

**Tenure-Track Faculty Position in  
Computational Toxicology**  
School of Health Sciences, Purdue University

**Job Summary**

The School of Health Sciences in the College of Health and Human Sciences invites applications for a tenure-track position at **Assistant/Associate Professor** level in computational toxicology. The successful candidate will lead an independent research program that utilizes state-of-the-art computational approaches to advance understanding of how environmental exposures adversely affect human health. Within the School of Health Sciences, ongoing studies on the adverse outcomes of environmentally relevant exposures offer tremendous collaborative opportunities for a computational toxicologist. Outside the School, there are collaborative opportunities with Purdue's world-renowned colleges, including Engineering, Management, Science, Health and Human Sciences, Pharmacy, and Agriculture. Purdue has also established Discovery Park, a highly interdisciplinary enterprise dedicated to transformative research that includes state-of-the-art centers for nanotechnology, biosciences, healthcare engineering, energy, and other multi-disciplinary activities including the Regenstrief Center for Healthcare Engineering with a focus on health analytics. Opportunities for collaboration also exist with a large number of manufacturing, information, healthcare, and energy industries in the region.

The successful candidate is expected to lead an extramurally funded research program involving the elucidation of risks associated with chemical exposures to human health outcomes through use of computational approaches including machine learning and artificial intelligence (AI) on high-throughput, high-content, exposure-risk assessment, and/or clinical data. The successful candidate is also expected to contribute to the School's educational missions in our Biomedical Health Sciences Pre-Professional program aimed at preparing students for professional careers in the biomedical sciences, as well as our Occupational and Environmental Health Sciences and Toxicology programs. The candidate will develop new courses in our curriculum focused on the use of "big data," AI, machine learning, and other computational approaches to human health and disease (e.g. toxicogenomics, molecular structure-function modeling, clinical bioinformatics, translational modeling).

**Qualifications**

Candidates must have a Ph.D. in toxicology, computational biology, or a related field and productive postdoctoral research experience. We seek a candidate who would utilize either a hybrid wet/dry lab approach in which *in silico* predictions are tested by *in vitro* or *in vivo* approaches, or a candidate using especially innovative dry-lab only computational approaches. Evidence of prior success in extramural funding is preferred. An area of research interest that capitalizes on existing strengths within the School of Health Sciences (<https://www.purdue.edu/hhs/hsci/research/>) is also preferred. The position is competitive with regards to salary, start-up funds, and laboratory space. We are especially interested in candidates who can contribute through their research, teaching, and/or service to the diversity and excellence of the academic community.

**Applications**

A cover letter, curriculum vitae, a statement of current and future research interests (maximum 3 pages), a teaching philosophy statement (maximum 1 page), a diversity and inclusion statement (see below) and contact information for three references should be submitted as a single PDF through Success Factors:

<https://career8.successfactors.com/sfcareer/jobreqcareer?jobId=16136&company=purdueuniv>

Purdue University's School of Health Sciences is committed to advancing diversity in all areas of faculty effort, including discovery, instruction, and engagement. Candidates should address at least one of these areas in a separate Diversity and Inclusion Statement, indicating their past experiences, current interests or activities, and/or future goals to promote a climate that values diversity and inclusion.

Priority deadline for review of applications will begin October 15, 2021 and continue until the position is filled. For more information, contact Dr. Jason Cannon ([cannonjr@purdue.edu](mailto:cannonjr@purdue.edu))

A background check is required for employment in this position.

## **The School and College**

The School of Health Sciences has internationally recognized research and educational programs in Health Physics, Imaging Sciences, Occupational and Environmental Health Sciences, Medical Physics, and Toxicology. The School is an integral part of the College of Health and Human Sciences, which aims to bring together scholars in the human sciences and health sciences to strategically address issues vital to enhancing quality of life. The College recently received accreditation of an MPH program in Public Health, along with the creation of the new Department of Public Health.

## **Integrative Data Science Initiative/computational resources**

Purdue University has launched the [Integrative Data Science Initiative](#) as a presidential Purdue Moves initiative. Our vision is to be at the forefront of advancing Data Science-enabled research and education by tightly coupling theory, discovery, and applications while providing students with an integrated, Data Science-fluent campus ecosystem.

Purdue is home to a large number of world class faculty spread across multiple colleges, engaged in fundamental research in Data Science, Machine Learning and Artificial Intelligence, as well as the applications of these methodologies and techniques to advance knowledge in other domains. Over the past five years alone, Purdue's commitment to these areas has attracted over 100 new tenure-track faculty with expertise in data science fundamentals and applications and extensive computational research (<https://www.rcac.purdue.edu>) and teaching (<https://datamine.purdue.edu>) resources.

## **Community**

Greater Lafayette Indiana is home to Purdue University and is one of the fastest growing communities in the Midwest. Subaru of Indiana Automotive, Caterpillar, Dow AgroSciences, Rolls-Royce, GE Aviation, Schweitzer Engineering Laboratories, Wabash National, Saab Global Defense and Security Company, high tech firms and small businesses all call Greater Lafayette their home. Conveniently located between Chicago and Indianapolis, Greater Lafayette is also near several other major metropolitan cities. 'Visit Lafayette-West Lafayette' and 'Greater Lafayette Commerce' are resources that highlight our great community.

## **Submission and start date**

Application review will begin on October 15<sup>th</sup> and continue until the position is filled. The position is expected to begin in August, 2022.

## **Equal opportunity**

*Purdue is an EEO/AA employer. All individuals, including minorities, women, individuals with disabilities, and protected veterans are encouraged to apply. Fully committed to achieving a diverse workforce.*