NAME AND AFFILIATION

Pedrum Mohammadi-Shemirani, PhD candidate

McMaster University, Department of Medical Sciences

WORK EXPERIENCE

January – April 2018 ARINAI INC.

Intern

 Helped develop business plan for a startup applying deep learning to language translation

January – April 2017 POPULATION HEALTH RESEARCH INSTITUTE

Graduate Research Assistant

 Used Bionano Genomics platform to identify genetic structural variation responsible for rare diseases in humans

September 2015 – 16 POPULATION HEALTH RESEARCH INSTITUTE

Volunteer Research Assistant

 Created bioinformatics pipeline for Mendelian randomization analysis using R and shell scripting

ACADEMIC AND TRAINING BACKGROUND

2016 – present MCMASTER UNIVERSITY

PhD Medical Sciences – Cancer and Genetics (*transferred in May 2018*) Thesis: "Prediction of cardiometabolic diseases using genetic and molecular

data"

PI: Dr. Guillaume Paré

2011 – 2015 WESTERN UNIVERSITY

BMSc Clinical Biochemistry

Thesis: "Characterization of wild-type and mutant vinculin- α -catenin protein

complexes"
PI: Dr. Eric H. Ball

TEACHING EXPERIENCE

January – April 2018 MCMASTER UNIVERSITY

Graduate Teaching Assistant

HTHSCI 2K03 – "Inquiry II: Cell Biology"

January – April 2018 MCMASTER UNIVERSITY

Graduate Teaching Assistant

HTHSCI 1LL3 - "Human Biochemistry I"

January 18, 2018 CANADIAN SOCIETY FOR EPIDEMIOLOGY AND BIOSTATISTICS (MCMASTER)

Workshop Leader

Health Research Skills Workshop – "Interpreting data in health sciences"

January – April 2017 MCMASTER UNIVERSITY

Graduate Teaching Assistant

HTHSCI 1LL3 – "Human Biochemistry I"

SELECTED ACCOMPLISHMENT AND HONOURS

2017	Teaching and Learning Foundations Certificate, McMaster University
2016 – 2017	Graduate Scholarship, McMaster University
2011 – 2015	Dean's Honor List, Western University
2011	Entrance Scholarship, Western University

SELECTED PEER-REVIEWED PUBLICATIONS

* Indicates primary author

1. Mohammadi-Shemirani P*, Sjaarda J, Gerstein HC, Treleaven DJ, Walsh M, Mann JF, Hess S, Paré G. Serum trefoil factor 3 as a biomarker for early kidney dysfunction and incident chronic kidney disease in individuals with dysglycemia. (*in preparation*)

SELECTED CONFERENCE ABSTRACTS

1. Mohammadi-Shemirani P, Chong M, Sjaarda J, Gerstein HC, Hess S, Paré G. Effect of free testosterone levels on cardiovascular outcomes: a Mendelian randomization analysis. (poster presentation at 2018 European Society of Cardiology Congress)

SELECTED PRESENTATIONS

1. Mohammadi-Shemirani P, Sjaarda J, Gerstein HC, Treleaven DJ, Walsh M, Mann JF, Hess S, Paré G. Identification of diagnostic biomarkers for CKD in dysglycemia: a Mendelian randomization analysis. *Oral presentation at the Thrombosis and Atherosclerosis Research Institute Graduate Seminar Series, Hamilton, Canada*. October 2017.

RELEVANT SKILLS

- Proficiency with R, Shell, and Excel
- Familiarity with Python (e.g. Pandas, Numpy, Scipy, Scikit-learn), MATLAB, and SQL