



UNIVERSITY OF TORONTO  
FACULTY OF MEDICINE



Medical Alumni Association  
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Comprehensive Research  
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Medical Alumni Association & CREMS Programs  
Dr. Elva May Rowe Fund

PLEASE PROVIDE A COPY OF THE ON-SITE SUPERVISOR'S CV. THIS IS REQUIRED IN ORDER TO PROCESS YOUR APPLICATION

PLEASE SUBMIT THIS COMPLETED FORM TO [CREMS.PROGRAMS@UTORONTO.CA](mailto:CREMS.PROGRAMS@UTORONTO.CA) BY **FEBRUARY 25, 2019**

*PART A: SUPERVISOR AND ON-SITE SUPERVISOR CONTACT INFORMATION*

U OF T RESEARCHER	
NAME:	Dr. Arun V. Ravindran
EMAIL:	<a href="mailto:arun.ravindran@camh.ca">arun.ravindran@camh.ca</a>
DEPARTMENT:	Psychiatry
SGS (please indicate where)	Professor and Director, Global Mental Health and the Office of Fellowship Training, Department of Psychiatry; Institute of Medical Sciences, University of Toronto
Selected Publications (3 most recent and relevant to the project)	<p><a href="#">Interventions for perinatal depression in low and middle-income countries: A systematic review.</a> Gajaria A, Ravindran AV. Asian J Psychiatr. 2018 Oct;37:112-120. doi: 10.1016/j.ajp.2018.08.014. Epub 2018 Aug 17. Review.</p> <p><a href="#">Childhood emotional abuse, physical abuse, and neglect are associated with theory of mind decoding accuracy in young adults with depression.</a> Rnic K, Sabbagh MA, Washburn D, Bagby RM, Ravindran A, Kennedy JL, Strauss J, Harkness KL. Psychiatry Res. 2018 Oct;268:501-507. doi: 10.1016/j.psychres.2018.07.045. Epub 2018 Aug 2.</p>



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	<a href="#">Depression, anxiety, and post-traumatic stress disorder among youth in low and middle income countries: A review of prevalence and treatment interventions.</a> Yatham S, Sivathasan S, Yoon R, da Silva TL, Ravindran AV. Asian J Psychiatr. 2018 Dec;38:78-91. doi: 10.1016/j.ajp.2017.10.029. Epub 2017 Oct 31. Review.
<b>ON SITE SUPERVISOR</b>	
NAME:	<b>Dr. Shehan Williams</b>
LOCATION OF PLACEMENT:	University of Kelaniya Teaching Hospital, Sri Lanka
EMAIL:	<a href="mailto:shehanwil@gmail.com">shehanwil@gmail.com</a>
AREA OF RESEARCH:	Psychiatric presentations in primary care, cultural and gender differences

**PART B: PROJECT INFORMATION**

**PROJECT TITLE: Evaluating traits that influence the development of depression in Sri Lankan patients suffering from diabetes mellitus**

**PROJECT/PROGRAM/INSTITUTION BACKGROUND INFORMATION (MAX 500 WORDS):**

Diabetes mellitus is a heterogeneous disorder that can result in severe morbidity with substantial emotional impact. In recent decades, research has also focussed on the mental health comorbidities associated with diabetes. The occurrence of depression is known to be 2-fold greater in individuals suffering from diabetes, which can also be linked to poor self-care in relation to treatment, low overall quality of life as well as increased long-term complications and rates of unemployment. Diabetic individuals can also suffer from anxiety in either the presence or absence of comorbid depression. As such, the American Diabetes Association recommends that healthcare practitioners regularly screen patients for mental health afflictions such as depression, distress, anxiety and cognitive impairment. In developing countries, the lack of adequate mental health resources for patients can also exacerbate the emotional impact of the disorder.



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Among the countries in South Asia, Sri Lanka (SL) is an Asian low middle-income country (LMIC) with a multiethnic population of 20 million, comprising Sinhalese, Tamils, Moors & Burghers. It has seen centuries-old racial tensions leading to a prolonged civil war & was hit by a major tsunami in 2004, taking resources away from needed development. These catastrophes led to thousands of deaths & displacements. The resulting grief, together with loss of social & family infrastructure & adverse economic impact created significant collective trauma. Pre-existing adverse social determinants, e.g. poverty, further compounded the impact, with significant deleterious effects on health & development, including those with chronic medical conditions.

The aim of this project is to conduct a pilot evaluation of 400 patients (up to 65 years of age) treated for diabetes mellitus at the University of Kelaniya Teaching Hospital, and to document the related illness characteristics, treatment details and associated complications. We will specifically assess the relationship between diabetes and depression while examining personality traits using the NEO Five Factor Inventory. A history of mental illness and/or behavioural problems will also be evaluated.

It is anticipated that the data from this project may shed light on personality traits and other factors associated with the development of mental health comorbidities in Sri Lankan patients suffering from diabetes mellitus, and help develop preventative strategies in relation to LMICs.

Our group has been successful in obtaining funds from the CREMS Program for the last 6 years in sponsoring 2 UofT students for research work in Sri Lanka. The funding allowed substantial project work for the selected trainees, with the obtained data disseminated via presentations and publications by the students concerned.

### **STUDENT ROLES/RESPONSIBILITIES (PLEASE BE AS SPECIFIC AS POSSIBLE):**

- Work under supervision to review patient charts, interview patients and family members and collect relevant data
- Develop database and analyze data
- Produce final report and disseminate the specific findings by presentations and publications.

- What, if any, second language is required for the student to successfully complete this project?



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English is spoken widely in Sri Lanka. Knowledge of Tamil and/or Sinhalese would be useful. However, it is anticipated that the students will work closely with a senior resident, who would be fluent in local languages and in English.

- Is this project for 1 or 2 students to complete?  
2 students
- How long have you worked with the on-site supervisor and briefly describe your working partnership:

I have collaborated for over 15 years with Dr. Shehan Williams, who is Head of the Department of Psychiatry at the University of Kelaniya, which is located in Ragama. There is an official MOU between the Departments of Psychiatry at the University of Toronto and the University of Kelaniya. In association with this MOU, a collaborative clinician-scientist training program is currently underway at the University of Kelaniya, and Dr. Williams is the supervisor of one of the senior physician trainee enrolled in the program. He has also supervised UToronto students on CREMS-sponsored international research over the past 4 years, who had very good learning experiences, resulting in several presentations and publications related to their projects. Please note that Dr. Arun Ravindran and Dr. Shehan Williams also jointly hold a 2-year grant with the Templeton Foundation to implement programs for improving character development in Sri Lankan youth.

- Have you visited the city/town where the student will be placed? If yes, when was your last visit?

I visit Sri Lanka frequently for global health work, and regularly spend time at the University of Kelaniya. I was last there in November 2018 to work on collaborative projects with local faculty at the University of Kelaniya Teaching Hospital.

- If human subjects are involved, has Ethics been obtained (note: written proof or an email indicating protocol approval may be requested prior to the student's arrival at the on-site location)?

Ethics approval has not yet been obtained. Application for ethics approval will be made as soon as the successful student candidates are selected.