Andrew Masoud

M. B. B. Ch (MD), Ph.D. Candidate Nephrology Division, Department of Medicine Supervisor: Dr. Allan G. Murray

Andrew is a motivated, self-directed and a well-organized PhD candidate at the Department of Medicine University of Alberta, with a medical background as an MD/Full-Time physician for 1-2 years.

As a medical student, his leadership experience included leading a health survey team back home to visit rural water supplies, collect data about water purification and take samples to the central laboratories towards achieving healthier water supplies for the nearby villages. He shared in the data collection, analysis and preparation of graphs for the above-mentioned project, prepared an abstract for the Faculty of medicine annual research day oral and poster presentations. Andrew is keen to enrich his medical research knowledge everyday through searching up-to-date scientific literature in vascular biology, transplantation immunology and learn various laboratory techniques with professional training to translate experimental laboratory work into promising clinical trials (i.e. from bench to bedside).

Since started his PhD program, he developed expertness in performing focused research on vascular biology, organ transplantation and advanced Immunology literature. He is confident performing inhalational intravenous anesthesia, microscopic coronary artery isolation, animal injections, suturing, post-operative pain management, IHC, Western blot, flow cytometry, RTPCR, confocal microscopy, conventional transmission electron microscopy, Immunofluorescence, cell culturing, in vitro angiogenesis assays and human immune cell isolation from fresh blood.

His current work "Masoud AGT, Lin J, Farhan MA, Fischer C, Zhu LF, Zhang H, et al. Vascular repair is promoted by apelin directed endothelial cell differentiation following immune-mediated injury. J Clin Invest. 2019; published in the Journal of Clinical Investigations (Impact factor 12.282 in 2018), serves as a foundational study to prompt exploration of the clinical utility of determining reparative endothelial biomarker expression in a variety of vascular diseases including transplantation and autoimmune vasculitis"

Awards:

- 1. The University of Alberta Doctoral Recruitment Scholarship (5,000 CAD, in 2019).
- 2. The Alberta Graduate Excellence Scholarship (12,000, 2019-2020).
- 3. First-place basic science poster presentation at the Department of Medicine Research Day, University of Alberta (500 CAD, 2019).
- 4. The Faculty of Medicine and Dentistry Graduate Student Med Star Award (1000 CAD, 2020)

Volunteering recognition:

A Vice President Academic of the Department of Medicine Graduate Student

Association (DOM-GSA) for the academic year 2019-2020.

Career goals to consider are as follows:

- 1. A Clinician Scientist, who is keen to study the fields/aspects of the translational transplant immunology science, towards achieving better health and quality-of-life outcomes for hospitalized transplant patients.
- 2. A Medical Doctor with an avid interest in the developing of innovative curative solutions for late solid organ transplantation rejection in the long run.
- 3. Clinical Research Coordination with a specific focus on organ transplantation projects.
- 4. A Clinical or Translational Research Associate.
- 5. Skilled Laboratory Technician, to help scientists as well as trainees in carrying out innovative research studies via conducting highly advanced and sophisticated surgical and molecular laboratory techniques.