DESCRIPTION

The Department of Microbiology and Environmental Toxicology (https://www.metx.ucsc.edu) at the University of California, Santa Cruz (UCSC) invites applications for the position of Postdoctoral Scholar, under the direction of Professor Donald Smith. The Postdoctoral Scholar will participate in NIH-funded research to elucidate the neural mechanisms underlying the lasting attentional, impulse control, and fine motor dysfunction caused by developmental manganese exposure, and test potential therapeutic interventions in an established rodent model of childhood manganese exposure.

Studies in children/adolescents have linked developmental environmental manganese exposure to inattention, impulsivity, hyperactivity, oppositional behaviors, and fine motor deficits, though the causal relationship between manganese exposure and these deficits, and their underlying neural mechanisms are poorly understood. The specific goals of the research will be to (i) identify a clinically-relevant therapeutic regimen for the manganese deficits in attention, impulse control, and fine motor function, and (ii) determine involvement of the fronto-striatal catecholaminergic system in the manganese deficits and in the efficacy of selected therapeutics.

The research will use a rodent model of developmental manganese exposure and tests of attentional, impulse control, and fine motor function, in combination with receptor antagonism, PET neuroimaging, and quantitative immunohistochemistry to elucidate changes in catecholaminergic system proteins implicated in the manganese deficits, and the association of these measures with the attention/impulse control/fine motor outcomes. These studies will be the first to identify potentially efficacious therapies for the treatment/prevention of attentional and co-morbid fine motor deficits due to developmental manganese exposure, and to elucidate their neural mechanisms.

The selected applicant will be expected to participate in career development activities at UCSC, publish scientific findings, and contribute to the excellence of the academic community. The Postdoctoral Scholar will also be encouraged to apply for fellowship grants to potentially support the development of self-initiated research projects. This position will require the incumbent to work effectively, collaboratively, and collegially with undergraduate and graduate students, staff, established researchers, and faculty from a wide range of social and cultural backgrounds.

Applicants with expertise in any of the following are strongly encouraged to apply: experience with 5-choice serial reaction time testing paradigms in aspects of attention and impulse control; a demonstrated record of scientific productivity; excellent scientific writing skills; a demonstrated record of commitment to diversity.

ACADEMIC TITLE
Postdoctoral Scholar – Employee

SALARY
Starting at $49,188, commensurate with qualifications and experience level (determined by the number of months of postdoctoral service at any institution).
BASIC QUALIFICATIONS
Ph.D. (or equivalent foreign degree) in neuroscience, neurotoxicology, or a related field (in hand at time of appointment), behavioral or molecular neuroscience laboratory experience with rodent animal models (in pursuit of doctorate or postdoctoral), and a demonstrated record of lead-authorship on scientific publications.

POSITION AVAILABLE
October 1, 2018.

DURATION OF POSITION
Postdoctoral Scholar appointments are full-time. Initial appointment will be for one year, with the intention of reappointment (for an additional 1-2 years) upon successful performance review and availability of funding.

MAXIMUM DURATION OF SERVICE IN A POSTDOCTORAL TITLE
The total duration of an individual’s postdoctoral service may not exceed five years, including postdoctoral service at any institution. Under limited circumstances, an exception to this limit may be considered, not to exceed a sixth year.

APPLICATION REQUIREMENTS
Please refer to “Therapeutics for behavioral and molecular neurotoxicology of manganese Postdoctoral Scholar” in all correspondence. All documents and materials must be submitted as PDFs and applicants should send application materials to: drsmith@ucsc.edu.

Documents/Materials
- A short (~1 page) cover letter with a description of how your doctoral training has prepared you for this postdoctoral position, and what you would hope to achieve if accepted into the position (required)
- Curriculum vitae, including publications list (required)
- Diversity statement that addresses past or potential contributions to diversity (optional)
  Guidelines on diversity statements can be viewed at https://senate.ucsc.edu/committees/caad-committee-on-affirmative-action-and-diversity/DivStateGuidelines.pdf

Reference Requirement
Applicants must provide the names and contact information for a minimum of three academic/professional references (a maximum of five will be accepted).

RECRUITMENT PERIOD
Full consideration will be given to applications completed by August 31, 2018. Applications will continue to be reviewed until the position is filled.