

Opportunity Title: Nanotechnology Postdoctoral Fellow-FDA Opportunity Reference Code: FDA-ORA-2016-0052

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

Reference Code FDA-ORA-2016-0052

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 <u>FDArpp@orau.org</u> Please include the reference code for this opportunity in your email.

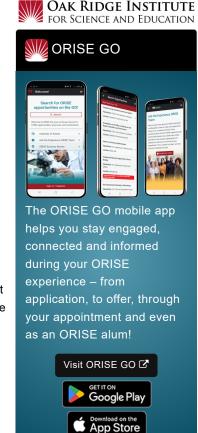
Description A research project opportunity is currently available at the U.S. Department of Health and Human Services, Food and Drug Administration (FDA), Office of Regulatory Affairs (ORA), Arkansas Regional Laboratory. The postdoctoral fellow will collaborate with multi-disciplinary research efforts within the NCTR/ORA Nanotechnology Core Facility. Collaborative and research activities may include:

- 1. Development of hyphenated size-based separation techniques (e.g., asymmetric field flow fractionation, centrifugal field flow fractionation, capillary electrophoresis, liquid chromatography) using inductively coupled plasma/mass spectrometry (ICP/MS), MALS, DLS and optical absorbance detectors.
- 2. Development of methods to detect nanoparticles in complex matrix using single particle mode ICP/MS

The fellowship is within the Nanotechnology Core Facility where the following analytical techniques will be used to support these research activities: inductively coupled plasma-mass spectrometry (ICP-MS), asymmetric field flow fractionation (AFFF), centrifugal field flow fractionation(CFFF), x-ray diffraction (XRD), particle size analysis (multiple methods including dynamic light scattering, photon cross correlation spectroscopy, and particle tracking analysis), spectroscopy (FTIR, UV/VIS, fluorescence, XRF, Raman), atomic force microscopy (AFM), high resolution mass spectrometry (HRMS), and electron microscopy with elemental analysis capabilities.

The Nanotechnology Core Facility was developed to support the technical needs of scientists involved in determining the toxicity, safety, and characterization of nanomaterials. This facility supports research efforts at the FDA's ORA, the National Center for Toxicological Research (NCTR), and the National Institute of Environmental Health Sciences National Toxicology Program.

This program, administered by ORAU through its contract with the U.S. Department of Energy to manage the Oak Ridge Institute for Science and



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> Education, was established through an interagency agreement between DOE and CDC. 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 ORA in the Jefferson, AR, area. Participants do not become employees of ORA, NCTR, FDA or the program administrator, and there are no fringe benefits paid.

The target starting date is March 7, 2016. The FDA Jefferson Laboratory Complex is located approximately 25 miles South of Little Rock, Arkansas. The Campus houses NCTR (the primary research facility of the U.S. Food & Drug Administration) and the Arkansas Regional Laboratories of ORA.

Qualifications The participant must have received a Ph.D. in chemistry or materials science with a strong emphasis in nanotechnology within the last five years. The applicant should have experience in the characterization of nanomaterials using spectroscopy, microscopy, or other current published methodologies.

Eligibility Requirements

- **Degree:** Doctoral Degree received within the last 60 month(s).
- Discipline(s):
 - Chemistry and Materials Sciences (2.
 - Science & Engineering-related (1_●)

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