7.00 COVID-19, SARS-CoV-2 and the Pandemic

Tuesdays 11:30-12:30 Units: 1-0-1 Grade: P/D/F

Course description: Lectures by leading experts on the fundamentals of coronavirus and host cell biology, immunology, epidemiology, clinical disease, and vaccine and therapeutic development. This is an exploratory subject, open to undergraduate and graduate students.

Faculty: Richard Young, Facundo Batista and guest faculty, including Drs. David Baltimore, Victoria Clark, Kizzmekia Corbett, Anthony Fauci, Britt Glaunsinger, Akiko Iwasaki, Eric Lander, Michael Mina, Michel Nussenzweig, Shiv Pillai, Arlene Sharp, Skip Virgin, and Bruce Walker. Teaching Assistant: Lena Afeyan

September

- 1 COVID-19 and the pandemic
- 8 Coronavirus biology
- 15 Virology and lessons from the AIDS pandemic
- 22 Insights from the COVID-19 pandemic
- 29 Viral immunology

October

- 6 Target cells and the innate response
- 13 No lecture
- 20 The patient
- 27 Epidemiology

November

- 3 Immunology: T cells
- 10 Vaccines
- 17 Immunology: antibodies
- 24 No lecture: Thanksgiving

December

- 1 Therapeutics discovery
- 8 Rapid Research Response in a Pandemic

Bruce Walker, Ragon, MIT, MGH Britt Glaunsinger, HHMI David Baltimore, MIT/Caltech Anthony Fauci, NIAID Michel Nussenzweig, Rockefeller

Shiv Pillai, Ragon, MGH

Victoria Clark, Whitehead/MGH Michael Mina, Harvard

Arlene Sharpe, HMS, Brigham Kizzmekia Corbett, NIH Akiko Iwasaki, Yale

Skip Virgin, Vir Eric Lander, Broad Institute