

# Tier 2 Canada Research Chair in the Analysis of Complex Data

## Assistant or Associate Professor, Faculty of Science

The University of Manitoba is seeking applications or nominations for a Tier 2 Canada Research Chair (CRC) in the Analysis of Complex Data. The Government of Canada has established the CRC program to enable Canadian universities to foster world-class research excellence. The proposed CRC aligns with the University's strategic plan ([http://umanitoba.ca/research/media/Strategic\\_Research\\_Plan.pdf](http://umanitoba.ca/research/media/Strategic_Research_Plan.pdf)) that identifies *Understanding and Communicating Information* as a crosscutting strategic theme.

The analysis of complex data underlies some of the most fundamental and practical problems currently faced by society. It sits at the junction of three core disciplines: mathematics, statistics and computer science. Creating and testing solutions to complex data analysis problems in one field is a challenge and a significant accomplishment. Of far greater value though, is the development of tools and techniques that can be applied and adapted to a range of problems in multiple disciplines. This is the expected focus of this CRC, and a major component of the Faculty of Science's strategic plan.

Working collaboratively with other research chairs at the University of Manitoba (e.g. in Ubiquitous Analytics) and beyond, the successful candidate will play a key leadership role to help build capacity to solve complex data analysis problems and bridge the expertise in the three core disciplines to help create an "intellectual platform" for data science. The successful candidate will be an emerging leader in his/her field as evidenced by an exceptional record of research funding, publications, conference presentations and student training and mentoring. The successful candidate will also be expected to develop and maintain a rigorous and independently funded research program that is also highly collaborative and involves local, national and international partners.

Tier 2 CRCs are intended for exceptional emerging scholars. Candidates must have less than 10 years of experience as active researchers in their field of study at the time of nomination. Candidates who are more than 10 years from having earned their highest degree and who have had career disruptions, due to maternity, parental or extended sick leaves, may have their eligibility for a Tier 2 Chair assessed through the program's Tier 2 justification process. Questions about this process or the requirements of a Tier 2 Chair can be directed to the University of Manitoba's research grants office. Please consult the Canada Research Chair's website (<http://www.chairs-chaire.gc.ca/>) for full program information, including details on [eligibility criteria](#) and the [justification process](#).

The University of Manitoba's Departments of Mathematics, Statistics and Computer Science, housed within the Faculty of Science (<http://umanitoba.ca/faculties/science/>), collectively comprise more than 70 faculty members. The Departments have active graduate teaching and research programs, with over 120 MSc and PhD students. Research activities are supported with Tri-Council and other funding, and industry partnerships. Many opportunities for collaborative research exist within the three departments. Research strengths include approximation theory, machine learning, advanced modelling, sparse methods and visualization as well as work in a number of bio-focused areas that require new methods in complex data analysis. Collaborative opportunities also extend beyond these departments. The university is also well connected to relevant external organizations including PIMS and a Compute Canada/Westgrid node.

[The City of Winnipeg](#) has a population of approximately 700,000 people and combines the amenities of urban life with easy access to the countryside and to northern lakes and forests. The city offers a vibrant arts community, diverse cultural events, and world-class entertainment and restaurants. The public education system is very good, and a wide variety of private schools are also available. For more information about the city of Winnipeg please visit the Tourism Winnipeg (<http://www.tourismwinnipeg.com/>) and City of Winnipeg ([www.winnipeg.ca/](http://www.winnipeg.ca/)) websites.

Review of applications will begin on **February 12, 2016** and will continue until the position is filled. All Chairs are subject to review and final approval by the CRC Secretariat.

Nominations or applications including the candidate's curriculum vitae, five-year research plan, summary of major research achievements, and the names and addresses of three (3) referees should be sent to:

**Dr. Ivan Oresnik, Associate Dean Research**  
**Faculty of Science, University of Manitoba**  
**247 Machray Hall, Winnipeg, Manitoba, Canada R3T 5V6**  
**Email: [Ivan.Oresnik@umanitoba.ca](mailto:Ivan.Oresnik@umanitoba.ca)**  
**Please refer to Position Number: 20697 in the subject heading.**

The University of Manitoba is committed to creating a diverse and inclusive workplace. Applications are encouraged from qualified applicants including members of visible minorities, Aboriginal peoples, persons with disabilities and people of all sexual orientations and genders. All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority. Application materials, including cover letter, curricula vitae, and letters of reference, will be handled in accordance with the protection of privacy provisions of "*The Freedom of Information and Protection of Privacy Act*" (Manitoba) and will be provided to participating members of the search process.

**For more information on this and other opportunities, please visit: [umanitoba.ca/employment](http://umanitoba.ca/employment)**