

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

Wednesdays 9-10am

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. Bruce Walker, Anthony Fauci, Britt Glaunsinger, Shiv Pillai, Rochelle Walensky, Salim Karim, Victoria Clark, Arup Chakraborty, Shane Crotty, Amy Barczak, Andrew Ward, Dan Barouch, and Laura Walker.

Teaching Assistant: Kalon Overholt

September

8	Covid-19 and the Pandemic	Bruce Walker, Ragon, MIT, MGH
15	Insights from the Covid-19 Pandemic	Anthony Fauci, NIAID
22	Coronavirus Biology	Britt Glaunsinger, HHMI, UC Berkeley
29	Target Cells and the Innate Response	Shiv Pillai, Ragon, MGH

October

6	Public Health	Rochelle Walensky, Director, Centers for Disease Control
13	Covid-19: Looking Ahead at 2021	Salim S. Abdool Karim, CAPRISA/Columbia
20	The Patient	Victoria Clark, Whitehead/MGH
27	Vaccination Through the Ages: From Smallpox to COVID-19 and Beyond	Arup Chakraborty, MIT

November

3	Adaptive Immunity and Immune Memory to SARS-CoV-2 Infection and COVID-19 Vaccines	Shane Crotty, La Jolla Institute
10	The COVID-19 Clinic	Amy Barczak, Ragon, MGH, MIT and Harvard
17	Understanding the Structure of the Virus	Andrew Ward, DISCoBio, Scripps
24	No Class	

December

1	Covid-19 Vaccine Development	Dan Barouch, BIDMC/Ragon
8	Broadly Neutralizing Antibodies to Speed Pandemic Responses	Laura Walker, Director of Adimab

Note: Our speakers are among the leading scientists in diverse areas relevant to COVID-19. Some of these scientists are employed by biopharmaceutical companies; our selection of these speakers is not meant as an endorsement of these companies or their products.