Supervisor & Project Information Form

Please complete and return via email ONLY to gdip.hres@utoronto.ca by Monday, November 2, 2020

**Supervisor Information**

*MUST have unrestricted University of Toronto School of Graduate Studies (SGS) appointment (to independently supervise graduate students)*

<table>
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<tr>
<th>Name:</th>
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<tbody>
<tr>
<td>Meng-Chuan Lai, MD, PhD</td>
<td><a href="mailto:mengchuan.lai@utoronto.ca">mengchuan.lai@utoronto.ca</a></td>
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**SGS Department:**

1. Institute of Medical Science (IMS) [primary]
2. Department of Psychology [cross-appointed]

**Field of Research:**

Psychiatry, Child and Youth Mental Health, Neurodevelopmental Disorders, Sex and Gender, Cognitive Neuroscience

**Research Institution affiliation (if applicable):**

1. Margaret and Wallace McCain Centre for Child, Youth & Family Mental Health, Azrieli Adult Neurodevelopmental Centre, and Campbell Family Mental Health Research Institute, Centre for Addiction and Mental Health
2. SickKids Research Institute

**Location of Work:**

Centre for Addiction and Mental Health & The Hospital for Sick Children

**Student contact time (number of hours per week YOU are available to the student for any concerns or to review progress):**

1-2 hours/week (and as needed)
Project Information (will be posted on GDipHR website for student access)

**TITLE:**

Understanding the clinical characteristics, health care experiences, risk and protective factors associated with suicide in individuals with autism

**DESCRIPTION (MAX 500 WORDS):**

Individuals with autism (1-2% of the population) face unique and pervasive challenges in everyday life and experience high rates of mental health disorders, including depression (11% of people with autism). Recent studies show that there are high rates of suicide and suicidal thinking in individuals with autism (up to 72% with suicidal ideation), with data indicating higher risk in depressed autistic individuals, autistic females, and those without intellectual disability. Population data from Europe suggest that the odds of completed suicide may be as high as 9 times greater in people with autism without intellectual disability than in the general population, and the majority of individuals with autism report suicidal thinking. However, very limited information is available to understand factors associated with suicide in Canadians with autism. We do not know the overall rates of completed suicide and suicidal behaviour, the factors contributing to increased risk for suicidal thinking and behaviour, nor if there are any protective factors specifically in the autism population. As a result, the real risk of suicide in people with autism is overlooked in our care systems. We need more information to know how to build and shape mental health services and to increase awareness among front-line clinicians (e.g. family physicians, paediatricians, emergency department staff) providing care to people with autism who may be critical for prevention and care efforts.

We have recently established a new collaborative research program across clinicians and researchers at the Centre for Addiction and Mental Health (CAMH), The Hospital for Sick Children (SickKids), and UofT to improve our understanding of the prevalence, demographic and clinical characteristics associated with suicidal behaviour in people with autism, with a long-term goal of creating tailored suicide prevention and intervention approaches for this vulnerable population. Our program currently includes 4 complementary main Projects with different research approaches/methodologies: (1) an Ontario total population-based epidemiological study using health administrative data housed and linked at ICES (REB approved, starting); (2) a series of emergency department (ED) chart audit and analysis (REB approved, starting); (3) a qualitative study with autistic youth and their families to understand experiences related to past suicide (in preparation); (4) a clinical study to understand cognitive characteristics associated with suicidal thought and behaviour in autistic individuals (in preparation).
Findings will be integrated and discussed with our stakeholder advisors (i.e. youth and adults with autism and their families, via established participatory research framework at CAMH, and collaboration with community agencies such as Autism Ontario, as well as health care professionals) via regular Knowledge Translation (KT) meetings. The discussion will lead to: (i) meaningful ways to disseminate findings to health service providers and stakeholders to raise awareness of suicidal risk in people with autism and potential ways to address risk factors and promote protective factors; and (ii) co-developing suicide prevention and intervention strategies (e.g. unique ways of detecting and coping with suicidal risk) that are appropriate for the developmental background, individual and family characteristics, and life experiences of people with autism and their families.

If human subjects are involved, have the appropriate Research Ethics Board approvals been obtained?

☒ Yes ☐ No ☐ Application Submitted (Date: ________________)

Do you expect this work will be published within the 20 months?

☒ Yes ☐ No ☐ Uncertain / Other

Student Roles & Responsibilities (please be as specific as possible)

1. The student is expected to co-design (with support from the PI and research team) and lead a sub-project within Project 2 (i.e. ED chart audit and analysis), including conceptualization, data extraction, qualitative and quantitative data synthesis and statistical analysis, result presentation (e.g. in local and international conferences), and serve as a lead author in a peer-reviewed academic publication for this sub-project. The student will be supported by the PI and research team members with expertise in chart audit, qualitative research, and statistical analysis, to complete this sub-project.

2. The student is expected to actively participate in research activities and team meetings involving Project 1 (i.e. epidemiological study) and Project 2 in order to gain clinical and scientific knowledge on the research of suicide, mental health and developmental disabilities (including autism). The student is expected to be involved in other sub-projects within
Project 1 and Project 2 that are linked with the sub-project led by the student, to contribute to the conceptualization, data extraction, data analysis, data interpretation, presentation and writing up of findings of the other sub-projects.

3. Optional: If the student is interested in learning more about qualitative research methodology or cognitive research approaches/analysis, opportunities can be offered within Project 3 and Project 4 (both in preparation) for the student to participate in research design and data collection, and potentially data analysis and result writing/presentation.

4. Optional: If the student is interested in learning more about Knowledge Translation (KT), opportunities can be offered for the student to actively work with our stakeholder advisors and participate in KT activities.

Indicate who will serve as the student’s direct report for daily oversight (PI, PhD student, technician, etc...)

Dr. Meng-Chuan Lai (PI)
Dr. Patrick Jachyra (Post-doctoral fellow)
Professor Yona Lunsky (Co-Investigator)

Indicate to what extent the student’s research activities could, if necessary, be completed remotely.

It is expected that the majority of the student’s research activities can be completed remotely, including data management/analysis of the sub-project led by the student (i.e. chart audit without direct patient contact), research supervision and team meetings, presentations, writing up of results, and KT meetings. If the student is to be involved in optional activities as indicated above, it is only if the student decides to be involved in participant in-person assessment (part of Project 4) or in-person KT activities, that in-person participation will be arranged.