

# STEM Sites to Learn about COVID-19

**Education Resources for Parents and Educators** 

How to spot COVID19 Misinformation. Time Magazine. 3/16/20.

Corona Virus Comic for Kids

Exploratorium (https://www.exploratorium.edu/learn) Younger Children

<u>Computer Science Teachers Association</u> has a ton of epidemic simulations (some made by K12 students), great resources on COVID-19 especially how computer science is used to fight the disease

- Outbreak Squad Game: <a href="https://outbreaksquad.org">https://outbreaksquad.org</a>
- o Scratch Epidemic Simulation: <a href="https://scratch.mit.edu/projects/376656449/">https://scratch.mit.edu/projects/376656449/</a>

### **Soap and Sanitizers**

- Video: How Soap Interacts with a Virus: <a href="https://www.exploratorium.edu/video/how-does-soap-inactivate-coronaviruses">https://www.exploratorium.edu/video/how-does-soap-inactivate-coronaviruses</a>
- Chemistry of why soap kills viruses video: <a href="https://www.youtube.com/watch?v=-">https://www.youtube.com/watch?v=-</a>
  LKVUarhtvE
- How Hand Sanitizers attack viruses and bacteria and what's in them. <u>YouTube Video</u>.
  PBS Studios. (3:21) Middle School-Adult

### **Products and Behaviors In the News**

- Why Do People Hoard Toilet Paper? A Look At Irrational Behaviors In Uncertain Times. NPR Interview (7:02)
- How Toilet Paper is Made. YouTube Video (Discovery Channel). (5:47) Elementary-Adult.
- How Soap is Made. YouTube Video. (4:59) Elementary-Adult.
- UCLA Student Makes Ventilator with Parts from Home Depot. CBSN News Spot. 3/31/20.
- Masks. Should you make one? What materials? Washington Post. 4/1/20.
- Research Paper Testing Different Materials for Homemade Masks Against the Flu. Disaster Medicine and Public Health Preparedness. 2013.
- How 3D Printers are Helping to Fight Corona Virus. The New Yorker. 3/31/20.
- MIT's <u>E-Vent Project</u> to automate a manual resuscitator as a potential means for longerterm ventilation.
- Maker Community steps up to create medical supplies. Time. 4/1/20.

## **Viruses**

 Video: How Big is a Virus. Exploratorium Video. : <a href="https://www.exploratorium.edu/video/how-big-virus?autoplay=true">https://www.exploratorium.edu/video/how-big-virus?autoplay=true</a> Elementary-Adult

- Where Do New Viruses Come From? Feb.27, 2020. <u>YouTube Video</u>. (10:09) Middle School/ High School/College. There is more certainty now that the virus did not escape from a lab.
- Corona Virus Explained and What You Should Do About It as of March 19, 2020. <u>YouTube</u> Video. (8:34) Middle School/High School/College.
- Why Bats Carry So Many Viruses and How Studying Them Can Help Us. <u>YouTube Video</u>.
  (12:44) High School/College.
- Human impact on biodiversity loss may fuel future pandemics. ABC News. April 8, 2020

# **Infographics and Data**

- New Mexico COVID19 Graphs from the Daily Lobo.
- OPINION: Bad graphs suck: A primer on COVID-19 data coverage. Daily Lobo 3/23/20.
- Using internet linked thermometers to show social distancing is reducing infection rates. New York Times. 3/30/20. Direct link to Health Temperature Map.
- Simulations of different responses and how they affect infection rates. <u>Washington Post</u>.
  3/14/20.

Por qué brotes como el del coronavirus crecen exponencialmentey cómo 'aplanar la curva' En Espanol.

- Projections of case peaking for each state and US from University of Washington. <u>Institute</u> for Health Metrics and Evaluation.
- Using cell phone and other data to track the health emergency progress. Vox. 3/26/20.
- Our World in Data has great graphs. Compare linear and exponential graphs to isolate growth rates independent of population size.
- Scientists have turned the structure of the coronavirus into music. The song could help researchers find a way to stop the virus. Science Magazine. April 3, 2020.

#### **SOUTHWEST COVID19 Research**

- UNM researchers work to find COVID-19 vaccine. Daily Lobo. 3/17/20
- Coronavirus Clinical Trials Launched at UNM Hospital. 3/30/20.
- Texas A&M researchers create DIY mask for hospitals. Dallas News. 4/1/20
- UNM mechanical engineers, biologists and mathematicians, and 3D printing network collaborate to make masks. <u>Albuquerque Journal</u>. 4/6/20.
- UNM Researchers Devise Way of Decontaminating PPE. NM Political Report. April 11, 2020.
- School of Engineering Leaps Into Making Masks. Albuquerque Journal. April 12, 2020.
- Professor, postdoc win pitch award for COVID-19 efforts. UNM.
- Old Paper Offers Fresh Insights on Disease. Albuquerque Journal. April 14, 2020