Title: Examining the impact of cannabis on sleep

Background: Emerging evidence suggests that cannabis may alter sleep (e.g. sleep architecture and sleep-related physiology [e.g. sleep-disordered breathing, periodic limb movements of sleep, etc.]). However, data supporting these associations is inconclusive. The Sunnybrook Sleep Laboratory has collected a detailed set of demographic, clinical (including cannabis use), and physiological variables from approximately 10,000 adults who underwent daytime and overnight sleep studies between 2004 till present.

Study Objectives: The primary objective of this study is to use a large database of sleep study data to determine how self-reported cannabis use impacts objectively assessed neurophysiological sleep parameters. Our secondary objective is to evaluate the relationship between use of cannabis and self-reported sleep parameters, ascertained by questionnaires patients completed on the day or night of their sleep study.

Methods: This will be a retrospective cohort study of previously collected data. We plan to search the database to examine whether self-reported use of cannabis impacts sleep architecture and sleep-related physiology (e.g. sleep-disordered breathing, periodic limb movements of sleep, etc.) and self-reported sleep quality. All patients who underwent in-laboratory daytime or nighttime sleep studies at the Sunnybrook Health Sciences Sleep Laboratory will be examined; medication and recreational drug use (including cannabis use) are routinely noted during each sleep study, as are several clinical questionnaires and the sleep technologist scored neurophysiological data.

Student Role: The student will assist with data extraction from the database. He/she will also assist with computing the statistical analyses for the study and preparation of the manuscript for publication. Finally, if possible, the student will also remotely join Dr. Boulos in his clinics and learn about various sleep and stroke disorders.