

**Opportunity Title:** New Approach Methodologies for Toxicity Testing

**Opportunity Reference Code:** NIH-NIEHS-2022-0003

**Organization** National Institutes of Health (NIH)

**Reference Code** NIH-NIEHS-2022-0003

**How to Apply** Click on *Apply* below to start your application.

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**Description** As one of the largest research agencies dedicated to using environmental sciences to understand human disease and to improve human health, The National Institute of Environmental Health Sciences (NIEHS) fosters scientific learning and discovery and provides learning opportunities for students of all levels.

This project, as part of the Division of the National Toxicology Program predictive toxicology effort, seeks to explore advanced technologies and approaches for the next generation of human-relevant safety and toxicity testing. Focus areas include but are not limited to: complex in vitro systems (e.g., 3D cell models, microphysiological systems, tissue-chips), in silico and computational modeling, bioinformatics, data analytics, natural language processing, high-content imaging, "omics" (e.g., transcriptomics, metabolomics, proteomics, etc.) and high/medium-throughput screening.

#### What will I be doing?

The participant will learn how to apply their scientific and technical knowledge to advance the interrelated fields of toxicology, chemical safety, and human risk assessment. During the fellowship, the participant will collaborate with cross-disciplinary teams to understand existing regulatory requirements and help bridge the gap between advances in modern science and real-world application to human risk assessment. The participant will be mentored by recognized leaders in the respective field and will take an active role in designing experiments, analyzing and interpreting data, and communicating research findings through publications and presentations at scientific meetings.

#### Benefits

- Competitive Stipend based on education and experience.
- Health insurance supplement.
- Travel/Training allowance

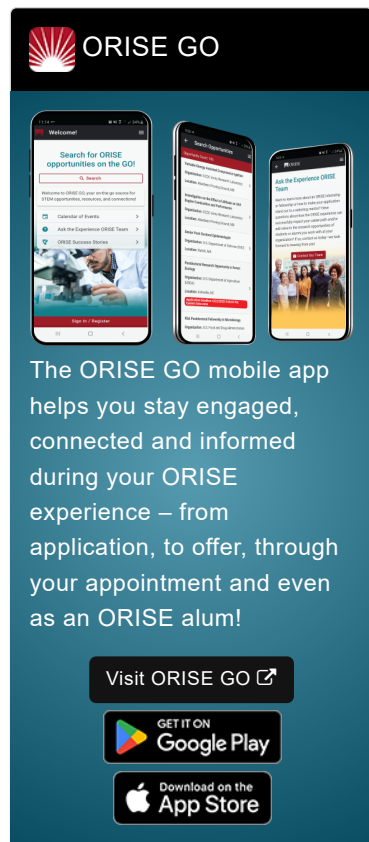
#### What is the anticipated start date?

The exact start date will be determined between the mentor and applicant at time of selection. The initial appointment is for one year, but may be renewed upon recommendation of NIEHS contingent on the availability of funds.

#### Nature of the Appointment

Participants will not enter into an employee/employer relationship with ORISE, ORAU, NIH, or any other office or agency. Instead, the participant will be affiliated with ORISE for the administration of the appointment through the ORISE appointment letter and Terms of Appointment.

**Qualifications** Have received a Bachelor's, Master's, or Doctoral degree within five years (60 months) of appointment start date, in a relevant field. Current graduate students may apply but must complete



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their degree before the start of appointment.

- Eligibility Requirements**
- **Degree:** Bachelor's Degree, Master's Degree, or Doctoral Degree.
  - **Discipline(s):**
    - **Chemistry and Materials Sciences** ([12](#))
    - **Communications and Graphics Design** ([2](#))
    - **Computer, Information, and Data Sciences** ([17](#))
    - **Earth and Geosciences** ([21](#))
    - **Engineering** ([27](#))
    - **Environmental and Marine Sciences** ([14](#))
    - **Life Health and Medical Sciences** ([48](#))
    - **Mathematics and Statistics** ([11](#))
    - **Physics** ([16](#))
    - **Science & Engineering-related** ([2](#))
    - **Social and Behavioral Sciences** ([29](#))