



# The VADA Program

Visual and Automated Disease Analytics  
Graduate Training Program

## Student Application Form for 2021/22

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 this application form, original transcript(s) containing information about the last 60 credit hours of coursework (**must be official transcripts mailed directly from institution to a address listed at the end of this form**), and a current curriculum vitae. If an official transcript cannot be provided by January 29th, an electronic or unofficial copy will suffice and a provisional offer may be made. However, an official copy will be required in advance of full acceptance into the program. **Arrange for two referees to send letters of reference to be submitted to the email address or office address listed at the end of this form.** Letters must be on letterhead and signed by the referee.

**Deadline for Submission of all Application Requirements: January 29th, 2021 at 11:59 pm CST**  
Please Submit Applications to: [vada.program@chimb.ca](mailto:vada.program@chimb.ca)

### Applicant Information

Last Name	
First Name	
Street Address	
City	
Province/State, Country	
Postal Code	
Phone	
E-Mail Address	
Citizenship/Landed Immigrant Status	
Gender	
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.*

### Graduate Program Information

Graduate Program (registered or applied to)	
University Student Number (if available)	





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Student Status (Full time/Part time)	
University	
Department/School	
Degree Sought	<input type="checkbox"/> Master's <input type="checkbox"/> PhD
Program Status (as of September 2021)	<input type="checkbox"/> Full Time <input type="checkbox"/> 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	<input type="checkbox"/> Analytics <input type="checkbox"/> 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 2021/22 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 2021/22. 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

## Thesis/Dissertation Title (or proposed title)

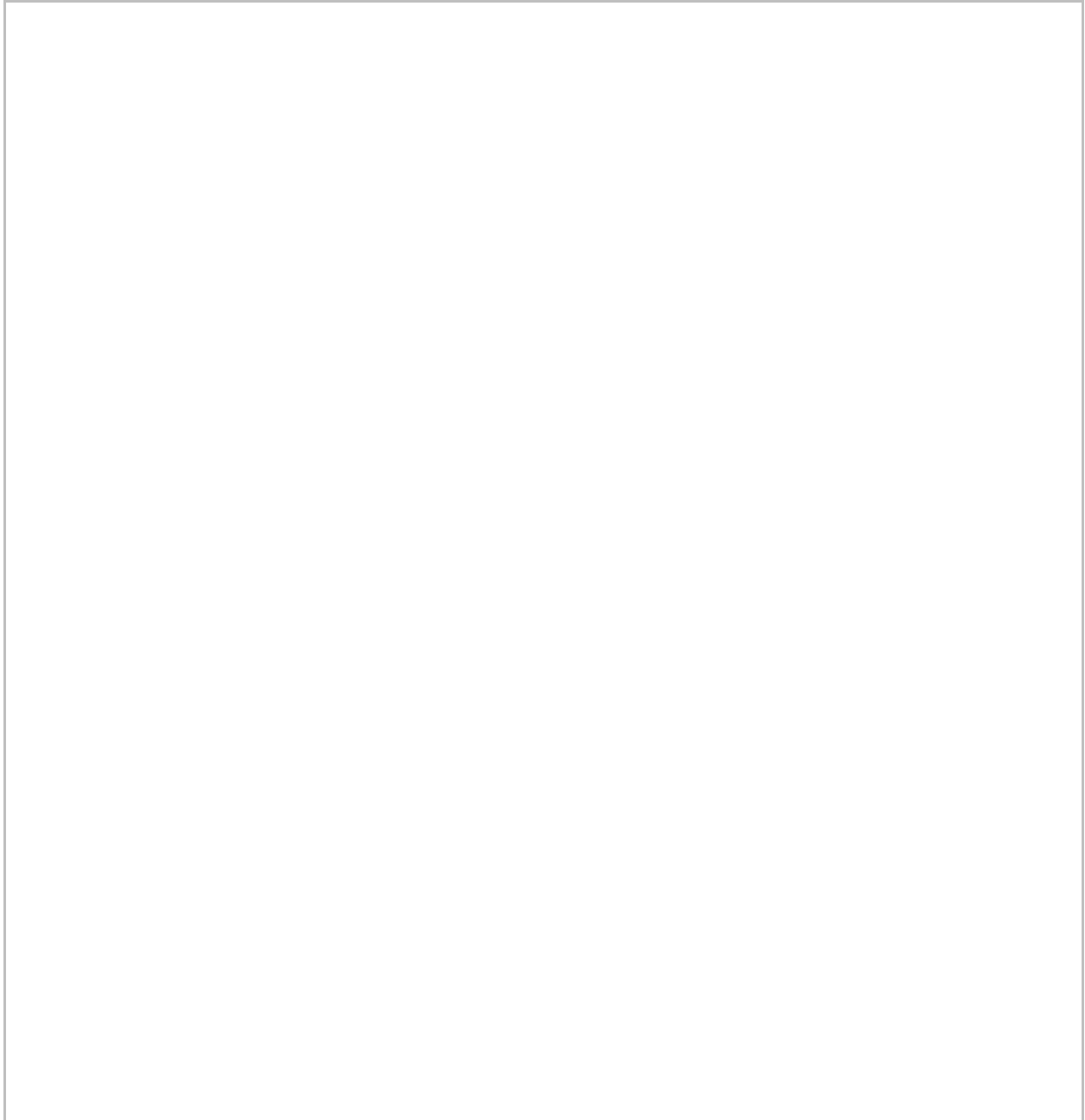




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## List of Publications and Presentations





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



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What are your career aspirations? (250 word maximum)





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



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List the agencies to which you have applied for funding for the 2021/22 academic year.

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List any awards or funding you have already secured for the 2021/22 academic year.

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## 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:	





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## 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 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:	

### Please submit your application to:

VADA Program Coordinator  
 George and Fay Yee Centre for Healthcare Innovation  
 Third floor, Chown Building  
 753 McDermot Avenue  
 Winnipeg, MB, Canada R3E 0T6  
 Email: [vada.program@chimb.ca](mailto:vada.program@chimb.ca)





# The VADA Program

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## 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
Karen Kobayaski	Sociology, Social Dimensions of Health	Victoria	Intersection of structural, cultural, and individual factors/experiences affecting health and aging in the Canadian population
Natalie Knox	Medical Microbiology	Manitoba	Microbial genomics and bioinformatics for infectious disease surveillance and detection
Depeng Jiang	Community Health Sciences	Manitoba	Longitudinal analysis and multilevel models, person-centered statistical approaches





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			(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.
Meghan Azad	Pediatrics and Child Health	Manitoba	Role of infant nutrition and the microbiome in child growth, development and resilience.
Meaghan Jones	Biochemistry and Medical Genetics	Manitoba	Environmental exposures in the prenatal and early childhood periods, and when and how these become biologically embedded.
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 in MSM in Kenya and Thailand.