



**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: Artificial Intelligence/Medical Imaging Devices Scientist - (Staff Fellow)

Location: Silver Spring, Maryland, FDA Headquarters, [White Oak Campus](#)

Application Period: Friday, February 11, 2022, through Friday, March 11, 2022

Salary Range: \$89,834 - \$164,102 (commensurate with education and experience)

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

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

Introduction: The U.S. Food and Drug Administration ([FDA](#) 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 [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 innovation for the development of new lifesaving medical devices. OSEL is composed of scientists and engineers who conduct regulatory science research and have a broad diversity of expertise from microbiology to artificial intelligence and machine learning. The Division of Imaging, Diagnostics, and Software Reliability ([DIDSR](#)) within CDRH's OSEL develops methods for evaluating the image quality of emerging imaging systems, develops methods for characterizing new medical image display devices, evaluates the dose reduction potential of new image reconstruction methods and assesses the performance of Artificial Intelligence and Machine Learning algorithms.

Position Summary: DIDSR is now accepting applications for one or more Staff Fellows who have experience in artificial intelligence (AI), machine learning (ML), and medical device imaging. As an integral member of DIDSR, you will assist the Division in leading and advancing regulatory science in the development and assessment of AI and ML methods and techniques for medical imaging devices. As a Fellow, you will also participate in the regulatory review of medical devices based on emerging technologies in the area of algorithms for diagnostic and medical imaging products. Research areas of immediate interest are (1) evaluation methodologies for assessing the performance of algorithms in clinical applications and methods to assess the performance of continuous learning algorithms to reasonably ensure their safety and effectiveness, (2) methodologies for the regulatory assessment of home-use devices including automated readers for over-the-counter (OTC) COVID and other screening and diagnostic tests, and (3) tools and methods for the use of in silico imaging for the design, development, training, validation and testing of medical AI. These efforts contribute to the advancement of regulatory science regarding emerging AI/ML techniques in medical devices and prepares the Agency for the regulatory evaluation of related products. Candidates with strong backgrounds in theoretical and statistical aspects of ML, deep learning and algorithm assessment are preferred for senior level positions. Candidates with strong programming skills and experience



in AI/ML will be considered for entry level positions.

Educational Requirements: Applicants must possess a Ph.D. in Engineering, Physics, Optics, Mathematics, Statistics, Computer Science or related fields, with an eagerness to solve technical challenges systematically with experimental and/or computational approaches. Applicants with a proven record of research and development beyond the doctoral program in similar fields will be considered for senior status and increased salary. 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 and Experience: Please document knowledge, skills, and abilities relevant to each area described below:

- Ph.D. or equivalent degree from an accredited university in Engineering, Physics, Optics, Mathematics, Statistics, Computer Science or related scientific fields.
- Demonstrated track record of scientific independence and collaborative research work
- Ability to contribute to multi-disciplinary teams to resolve challenging research questions

How to Apply: Submit an electronic resume or curriculum vitae, cover letter containing describing why you are uniquely qualified for this position, and a copy of unofficial transcripts all in **one** document (**Adobe PDF**) to CDRH-OSEL-Opportunities@fda.hhs.gov, with Job Reference code "**2022-OSEL-DID-AIDM**" in the subject line. Applications will be accepted through **March 11, 2022**.

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 <https://www.usa.gov/benefits-for-federal-employees>
4. 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>.
5. Travel, transportation, and relocation expenses **will not** be paid.