

# Interdisciplinary Medicine Course

**IMED7104: 1.5 credits**

## ***Neural Stem Cells: Biology and Regenerative Medicine Applications***

**March 3 - April 21, 2021**

**Department of Physiology and Pathophysiology  
Regenerative Medicine Program**

**Course Co-Coordinators:**

Dr. Soheila Karimi ([Soheila.Karimi@umanitoba.ca](mailto:Soheila.Karimi@umanitoba.ca))

Dr. Eftekhar Eftekharpour ([Eftekhar.Eftekharpour@umanitoba.ca](mailto:Eftekhar.Eftekharpour@umanitoba.ca))

**Course Instructors:**

Dr. Soheila Karimi

Dr. Eftekhar Eftekharpour

Dr. Ben Lindsey

**Course description:** This course will discuss the current concepts in Neural Stem Cells from basic neurobiology (development, fate specification and maintenance) to their potential clinical applications in treating a broad range of neurological disorders through activation of endogenous cell population, cellular reprogramming, cell transplantation as well as gene and drug delivery. Neural stem cells play critical roles in the nervous system and ***the course is developed to build the necessary knowledge for graduate students and residents within all disciplines in neurosciences.***

**Prerequisite:** A basic course in biology or consent of the co-ordinator(s).

This course is a 1.5 credit hour for MSc and PhD students and is open to graduate students in all disciplines in Rady Faculty of Health Sciences.

**Format:** Each session will consist of 75% lecture time and 25% student participation on the related topics. The students will be informed about the topics prior to the lecture.

**Dates:** Sessions will be held weekly on the Bannatyne Campus **from March 3 to April 21, 2021**, and are tentatively slated for **Wednesdays 2:00- 4:45 p.m.**

For more information on the course and its content, please contact Dr. Soheila Karimi ([Soheila.Karimi@umanitoba.ca](mailto:Soheila.Karimi@umanitoba.ca)). A minimum of 3-4 students will be required to offer the course.