

Opportunity Title: FDA Global Food Safety Data Science Fellowship

Opportunity Reference Code: FDA-CFSAN-2021-0025

Organization U.S. Food and Drug Administration (FDA)

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How to Apply *Connect with ORISE...on the GO!* Download the new ORISE GO mobile app in the [Apple App Store](#) or [Google Play Store](#) to help you stay engaged, connected, and informed during your ORISE experience and beyond!

A complete application consists of:

- An application
- Transcripts – [Click here for detailed information about acceptable transcripts](#)
- A current resume/CV, including academic history, employment history, relevant experiences, and publication list
- One educational or professional recommendation

All documents must be in English or include an official English translation.

If you have questions, send an email to ORISE.FDA.CFSAN@orau.org. Please include the reference code for this opportunity in your email.

Application Deadline 9/7/2021 3:00:00 PM Eastern Time Zone

Description *Applications will be reviewed on a rolling-basis. Early submissions are encouraged, as a selection could be made before the deadline.

A research opportunity is currently available with the U.S. Food and Drug Administration (FDA), Center for Food Safety and Applied Nutrition (CFSAN), Office of Compliance (OC) located in College Park, Maryland.

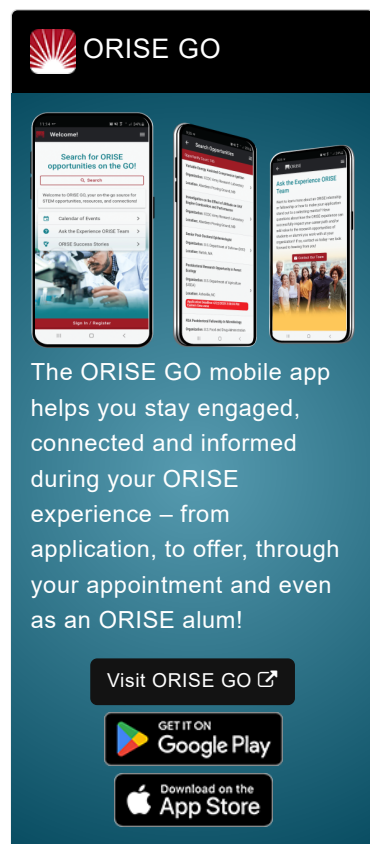
CFSAN is seeking a data science-orientated participant to contribute to the development of models and analysis to better define global food supply chains, assess risk, and determine the optimal regulatory intervention to prevent food-borne illness. Such models will support regulatory decisions on how to best deploy limited resources and maximize the impact on public health. There is a need to apply modern statistical approaches, such as data mining, machine learning, and predictive analytics to analyze bigger, more complex data and deliver faster, more accurate results. We also seek more automated ways to analyze and present data visually through interactive reports and dashboards.

Under the guidance of a mentor, learning objectives of this appointment include:

- identifying available structured and unstructured data available within FDA and externally (e.g. from other US and Foreign Government Agencies, third-party data sets, etc.)
- research approaches for streamlining the collection and reporting of the data, to include data calls and scraping using APIs, and automating/consolidating existing reports
- developing visual analytical dashboards in SAS Visual Analytics, Python, Shiny, Qlik Sense, or Tableau
- developing and testing predictive and machine learning models using Python, R, SAS, or Analytica
- presenting results to support regulatory decision making by Senior Management

Anticipated Appointment Start Date: August 1, 2021; start date is flexible

This program, administered by ORAU through its contract with the U.S. Department of Energy to



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manage the Oak Ridge Institute for Science and Education, was established through an interagency agreement between DOE and FDA. The initial appointment is for one year, but may be renewed upon recommendation of FDA contingent on the availability of funds. The participant will receive a monthly stipend commensurate with educational level and experience. Proof of health insurance is required for participation in this program. The appointment is full-time at FDA in the College Park, Maryland, area. Participants do not become employees of FDA, DOE or the program administrator, and there are no employment-related benefits.

Completion of a successful background investigation by the Office of Personnel Management is required for an applicant to be on-boarded at FDA. OPM can complete a background investigation only for individuals, including non-US Citizens, who have resided in the US for a total of three of the past five years.

FDA requires ORISE participants to read and sign their FDA Education and Training Agreement within 30 days of his/her start date, setting forth the conditions and expectations for his/her educational appointment at the agency. This agreement covers such topics as the following:









- Non-employee nature of the ORISE appointment;
- Prohibition on ORISE Fellows performing inherently governmental functions;
- Obligation of ORISE Fellows to convey all necessary rights to the FDA regarding intellectual property conceived or first reduced to practice during their fellowship;
- The fact that research materials and laboratory notebooks are the property of the FDA;
- ORISE fellow's obligation to protect and not to further disclose or use non-public information.

Qualifications The qualified candidate should have received a bachelor's, master's or doctoral degree in one of the relevant fields. Degree must have been received within the past five years.

Preferred skills:

- Strong background in data or computer science
- Ability to extract and transform data, conduct descriptive and inferential statistical analysis, develop predictive or machine learning models
- Tableau (Desktop and Prep)
- An interest in public health and supply chain management (to include GIS)

Eligibility Requirements

- **Citizenship:** U.S. Citizen Only
- **Degree:** Bachelor's Degree, Master's Degree, or Doctoral Degree received within the last 60 month(s).
- **Discipline(s):**
 - **Computer, Information, and Data Sciences** ([17](#) )
 - **Earth and Geosciences** ([1](#) )
 - **Engineering** ([6](#) )
 - **Environmental and Marine Sciences** ([1](#) )
 - **Life Health and Medical Sciences** ([8](#) )
 - **Mathematics and Statistics** ([5](#) )
 - **Other Non-Science & Engineering** ([2](#) )
 - **Social and Behavioral Sciences** ([4](#) )

Affirmation Have you lived in the United States for at least 36 out of the past 60 months? (36 months do not have to be consecutive.)