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**POSTDOCTORAL OPENING: AIR POLLUTION AND MORTALITY USING CAUSAL INFERENCE METHODS**

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The Department of Epidemiology, Biostatistics and Occupational Health at McGill University invites applications for a postdoctoral fellowship in environmental epidemiology. McGill University is a top-ranked research university located in Montreal, Canada. The selected applicant will work on a study estimating the impact of various interventions aiming to reduce air pollution on mortality in the Canadian population using causal inference methods in the counterfactual framework. The research will be based on data from the Canadian Census Health and Environment Cohort (CanCHEC), which includes 3.6 million respondents to the 1996 census long-form questionnaire that were followed for 17 years. The fellow will also support data collection activities for the Venda Health Examination of Mothers, Babies and their Environment (VHEMBE), a birth cohort of 751 South African mother-child pairs exposed to insecticides used to control malaria. Opportunities to work on a study investigating the impact of exposure to novel plasticizers (e.g. phthalates), flame retardants (e.g. organophosphate esters) and phenols (e.g. bisphenol A, F, S), on the impact of aging on male reproductive outcomes and on the developmental impact of exposure to public health insecticides in the VHEMBE study are also available. The postdoctoral fellow will work under the supervision of Dr. Jonathan Chevrier.

For more details about Dr. Chevrier's works, see <http://jchevrier.weebly.com>

**Duties**

Duties will fall under two axes: 1) Contribution to data collection efforts, and 2) Production of original research.

1) Data collection: Under Dr. Chevrier's guidance, the postdoctoral fellow will work closely with the VHEMBE field coordinator in South Africa to remotely supervise field activity, ensure data quality and integrity by generating progress and quality control reports and resolving discrepancies, assist with questionnaire and protocol design and with submission to ethics committees.

2) Research: The postdoctoral fellow will be expected to conduct data analysis and publish original research in peer-reviewed journals concerning the impact of interventions to reduce exposure to air pollution on the health of Canadians and conduct data analysis for other projects, providing multiple opportunities for authorship.

**Qualifications**

Required

- Doctoral degree in epidemiology, public health, environmental health sciences or equivalent. Applicants who do not have a completed Ph.D. at the time of application must include a letter from their Department Chair specifying the date of their dissertation defense.



- Strong understanding of biostatistics and epidemiological methods, and in particular of causal inference methods in the counterfactual framework.
- Excellent data analysis/programming skills in SAS, STATA and/or R.
- Excellent communication skills (oral and written) in English.
- Ability to work independently with occasional supervision.
- Demonstrated publication record in environmental health sciences.
- Ability to take initiative, creativity, attention to details and commitment to producing high quality work.

### Preferred

- Experience in data collection/Study coordination.
- Knowledge of STATA.
- Canadian citizen or permanent resident

### Term

Funding is available for 1-2 years but the fellow will be expected to apply to the FRQS and CIHR for postdoctoral scholarships.

### Salary

Salary will be based on qualifications and experience.

### Start date

As soon as possible. Ideally, before the spring of 2020.

### To apply

Please submit a cover letter that includes a description of current research, future plans for research and professional goals, a curriculum vitae, 2-3 samples of scholarly writing (published, under review or in preparation) and the name of 3 references (including the Ph.D supervisor) to Dr. Jonathan Chevrier at [jonathan.chevrier@mcgill.ca](mailto:jonathan.chevrier@mcgill.ca).

### Notes

- Review of applications will begin on February 15, 2020 and will continue until the position is filled. If degree has not been granted, applicants must have plans to receive their degree by August 2020 at the latest.
- Candidates' eligibility to hold a Postdoctoral Research Fellowship expires 5 years after the date on which their PhD was awarded, regardless of when they are hired. Be sure to refer to the following link for further information on eligibility criteria:  
<http://www.mcgill.ca/gps/postdocs/fellows/registration/eligibility>.
- Any offer to non-Canadian citizens/non-permanent residents is contingent on the candidate obtaining a work permit after an offer has been made and a letter of invitation sent, see:  
<http://www.mcgill.ca/gps/postdocs/international/workpermit>