The Biology of Pandemics

You're already familiar with COVID-19 as the disease that has disrupted normal daily life for the past months. But have you wondered about the virus itself, and how it affects the body? In this one-week online course, held jointly with the National Museum of Qatar and Weill Cornell Medicine - Qatar, you'll discover the biology of this pandemic and place it into the context of historical pandemics. You'll use mathematical tools to understand how scientists study the spread of the virus. Working with a group of peers, you will use computer simulations to explore the impacts of social distancing, travel restrictions, vaccination, or other pandemic response tools, and present your findings to the other participants.

Learning outcomes

In this summer course, you will:

- Develop a better understanding of the biology of SARS-CoV-2, the virus that causes COVID-19, and the immune response against the virus
- Develop a better understanding of how viruses may "emerge" and become pandemics
- Develop an understanding of how COVID-19 compares to previous pandemics, and of the tools used to track the spread of viruses
- Develop skills in team work, presentation, quantitative reasoning, and experimental design
- Discover the series of deadly diseases Qatar faced in the past

Program dates: July 5-9, 2020

Target Audience: High School Students

Requirements

- Students must possess a good foundation in biological sciences, math, English language proficiency and interest in pursuing career in the medical field.
- A scanned copy of their latest high school report.
- A scanned copy of their passport/ID card.
- Complete the online application before the deadline.

Deadline of application: June 20, 2020

For more information visit our website at: Qatar-weill.cornell.edu/prospective-students/