Office of Science and Engineering Laboratories has an opening in Silver Spring, MD for a full-time staff scientist/engineer position. The Division conducts research to assess the benefits and risks of using wireless technology in medical devices. We require a candidate specialized in wireless communication to participate in researching novel methods of enabling healthcare applications using wireless technology, defining future research strategy for addressing the use of emerging wireless technology in medical devices, and serving as a technical expert for evaluating the use of wireless technology in medical device regulatory submissions.

To be able to address current and future needs, the candidate should have a strong background in communication theory, radio propagation, and wireless communication systems. The candidate should also be familiar with wide area (e.g., LTE, 5G) and local area (e.g., Wi-Fi and Bluetooth) wireless communication networks.

Although not required, experience with developing, using, or evaluating wireless applications in medical devices is desirable.

The position involves approximately 70% laboratory research and 30% consulting support for reviews of pre-market submissions of new medical devices.

For additional information on the Division's research scope and other wireless medical device projects:

<http://www.fda.gov/AboutFDA/CentersOffices/OfficeofMedicalProductsandTobacco/CDRH/CDRHOffices/ucm299948.htm>

<https://www.fda.gov/medical-devices/cdrh-research-programs/wireless-coexistence>

<https://www.fda.gov/medical-devices/digital-health/wireless-medical-devices>

Educational Requirements

Applicants should possess a Ph.D. or equivalent degree in Engineering, Physics, Mathematics or a related field. Applicants working toward their Ph.D. degree or possessing an M.Sc. degree and a strong record of accomplishments are also encouraged to apply. The applicant must be able to demonstrate accomplishments in the area of wireless communication. This will enable the incumbent to serve as a technical authority in the scientific analysis on the safety and effectiveness of medical devices; 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.

Applicants who have completed part or all of their education outside of 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 US Department of Education. Another listing of services that can perform this evaluation is available at the National Association of Credential Evaluation Services (NACES) website.

Qualifications

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

- 1) Experience in the field of wireless communication. Candidates with a background in developing, implementing, modeling, simulating, or testing wireless technology in healthcare applications are preferred.
- 2) Strong background in cellular communication systems (e.g., LTE, 5G) or their enabling technologies, and a working knowledge of other wireless communication technologies (e.g., Wi-Fi, Bluetooth, RFID, WMTS).
- 3) Experience reviewing, analyzing, and using scientific data relevant to wireless communication technology and a familiarity with data collection and analysis tools (e.g., MATLAB, Python, etc.)
- 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) Excellent skills in written and oral communication demonstrated through presentations and written materials.

How to Apply

To apply for this announcement, applicants must provide a complete application package which includes:

- a) a cover letter with compensation requirements,
- b) curriculum vitae,
- c) response to the five knowledge, skills, and abilities from the qualifications section,
- d) the names and contact information of three references, and
- e) sample of written material such as publications, reports, peer-reviewed journal articles, etc.

Note: All supporting documents should include the announcement number.

Applications should be sent via email to oselrecruitment@fda.hhs.gov in MS Word, or Adobe pdf format. Applications must be received by closing date to be considered. Contact Valerie McRae for Questions: Valerie.McRae@fda.hhs.gov

Additional Announcement Information

- 1) **Security and Background Requirements:** 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 and/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>