Opportunity Title: Research on Food Safety & Nutrition using Quantitative Risk Assessment & Ranking - FDA CFSAN
Opportunity Reference Code: FDA-CFSAN-2018-0003

Organization	U.S. Food and Drug Administration (FDA)
Reference Code	FDA-CFSAN-2018-0003
How to Apply	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
- Two educational or professional references

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

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

Description A research opportunity is available at the U. S. Food and Drug Administration (FDA), Center for Food Safety and Applied Nutrition (CFSAN), Office of Analytics and Outreach (OAO).

Risk assessment and decision analysis are areas of research that make science useful and accessible so that the FDA, Industry and Consumers make informed decisions. Risk assessment is used to help solve food safety problems and to better understand the complex interactions of hazards, food, and human hosts. It is one of the most objective and scientific ways to determine the effectiveness of prevention and control practices throughout the food production and distribution system, from farm to table, and is a necessary tool to analyze the complexities of food safety and to focus our food safety efforts. Decision analysis methods are increasingly used to further inform food safety problems by providing methods to rank, prioritize, and optimize on the basis of risk, available management strategies.

This opportunity will allow the participant to gain practical experience in the development of risk-based evidence-driven modeling approaches to quantify public health risks (and benefits), rank risks, and evaluate potential interventions designed to reduce public health risk or increase public health benefits. The ORISE participant, interacting with experts in the Risk Analysis Branch within the Division of Risk and Decision Analysis in the Office of Analytics and Outreach will learn how to perform systematic reviews, collect and analyze data from peer-reviewed literature and Agency databases, develop quantitative and semi-quantitative models, evaluate different situations (scenarios) that may impact public health risk/benefits, and quantify uncertainty associated with risk/benefit estimates.

The participant will have an opportunity to participate in scientific training events (webinars, workshops, meetings) where additional state-of-the-art research and research methods are discussed. Training areas may include statistics, data analysis, data visualization, microbiology, toxicology, food safety, nutrition, or decision analysis. The participant will have an

opportunity to present his/her research experience during at least one scientific meeting.

This program, administered by ORAU through its contract with the U.S. Department of Energy to manage the Oak Ridge Institute for Science and Education, was established through an interagency agreement between DOE and FDA. The initial appointment is for 12 months, 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 or the program administrator, and there are no fringe benefits paid.

The Homeland Security Presidential Directive-12 (HSPD-12) mandates a background check be completed for both U.S. citizens and foreign nationals. Foreign nationals must have resided in the U.S. for at least three (3) of the past five (5) years in order for FDA to complete a background check.

Qualifications   The candidate should have received a doctorate degree in microbiology, toxicology, food science, food safety, biology, nutrition, epidemiology, engineering, mathematics, statistics, biostatistics, or data analytics, within the last 5 years of the desired start date.

A candidate with basic knowledge of the basic principles and practices of food safety risk assessment and decision analysis, with a good understanding of analyzing quantitative data and the development of quantitative modes, including an more in-depth knowledge of microbiology, toxicology, food safety, nutrition, engineering, or data analytics is desired. It would is preferred that the candidate have a good understanding of standard statistical analysis methods and statistical software to perform such analysis (such as R or SAS). Good written and oral presentation skills would be helpful, as the individual will have an opportunity to help in the preparation of technical documentation and may give presentations describing methodology and models, and may have an opportunity to do research with multi-disciplinary research teams.

Eligibility
Requirements
- **Degree:** Doctoral Degree received within the last 60 month(s).
- **Discipline(s):**
  - **Engineering** (4 👁)
  - **Life Health and Medical Sciences** (10 👁)
  - **Mathematics and Statistics** (5 👁)
  - **Physics** (1 👁)

Opportunity Title: Research on Food Safety & Nutrition using Quantitative Risk
Assessment & Ranking - FDA CFSAN
Opportunity Reference Code: FDA-CFSAN-2018-0003