EPA STAR RFA

Advancing Toxicokinetics for Efficient and Robust Chemical Evaluation Applications

Informational Webinar for Applicants

August 7, 2019

2 PM EDT

Webinar Objectives

- Go over application Information in the EPA STAR RFA *ADVANCING TOXICOKINETICS FOR EFFICIENT AND ROBUST CHEMICAL EVALUATIONS* (Technical, Eligibility, Submission).
- There will be no new information, this is an overview what has already been provided in the RFA.

Webinar Ground Rules

- Please hold your questions till all EPA presentations have been made.
- No specific research project or idea can be discussed, but clarifying questions regarding what is written in the RFA announcement may be answered.

ORD's Chemical Safety for Sustainability Research Program

EPA's Office of Research and Development's CSS Research Program Objectives:

- Connect chemical exposures to outcomes
- Accelerate chemical safety evaluation
- Evaluate high priority chemicals
- Provide accessible data
- Engage stakeholders

https://www.epa.gov/aboutepa/about-chemical-safety-sustainability-research-program

Award Information

- Estimated Number of Awards:

  Approximately 5 awards

  Anticipated Funding Amount:

  Approximately $4 million for all awards

- Potential Funding per Award:

  Up to a total of $800,000 per award, including direct and indirect costs, with a maximum duration of 3 years

Proposed Research Activities must address

1) Gaps in the availability of medium- or high-throughput assays for elucidating chemical toxicokinetics; and
2) Exposure-related factors to reduce uncertainty in current approaches for a specific exposure scenario, sensitive population or life-stage. Especially to
   - Scale up to increase throughput
   - Avoid the need for customization
   - Be widely applicable across many chemical classes

Specific Areas of Interest

Applications must address at least 1 of the 2

Research Area 1: **Development and integration of new assays and approaches** to improve the accuracy of chemical screening, hazard identification or risk assessment.

New *in vitro* and/or *in silico* approaches to be integrated into toxicokinetic screening approaches or rapid assessment methodologies

New or refined approaches that generate and make use of experimental *in vitro* data may include, for example:

a. Assays that reproducibly provide measures for challenging chemicals that are a part of the environmental chemical exposure space

b. Assays that measure TK parameters not currently available via in vitro approaches, that may be of relevance to sensitive populations or lifestages

Specific Areas of Interest

Research Area #2: **High-throughput approaches applicable to multiple chemicals or chemical classes**

Need -

- Methods or techniques made to be broadly applicable to multiple chemicals/chemical classes to increase the low throughput inherent in conventionally used targeted mass spectrometry method development.

    - E.G. Nuclear Magnetic Resonance (NMR), radioflow, spectrophotometric, or elemental analysis assays.

Expected Outputs

- New assays and approaches for toxicokinetic screening approaches,
- Rapid assessment methodologies, high-throughput approaches applicable to multiple chemicals or chemical classes,
- Decision support tools,
- Peer-reviewed journal publications, Guidance documents for new approaches,
- Models, and Case studies.

Expected Outcomes

- **Outcomes should enable better planning and decision-making to reduce potential adverse human health and ecological effects associated with chemical exposure by communities, municipalities, states, regions, and tribal governments**

Eligibility Information

Public and private nonprofit institutions/organizations, public and private institutions of higher education, and hospitals located in the U.S., state and local governments, Federally Recognized Indian Tribal Governments, and U.S. territories or possessions are eligible to apply. Profit-making firms and individuals are not eligible to apply.

Application Materials

- To apply under this solicitation, use the application package available at Grants.gov (for further submission information see Section IV.F. Submission Instructions and other Submission Requirements).
- Note: With the exception of the current and pending support form (available at Research Funding Opportunities: How to Apply and Required Forms), all necessary forms are included in the electronic application package. Make sure to include the current and pending support form in your Grants.gov submission.

Other Information

- Please refer to Section IV. Application And Submission Information.
- Please refer to Section V. Application Review Information.
- **Solicitation Closing Date**:

  Tuesday, September 10th, 2019, 11:59:59 pm Eastern Time

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