The UBC Department of Psychiatry and the Data Science Institute is inviting eligible candidates to apply for a full-time Postdoctoral Research Fellowship.

The UBC Data Science Institute is a Faculty of Science initiative designed to incubate and accelerate research, innovation and training in data-intensive science. Working across the university’s data science community and advanced computing teams, the DSI focuses on building interdisciplinary research teams tackling data-rich problems. Visit: dsi.ubc.ca/research to view some of the most recently funded projects. Even though the DSI works in various application domains such as manufacturing, the DSI has a strong record of conducting diverse health and biomedical projects. On joining the DSI, you will have the opportunities to interact with post-doctoral fellows hosted by the DSI on diverse topics covering the intersection between data science and human health.

UBC’s Department of Psychiatry and the Institute of Mental Health are internationally recognized academic units that develop and implement cutting edge research and implementation projects in the field of mental health and substance use. The Department’s Mental Health Systems and Services Laboratory works closely with decision-makers, the community, and other stakeholders to answer key challenges referred to basic science, clinical practice, health systems, population mental health, and epidemiology. Our goal is to improve delivery of mental health and substance use services to ultimately impact health outcomes of people from BC, Canada, and globally.

The Postdoctoral Research Fellow will work in an interdisciplinary research environment and will develop models to predict increased risk of developing adverse mental health or substance use outcomes, using artificial intelligence and other methods, as part of a funded project. The candidate will have extensive experience with research, academic and scientific writing; data science experience; and an interest in psychiatric epidemiology, clinical research, and health system planning for mental health and substance use. The incumbent will conduct quantitative data analysis related to mental health and health systems and will also assist in the interpretation and presentation of findings. The position will focus on research and manuscript writing; although opportunities for contributing to teaching, grant writing, knowledge translation, and community presentations also exist. The successful candidate will also help to mentor and supervise graduate students who are working on this (or related) project(s).

Key Attributes:

- Demonstrated experience in method development and application using statistical languages and programming languages (such as SPSS, Stata, SAS and Python and/or R) and database languages (e.g. SQL)
- Development, implementation and deployment of statistical/machine learning methods and models and their interpretation (e.g., PyTorch, TensorFlow)
- Passion for data, Machine Learning and Artificial Intelligence application in healthcare
- Experience with large health-related datasets access, extraction and linkages ensuring data integrity, recoding/deriving variables & prior experience working with Population Data BC (PopData BC) database are assets
- Experience with high performance computing, cluster management systems like Slurm or TORQUE; experience with cloud computing is a plus
- Demonstration of reproducible research tools (e.g., github) is an asset
- Experience in Natural Language Processing (NLP) is a plus
- Skills relevant to public health data science, including strong quantitative and programming skills, experience in processing and analyzing very large longitudinal datasets and expertise in in administrative, survey or cohort data relevant to public health, also a plus
- Understanding of public services relevant to mental health, health in general, education and social care and policy evaluation will be an advantage

Applicants will have a PhD in expertise in a relevant discipline (e.g. data science, machine-learning, computer science,
The anticipated start date is December 01, 2020. This is a one-year appointment subject to annual renewal. Salary will be commensurate with qualifications and experience.

**Department of Psychiatry**

A letter of application, accompanied by a detailed curriculum vitae and names of three references, should be directed to:

Dr. Daniel Vigo Assistant Professor
at: [Daniel.Vigo@ubc.ca](mailto:Daniel.Vigo@ubc.ca) and cc [Brianna.VanDenAdel@ubc.ca](mailto:Brianna.VanDenAdel@ubc.ca)

Closing date: November 15, 2020
Anticipated starting date of this position: December 01, 2020

The University of British Columbia (UBC) is a global centre for research and teaching. Surrounded by the beauty of the Canadian West, UBC embraces bold new ways of thinking that attract exceptional students and faculty. It is a place where innovative ideas are nurtured in a globally connected research community, providing unparalleled opportunities to learn, discover and contribute.

Faculty members, students, staff and alumni in the UBC Faculty of Medicine are actively engaged in innovative, leading edge research, education and community service on university and hospital campuses across the Province. Together we aim to create knowledge and advance learning that will make a vital contribution to the health of individuals and communities, locally, nationally, and internationally.

_Equity and diversity are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We encourage applications from members of groups that have been marginalized on any grounds enumerated under the B.C. Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Metis, Inuit, or Indigenous person._

[psychiatry.ubc.ca](http://psychiatry.ubc.ca) & [med.ubc.ca](http://med.ubc.ca)