Comprehensive Research Experience for Medical Students (CREMS)

2022 Supervisor and Project Information Form

Please complete and return via email ONLY to crems.programs@utoronto.ca by February 18, 2022.

**Supervisor Information**

*NOTE: CREMS will not support pre-determined pairings of students and supervisors. Supervisors must agree to open their projects to all students and interview all that are interested.*

**Name:**
Istvan Mucsi, M.D., Ph.D.

**Email:**
istvan.mucsi@utoronto.ca

**Department:**
Institute of Medical Science

**Hospital/Research Institution:**
Toronto General Hospital, UHN

**SGS Department(s) (if applicable):**
Click or tap here to enter text.

**ORCID ID** (see https://orcid.org/ - If you do not have an ORCID ID we encourage you to sign up for one):
orcid.org/0000-0002-4781-4699

**Location of Work:**
Toronto General Hospital

**Field of Research (up to 4 keywords):**
kidney transplantation/outcomes research/patient reported outcomes/health equity

**Student contact time** (number of hours per week YOU are available to the student for any concerns or to review progress):
2-4 hours per week during academic year and 6-8 hours per week during the summer
Project Information

**NOTE:** If this project is selected, this information will be posted on CREMS website for interested student applicants to view research opportunities.

**PROJECT TITLE:**
Electronic Patient Reported Outcome Measures to Improve Patient Centered Solid Organ Transplant Care

**PROJECT DESCRIPTION:**
Including background, aim(s), method(s) and significance of the project. **Maximum 300 words.**

**Background and Significance:** Access to kidney transplantation (KT) is dramatically reduced among racialized communities in Canada, with analyses reporting 50–70% lower likelihood of KT among Indigenous Peoples, East Asian, South Asian, and African Canadians compared to White Canadians. **Despite several studies highlighting this issue, little has been done to address it,** therefore, these inequities still exist. In our project we will carry out the following program to increase access to LDKT in racialized communities through **systematic engagement with patients, donors, and community leaders** by developing and evaluating culturally competent and safe services to support access to LDKT.

**Aim and Methods:** A **mixed methods study** will be completed to engage with transplant candidates, recipients, living donors, and community members. Using **qualitative research** (focus groups, interviews) we will identify barriers in the current care delivery model for education, support, and assessment for LDKT, and obtain feedback on how best to modify the current process to improve equitable access to LDKT (**Aim 1**). Using **validated questionnaires** in a cohort (n~600) of patients with ESKD, we will assess transplant knowledge, attitudes and readiness to consider and accept LDKT. We will also obtain this information in the communities using an **eSurvey**, translated to 8 languages used in these communities (**Aim 2**).

With our community partners, patients, donors, health care staff and administrators, we will develop **new clinical pathways** (**Aim 3**) that may include:
- Culturally competent educational materials and methods of delivery
- Peer support networks of prior transplant recipients and donors
- Cultural competency training for transplant and donation health care staff
- Community-based, trained navigators to work within transplant programs to facilitate culturally competent education and evaluation of transplant candidates and donors.

A **one-year feasibility pilot** (**Aim 4**) will be conducted to evaluate the costs, benefits and feasibility of implementing culturally tailored clinical pathways to support LDKT.

**Is this project remote-capable (in case of new restrictions) or have an alternative remote option?**
- ☒ Yes, remote capable
- ☐ No

☐ Yes, alternate remote option. **Please specify (100 words max):** Click or tap here to enter text.

**If human subjects are involved, have the appropriate Research Ethics Board approvals been obtained?**
- ☒ Yes
- ☐ No
- ☐ Not Applicable
If yes, please list the application submission date:

Do you expect this work will be published?
☒ Yes ☐ No ☐ Uncertain / Other
Research Environment and Student Roles and Responsibilities

Please be specific as possible. Please describe the research environment, including availability of required facilities/equipment/expertise, supervisor’s experience and mentorship plans. Please clearly outline the student role(s) and responsibilities related to the project, potential educational value, and indicate who will serve as the student’s direct report for daily oversight (PI, PHD student, technician, etc.). Maximum 300 words.

CREMS candidate’s role: Literature review; patient recruitment; data entry; review of patients’ charts; quantitative analysis using STATA; qualitative analysis using NVIVO; preparing abstracts, posters for conferences; writing manuscripts.

The CREMS candidate will report directly to Dr. I. Mucsi, supported by Ms. S. Macanovic (research analyst, student manager). Dr. Mucsi will dedicate 2-4 hours per week during academic year and 6-8 hours per week during the summer, all for 1:1 discussion of the research project.

The student will become integrated into the Kidney Health Education and Research Group (www.nefros.net) that currently co-lead by Drs. I. Mucsi (transplant nephrology) and M. Novak (psychiatry) and includes a large multidisciplinary and interprofessional collaborative research network (>15 researchers across Canada and USA), patient and community partners.

Research activities are managed by two research analysts (Ms. H. Ford and Ms. S. Chahal) and research associate (Ms. E. Edwards). The student group is managed by our student manager (Ms. Macanovic) and data team manager (Mr. N. Edwards). Our student group has 4 full-time master’s students, ~20 part-time undergraduate research students, and ~15 part-time undergraduate data/IT students. The CREMS candidate will likely lead a group of undergraduate students in this project.

Training support will be provided for the CREMS candidate through our structured internal curriculum (archived presentations and webinars, and ongoing live seminars) organized by our research education coordinator (Ms. Macanovic) and data team manager (Mr. Edwards), and supported by our biostatistician partner (Dr. E. Huszti). The methodological training is designed to promote development of the students towards performing future, independent research. Students have generated abstracts from their research for national and international conferences. Longterm students have contributed to original research manuscripts as co- or even first authors.

The CREMS candidate may also participate in additional training programs organized by the Canadian Donation and Transplant Research Program (https://cdtrp.ca/en/platforms/education-and-training/).