The Division of the National Toxicology Program (DNTP) Predictive Toxicology Branch (PTB), in the National Institute of Environmental Health Sciences (NIEHS), National Institutes of Health (NIH), Research Triangle Park, North Carolina is recruiting a Staff Scientist to lead the development and application of multi-scale computational models to better understand and predict adverse human-health outcomes associated exposure to environmental chemicals. The DNTP achieves program goals through a highly integrated, cooperative research and testing program carried out through research and development contracts and other support activities.

We are seeking an experienced scientist to serve as a subject-matter expert in the field of multi-scale modeling of biological systems to provide technical leadership in developing and applying computational tools to predict chemical-induced toxicity and identify underlying mechanisms and modes of action. The incumbent will integrate multi-omics and other high-content data into genome-scale models to better understand and predict human diseases associated with exposure to substances in the environment. Candidates should be interested in innovative, interdisciplinary approaches to modeling mammalian physiology and disease using approaches in data science, network science, functional genomics, and multiscale analysis. A successful candidate is expected to lead, develop, manage, and coordinate scientific and operational activities related to the development, validation, and use of genome-scale models; develop strategies for the application of genome-scale models with appropriate programmatic, interagency, and international committees and organizations; and represent DNTP at national and international scientific workshops and meetings.

Staff Scientist is an NIH employee generally appointed to a time-limited, renewable position to support the long-term projects of a research program. Staff Scientists function as team-based investigators to lead and execute research within the DNTP strategy and are not responsible for obtaining independent resources and managing budgets. Staff scientists work autonomously and have sophisticated skills and knowledge essential to the work of the laboratory. Staff Scientists do not receive independent resources, although they often work autonomously and have sophisticated skills and knowledge essential to the work of the laboratory. Staff Scientists should be capable of personally designing experiments, but generally do not have responsibilities for initiating new research programs. The Staff Scientist in this position will conduct independent research and mentor trainees and other laboratory staff.

Qualifications: Applicants must have a PhD, DVM, ScD, MD, or equivalent in computational science, mathematics, bioengineering, computational genetics, bioinformatics, toxicology, statistics or related fields, with at least 2 years of research experience after receiving the final degree, such as postdoctoral research and/or equivalent experience in their field. Applicants must demonstrate experience applying large-scale mechanism based mathematical modeling techniques in life sciences, including experience in building, validating and using complex, system level models of biological systems and critically assessing different methods for simulation of single species, communities and populations. An outstanding comprehension of the relevant literature in the aforementioned areas and related fields and excellent oral and written communication skills are required. Priority will be given to applicants with
demonstrated ability to foster effective scientific collaborations across groups from different disciplines, and to create an atmosphere for maximum creativity, productivity, and cooperation.

**Salary/benefits:** This is a federal full-time equivalent position, and a comprehensive benefits package is available. Salary will be commensurate with experience and qualifications.

**How to apply:** This checklist will assist you in submitting a complete application package. All materials listed are required for your application to be considered.

- **Curriculum vitae.** Include in your CV a description of mentoring and outreach activities, especially those involving women or other underrepresented groups in biomedical research.
- **2-page Statement of Research Experience and Goals**
- **Arrange for 3 letters of reference** to be sent to int-apps@niehs.nih.gov. Letters must be current. Referees must include your name and the vacancy number NR127 in the subject line of their email.

Combine all documents into a single PDF and email to int-apps@niehs.nih.gov. Questions about this position can be sent to int-apps@niehs.nih.gov or to Dr. Warren Casey at warren.casey@nih.gov. Incomplete or paper applications will not be accepted. Complete applications should be received no later than 10/13/2021 to be considered.

**Commitment to Diversity and Equal Employment Opportunity:** The NIH NIEHS encourages the application and nomination of qualified women, minorities, and individuals with disabilities. The United States Government does not discriminate in employment on the basis of race, color, religion, sex (including pregnancy and gender identity), national origin, political affiliation, sexual orientation, marital status, disability, genetic information, age, membership in an employee organization, retaliation, parental status, military service, or other non-merit factors. NIH NIEHS will provide reasonable accommodations to applicants with disabilities as appropriate. If you require reasonable accommodation during any part of the application and hiring process, please notify us.

**Foreign Education:** Applicants who have completed part or all of their education outside of the United States must provide an evaluation by an accredited organization to ensure its equivalence to education received in accredited educational institutions in the United States. For more information on foreign education verification, visit the National Association of Credential Evaluation Services (NACES) website at [http://www.naces.org/](http://www.naces.org/). Verification must be received prior to the effective date of the appointment.

The NIH is the premier biomedical research center for the world. Its 27 institutes and centers employ more than 18,000 employees doing a vast array of jobs, all supporting efforts for a healthy nation. For information about the NIH mission, goals and institutes and centers, visit [https://www.nih.gov/about-nih](https://www.nih.gov/about-nih).

DO NOT INCLUDE YOUR BIRTH DATE, PHOTOGRAPH, OR SOCIAL SECURITY NUMBER (SSN) ON APPLICATION MATERIALS.

DHHS AND NIH ARE EQUAL OPPORTUNITY EMPLOYERS

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