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 Kari, 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
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.