



# Advances in the Biology & Management of COVID-19

JUNE 3 & 4, 2021

This course will introduce the up-to-date key concepts in the biology, prevention, and management in the efforts to mitigate and contain the COVID-19 pandemic. Students will learn about the epidemiology and transmission of SARS-CoV-2 which has contributed to its dissemination worldwide. Topics will revolve around understanding the virus' biology, novel diagnostic approaches, it's impact on special populations, up-to-date therapeutic approaches as well as preventative strategies using vaccines and other public health measures.

## COURSE DIRECTORS

**Matthew P. Cheng, MDCM**

Assistant Professor, Divisions of Infectious Diseases & Medical Microbiology, McGill University

**Chen Liang, PhD**

Professor, Department of Medicine, McGill University

## CONTENT

In order to contain the COVID-19 pandemic, we need to increase diagnostic capacity and implement public health mitigation strategies. Effective measures will focus on the widespread administration of a safe and effective vaccine, as well as therapeutic approaches for both in and outpatients. There is plenty of evidence that COVID-19 has had a disproportionate impact on certain populations (e.g. people of certain socioeconomic status and ethnic origins) and understandings these differences will be paramount in containing this pandemic. This session of leading international experts will:

- Review the biology and transmission of SARS-CoV-2
- Discuss and highlight the epidemiology of the COVID-19 pandemic
- Present novel diagnostic strategies for SARS-CoV-2
- Discuss and debate the best therapeutic interventions for the management of inpatient and outpatients with COVID-19
- Highlight key differences in the manifestations of COVID-19 in special populations (including children, pregnant women, and disenfranchised individuals)

- Explore the role of technology in the management of COVID-19
- Present and debate the optimal vaccination strategy against COVID-19
- Understand and mitigate the impact of COVID-19 on mental health

## OBJECTIVES

By the end of the course, participants will be able to:

- Understand the basic properties of SARS-CoV-2 in the context of its biology, pathogenesis, transmission and epidemiology.
- Review various approaches to the management of inpatient and outpatients with COVID-19
- Summarize current evidence on the diagnosis of SARS-CoV-2 infection, and give examples of specific use cases
- Describe optimal public health mitigation strategies, including vaccination, against the COVID-19 pandemic, and highlight current gaps to be addressed in the future
- Present the impact of COVID-19 on social life, mental health, and at-risk populations

## TARGET AUDIENCE

- Clinicians and nurses
- Undergraduate students, graduate students, medical school students, postdoctoral fellows,
- Researchers and academics involved in SARS-CoV-2 research
- Funding agencies
- Product development partnerships
- Policy makers and public health implementers
- Community advocates and civil society

## ENROLMENT

Unlimited.

**2021 COURSES** To Register: <http://mcgill-idgh.ca/>



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