



**NTP**  
National Toxicology Program

# Postdoctoral Training at the National Toxicology Program



U.S. Department of Health and Human Services



## Toxicological Pathology

This fellowship provides trainees rodent pathology expertise in multiple areas, including cardiac, pulmonary, renal, reproductive, and immune system toxicology by:

- Participating in NTP research projects.
- Learning to accurately diagnose pathology data.
- Learning rodent pathology.

The experience gained through this fellowship will help prepare candidates for board certification by the American College of Veterinary Pathologists (clinical or anatomical pathology).

The research performed can be thesis work toward the achievement of a Ph.D. degree by arrangement with various universities. Note: Two years of veterinary pathology residency training is required to participate.

## The National Toxicology Program

NTP is the nation's premier federal program for testing and evaluating agents of public health concern in our environment. NTP develops and applies tools of modern toxicology and molecular biology to evaluate substances that may potentially cause harm to human health. For information about NTP, visit <https://ntp.niehs.nih.gov>.

NTP is headquartered at the National Institute of Environmental Health Sciences (NIEHS), part of the National Institutes of Health.



## Applied Toxicology and Carcinogenesis

These non-laboratory fellowships provide opportunities for trainees, including:

- Serving as lead scientist and participating in the development of testing strategies, the design and conduct of studies conducted at NTP contracted laboratories, and the evaluation and interpretation of toxicity and carcinogenicity data.
- Coordinating activities of a multi-disciplinary team of scientists.
- Developing a subspecialty area and authoring reports in the NTP Technical Report series and peer-reviewed publications.

The experience gained through this fellowship will prepare candidates for the Diplomate of the American Board of Toxicology (D.A.B.T.) certification.

## Biomolecular Screening and Computational Toxicology

These fellowships are designed to train individuals in:

- Developing research and testing activities in medium-throughput and high-throughput content screening assays for the rapid detection of biomarkers of toxicity.
- Developing and conducting toxicology screening assays using alternative animal models, such as the roundworm, *Caenorhabditis elegans*.
- Developing approaches to understand the genetic and epigenetic basis for differences in susceptibility.
- Developing computational tools and approaches to allow for an integrated assessment of data.

## Chemistry, Chemical Metabolism, Disposition, and Toxicokinetics

These fellowships provide opportunities for trainees to develop expertise in the field of xenobiotic metabolism, disposition, and toxicokinetics.

Trainees will be part of multidisciplinary teams and will be:

- Participating in the design of NTP chemical disposition, metabolism, and toxicokinetic studies.
- Monitoring the conduct of studies at NTP contract laboratories.
- Evaluating and interpreting chemistry, toxicokinetics, metabolism, and disposition data.
- Presenting data at NTP and national forums.
- Preparing data to be published in the peer-reviewed literature and NTP Technical Report series.

Applicants with a Ph.D. in chemistry, toxicology, pharmacology, or allied fields, with prior experience in xenobiotic metabolism and disposition, are eligible.

## Health Assessment and Translation

These fellowships are designed to provide trainees experience in the assessment, integration, interpretation, and communication of scientific information on environmental agents. Trainees will gain experience in:

- Conducting in-depth, systematic evaluations of laboratory and clinical data, integrating relevant information for reaching conclusions, and managing peer review.
- Carrying out workshops or state-of-the-science evaluations to address important environmental health issues.
- Interpreting and communicating toxicology information useful for public health policy.



## Laboratory Animal Medicine

These fellowships are designed to allow individuals to participate in NTP and NIEHS laboratory animal veterinary care. This includes:

- Clinical and surgical responsibilities.
- Learning to manage a research animal facility.
- Conducting research and publishing results in peer-reviewed journals.
- Participating in didactic training with other local laboratory animal medicine residents.
- Participating in clinical rotations at nearby academic institutions.

The experiences gained through this fellowship will prepare candidates for the American College of Laboratory Animal Medicine (ACLAM) certifying examination.

## Systems and Mechanistic Toxicology

These fellowships help develop advanced approaches for the collection and interpretation of data generated from *in vivo* and *in vitro* experiments, including:

- Learning a range of molecular biology and pathology techniques.
- Studying toxicology pathways and the mode of action of chemicals of interest to the NTP and regulatory agencies.
- Gaining specialized training in systems toxicology by studying specific nervous, endocrine, or respiratory systems.

# Postdoctoral Training Opportunities at the National Toxicology Program

The National Toxicology Program (NTP) offers a limited number of postdoctoral training fellowships that prepare scientists for careers in pharmaceutical and chemical industries, regulatory agencies, and academia. NTP fellowships are offered in seven areas of toxicology sciences.

## Eligibility

Applicants must hold a Ph.D. or equivalent in toxicology or an allied science, M.D., D.V.M., or other equivalent professional degree.

Visa assistance is available for qualified international applicants.

## Stipend and Benefits

The postdoctoral training program funds fellowships for up to five years. Stipends are determined by the amount of previous postdoctoral experience. Medical insurance is provided.

## To Apply

The number of NTP fellowships is very limited and competitive. There is no specific deadline for applying.

To check availability of a fellowship in the field of your choice, send a cover letter, curriculum vitae, and the names and contact information of three persons as references to:

Diane Spencer  
NTP Training Program Coordinator  
National Institute of  
Environmental Health Sciences  
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