The VADA Program
Visual and Automated Disease Analytics Graduate Training Program

Student Application Form for 2023/24

Students should apply to one of two *Program Streams*: Analytics or Health Sciences. The *Analytics Stream* emphasizes research in computational and analytic techniques for disease data; students should have a background or be enrolled in a graduate program in computational, statistical, and/or mathematical sciences. The *Health Sciences Stream* emphasizes epidemiology, biostatistics, bioinformatics, social dimensions of health, and health informatics; students should have a background in the health or social sciences (e.g., psychology, sociology) fields.

Application Requirements: Submit the completed application form, electronic or unofficial copy of transcript(s) containing information about the last 60 credit hours of coursework, and a current curriculum vitae. **Arrange for two referees to send letters of reference to be submitted to the email address or office address listed below. One referee must be the degree supervisor who will speak to applicant strengths and fit in the program.** Letters must be on letterhead and signed by the referee.

Deadline for Submission of all Application Requirements: January 30th, 2023 at 11:59 pm CST
Please Submit Applications to: vada.program@chimb.ca or 300-753 McDermot Ave, Winnipeg, R3E 0T6

Applicant Information

Last Name	
First Name	
Street Address	
City	
Province/State, Country	
Postal Code	
Phone	
E-Mail Address	
Citizenship/Landed Immigrant Status (please specify)	Canadian Citizen Permanent Resident International Student
Preferred Gender Pronouns	
Date of Birth	

Your personal information is being collected under the authority of The University of Manitoba Act. The information you provide will be **used for the purposes of determining eligibility for admission and financial aid and awards, assessment of academic status, statistical analysis, and communication with the applicant. Your information may be disclosed to other educational institutions for the purpose of determining eligibility for admission into joint-programs and it may be disclosed to government departments and co-sponsoring organizations to determine eligibility for financial aid and awards. Your personal information will not be used or disclosed for other purposes, unless permitted by The Freedom of Information and Protection of Privacy Act (FIPPA). If you have any questions about the collection of personal information, contact the Access and Privacy Office (tel. 204-474-9462), The University of Manitoba, 233 Elizabeth Dafoe Library, Winnipeg, Manitoba, Canada, R3T 2N2.*

University of Manitoba   NSERC CRSNG   University of Victoria

The VADA Program
Visual and Automated Disease Analytics Graduate Training Program

Graduate Program Information

Graduate Program (registered or applied to)	
University Student Number (if available)	
Student Status (Full time/Part time)	
University	
Department/School	
Degree Sought	☐ Master's ☐ PhD
Program Status (as of September 2023)	☐ Full Time ☐ Part Time
Supervisor (if available)	
Co-Supervisor (if available)	
Name(s) of potential VADA Program team members who could be on your thesis committee	
VADA Stream	☐ Analytics ☐ Health Sciences

University Degrees Previously Obtained

Graduation Year	Degree	Department/School	University

Program of Studies

Please list the courses you have already taken as part of your current degree program, the courses you plan to enroll in for the 2023/24 academic year as well as in subsequent years (based on current course offerings). Be sure to include the VADA required course, Foundations of Disease Analytics, to be offered bi-weekly over the Fall and Winter terms of 2023/24. Your proposed program of courses should meet the total program requirements for your degree.

Academic Year	Term (F/W/S)	Course Number (if known)	Course Title

The VADA Program
Visual and Automated Disease Analytics
Graduate Training Program

Thesis/Dissertation Title (or proposed title)

List of Publications and Presentations

The VADA Program

Visual and Automated Disease Analytics
Graduate Training Program

Please describe your thesis/dissertation topic and how it relates to the purpose of the VADA Program. (500 word maximum)

University of Manitoba

NSERC CRSNG

University of Victoria

What are your career aspirations? (250 word maximum)

What non-academic qualifications (extracurricular, volunteer, leadership experience outside of an academic research context) make you a good fit for the VADA Program? (250 word maximum)

What do you expect to gain from the VADA Program? How will the VADA Program advance your career goals? (500 word maximum)

List the agencies to which you have applied for funding for the 2023/24 academic year.

List any awards or funding you have already secured for the 2023/24 academic year.

Inclusion, Diversity, Equity and Accessibility

The VADA Program committed to being an inclusive program. As part of this commitment, we seek to diversify our program and increase the representation of the four designated groups: women, Indigenous peoples, racialized persons/persons of colour and persons with disabilities.

In order to do this, we ask that you complete the following questions. **The completion of this form is voluntary.** The information you provide will be used to track the numbers of applications received from members of the designated groups. It may also be used in the selection of candidates for admission to the program. However, only individuals qualified for the program will be considered. Your response will be kept confidential.

Further information can be obtained by contacting the Diversity & Inclusion Facilitator at 204-474-8371.

Do you self-identify as a woman?

Yes   No

Are you an Indigenous person? (A descendant of the original peoples of North America. An Indigenous person MAY be First Nations, Métis or Inuit)

Yes   No

Racialized Person: (sometimes referred to in government documents as "a member of a visible minority") A Racialized Person in Canada is someone (other than an Indigenous Person) who self-identifies as non-White in colour or non-White in racial origin, regardless of birthplace or citizenship. Do you self-identify as a "racialized person"?

Yes   No

Person with a Disability(s) - A Person with a disability includes someone who has a physical, intellectual or learning disability, a sensory impairment, and/or a mental/emotional health issue, which in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others.

Do you self-identify as a person with a disability?

Yes   No

Agreement and Signature

The undersigned hereby certify that:
1. I certify that all information contained in the application and all information I will provide later (electronically or otherwise) related to this application, including any amendments, are and will be accurate and complete.
2. I authorize VADA to exchange all information regarding my application for reporting purposes.

Student Name (print):	
Student Signature:	
Date:	

Section to be completed by the Student's Supervisor or Proposed Supervisor

I have reviewed and support _____ (student's name) application to the VADA Program. I have or will write and submit a letter of reference on behalf of the applicant.

I am:
☐ A current member of the VADA Program Team
☐ Applying to be a member of the VADA Program Team

Supervisor Name (print):	
Supervisor Signature:	
Date:	

University of Manitoba   NSERC CRSNG   University of Victoria

The VADA Program

Visual and Automated Disease Analytics Graduate Training Program

Current VADA Program Team Members

Name	Department/School/Faculty	University	Areas of Expertise
Pourang Irani	Computer Science	Manitoba	Human-computer interaction; information visualization
Lisa Lix	Community Health Sciences	Manitoba	Analysis of longitudinal/repeated measures data; quality of administrative health databases; multivariate analyses of quality life and behavioural health outcomes
Andre Kushniruk	Health Information Science	Victoria	Evaluation of the effects of technology; human-computer interaction; cognitive science
Elizabeth Borycki	Health Information Science, Social Dimensions of Health	Victoria	Patient and health information technology safety, quality and usability; health information technology management and strategy
Xuekui Zhang	Mathematics and Statistics	Victoria	Statistical genomics, bioinformatics, machine learning, mixture models, design of clinical trials
Laura Cowen	Mathematics and Statistics	Victoria	Statistical methods to study population dynamics, particularly through the use of capture-recapture methods and applications
George Tzanetakis	Computer Science	Victoria	Digital signal processing; machine learning; human and computer interaction
Alex Thomo	Computer Science	Victoria	Algorithms for big graphs; distributed data; MapReduce; social networks
Julien Arino	Mathematics	Manitoba	Mathematical population dynamics in epidemiology
Jason Leboe-McGowan	Psychology	Manitoba	Human cognition, specifically learning and memory
Gary Van Domselaar	Bioinformatics	Manitoba	Microbial bioinformatics including metagenomics, molecular diagnostics, computational genomics and pathogenomics

Pingzhao Hu	Biochemistry & Medical Genetics	Manitoba	Novel machine learning and statistical algorithms related to bioinformatics and statistical genetics
Depeng Jiang	Community Health Sciences	Manitoba	Longitudinal analysis and multilevel models, person-centered statistical approaches (latent class analysis and growth mixture models), structural equation models, statistical methods for designing clinical studies and drug discovery, dynamic prediction and precision medicine on oncology, and mental health program evaluation.
Natalie Knox	Medical Microbiology	Manitoba	Microbial genomics and bioinformatics for infectious disease surveillance and detection.
Meaghan Jones	Biochemistry and Medical Genetics	Manitoba	Environmental exposures in the prenatal and early childhood periods, focusing on when and how these become biologically embedded.
Meghan Azad	Pediatrics and Child Health	Manitoba	Role of infant nutrition and the microbiome in child growth, development and resilience.
Aleeza Gerstein	Microbiology and Statistics	Manitoba	Empirical and computational methods to understand the acquisition of drug resistance and virulence in human fungal pathogens.
Lyle McKinnon	Medical Microbiology and Infectious Diseases	Manitoba	Causes and consequences of inflammation in the female genital tract, HIV target cells including those that home to the gut, and HIV transmission and acute infection.
Celine Nadon	Medical Microbiology	Manitoba	Design and delivery of national and international laboratory-based surveillance and outbreak response for enteric diseases.

Max Turgeon	Computer Science	Manitoba	Dimension reduction methods for high-dimensional data
Abdul Roudsari	Health Information Science	Victoria	Telecare and e-health, Advanced and intelligent methods for the acquisition, processing and interpretation of data from the Electronic Patient Record.
Britt Drögemöller	Biochemistry & Medical Genetics	Manitoba	Pharmacogenomics and precision medicine.
Miguel Uyaguari	Microbiology	Manitoba	Microbiomes and antibiotic resistance genes in the aquatic environment.
Alex Kuo	Health Information Science	Victoria	Data interoperability; Health database & data warehousing; AI & Data Mining application in healthcare, and e-health.
Hezhao Ji	Medical Microbiology and Infectious Diseases	Manitoba	Development of new methodologies for HIV diagnosis and HIV drug resistance testing; HIV viral evolution and molecular HIV epidemiology; applications of next generation sequencing (NGS) technologies in HIV/AIDS; HIV/AIDS-revelant metagenomics studies.