POSTDOCTORAL POSITION IN COMPUTATIONAL PSYCHIATRY (AI IN ELECTRONIC HEALTH RECORDS)

The Department of Psychiatry at the University of Alberta in Edmonton is recruiting a postdoctoral fellow in computational psychiatry focusing on Electronic Health Records (EHR) in Alberta (Canada) and China. The successful applicants will participate in research that applies advanced statistical, artificial intelligence (AI) and machine learning (ML) techniques to large EHR, demographic, admission, drug prescription and claims datasets of patients with mental disorders. Current and potential projects include symptom clustering across diagnoses and treatment outcome predictions of mental disorders using machine learning including deep learning. Applicants must possess a doctoral degree (MD and/or PhD) in relevant disciplines, such as biomedical engineering, computer science, mathematics, neuroscience, physics, psychiatry, psychology or statistics. Clinical research experience and strong coding skills in Python, Matlab, R or C are required. A strong track record of refereed journal publications is desired. Previous experience with natural language processing (NLP) is a plus. Applicants should have experience working in a team setting and exhibit excellent communication skills (oral and written).

The successful applicants will have the opportunity of supervised access to several public and government/institution/company owned datasets, including large (over 1 million) and fast-growing (over 200k per year) EHR and clinical trial data from Alberta and China. In this context, there are excellent opportunities for shared mentorship and collaboration with several PIs in psychiatry and computer science, including the Alberta machine intelligence institute (Amii). The successful applicant will play a co-leadership role for several research projects in computational psychiatry, co-develop and participate in preparation of research grant proposals, assist in the supervision and training of other personnel including technologists, graduate students, other lab members and scientific collaborators. The successful applicant will also have the opportunity to work directly with our partners in Alberta Government and Private Sectors, as well as our partners in China (including the largest private mental hospital corporation with customized AI/ML ready EHR platform). The ideal applicant will exhibit a high level of motivation to pursue data-driven research in mental disorders, to publish in excellent peer-reviewed journals, and to seek prestigious fellowships and research awards, as appropriate.

The stipend will be commensurate with the experience of the successful candidate. The position is available immediately and funding is sufficient to support the initial position for at least two years.

Fluency in English is a requirement and for applicants who did not complete training in an accredited English language institution, IELTS scores will normally be required as evidence of proficiency.

The Faculty of Medicine & Dentistry at the University of Alberta is one of Canada's premiere health-sciences institutes, and in recent years has ranked among the top 50 medical schools in the Times Higher Education World University Rankings. The University of Alberta has more than 39,000 students and ranks best places to work in academia (www.ualberta.ca/about/facts/fast). Excellent opportunities exist for collaborative research with other disciplines within the Faculty and University and other Faculties, as well as outside the University.

The University of Alberta is located in Edmonton, a vibrant metropolitan area of 1.8M and the provincial capital for Alberta. This friendly city offers a rich cultural life and diverse recreational opportunities. The campus on which the Faculty of Medicine & Dentistry is located is adjacent to the North Saskatchewan River with one of the largest municipal park systems in North America. Edmonton is approximately 3.5 hours by car from Jasper and from Banff in the Canadian Rockies.

To Apply:

Candidates should submit a cover letter, a statement of career goals, research interests and vision for research track if applicable, including a description of research interests; a complete CV (Canadian Common CV is acceptable) including a summary of graduate thesis research and post-doctoral research (if applicable), transcripts, and the names and contact information (address, phone number and email address of three referees to:

Contact Name: Dr. Bo Cao
Address: Dept. of Psychiatry, University of Alberta Edmonton, Alberta, Canada T6G 2E1
Email address: bcao2@ualberta.ca
Webpage: https://www.ualberta.ca/medicine/about/people/Bo-Cao

We thank all applicants for their interest; however, only those individuals selected for an interview will be contacted.

The University of Alberta is committed to an equitable, diverse, and inclusive workforce. We welcome applications from all qualified persons. We encourage women; First Nations, Métis and Inuit; members of visible minority groups; persons with disabilities; persons of any sexual orientation or gender identity and expression; and all those who may contribute to the further diversification of ideas and the University to apply.