

Perelman School of Medicine at the University of Pennsylvania

CENTER OF EXCELLENCE IN ENVIRONMENTAL TOXICOLOGY

Postdoctoral Position Available

A postdoctoral researcher position is available in the Center of Excellence in Environmental Toxicology at Penn to work with the Director Trevor M. Penning to study the metabolic activation of nitroarenes and the role of Nrf2-Keap1. Nitroarenes are carcinogenic constituents of diesel exhaust and are activated by nitroreduction via NQO1 and the aldo-keto reductases (AKRs). These human genes are induced by the Nrf2-Keap1 system raising the prospect that in the context of diesel exhaust exposure the Nrf2-Keap1 system may exacerbate nitroarene carcinogenesis. Measurement of nitroarene-DNA adducts by liquid chromatography tandem mass spectrometry, CRISPER-cas9 gene editing, and epigenetic regulation of Nrf2-Keap1 is being explored in human bronchial epithelial cells to study this process.

Required qualifications: PhD within the last two years in the biomedical sciences (e.g. biochemistry, pharmacology, toxicology, or analytical chemistry).

Preferred qualifications: Strong background in enzymology, mammalian cell culture, gene and protein expression (western blot analysis, real-time PCR, enzyme assays); use of si-RNA, sh-RNA and CRISPR/cas9; and strong background in analytical chemistry using LC-MS/MS.

For consideration please email: penning@upenn.edu, a cover letter, curriculum vitae and list of three references.

For more information on postdoctoral training at the Perelman School of Medicine visit:

<https://www.med.upenn.edu/postdoc/bpp-staff.html>

For more information on the Center of Excellence in Environmental Toxicology visit:

<http://ceet.upenn.edu/>

For more information on the Penning laboratory visit:

<https://www.med.upenn.edu/apps/faculty/index.php/g310/c1464/p12620>

For Penning publications see:

https://scholar.google.com/citations?hl=en&user=2RIsveIAAAAJ&view_op=list_works&gmla=AJsN-F4UQ6nB8DIKmkI-fx2lynzU5REy-5Re2EOxGHB3spQjRRUAbymA1cZ74-fd5DAX3i1b3t-Ysk2om2G5Dt5tX2No-G2scko-C7s19xquUQMKXCN5oKU

The University of Pennsylvania is an equal opportunity employer.



IN ENVIRONMENTAL TOXICOLOGY