



# The COVID-19 Crisis

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*Update October 29, 2020*

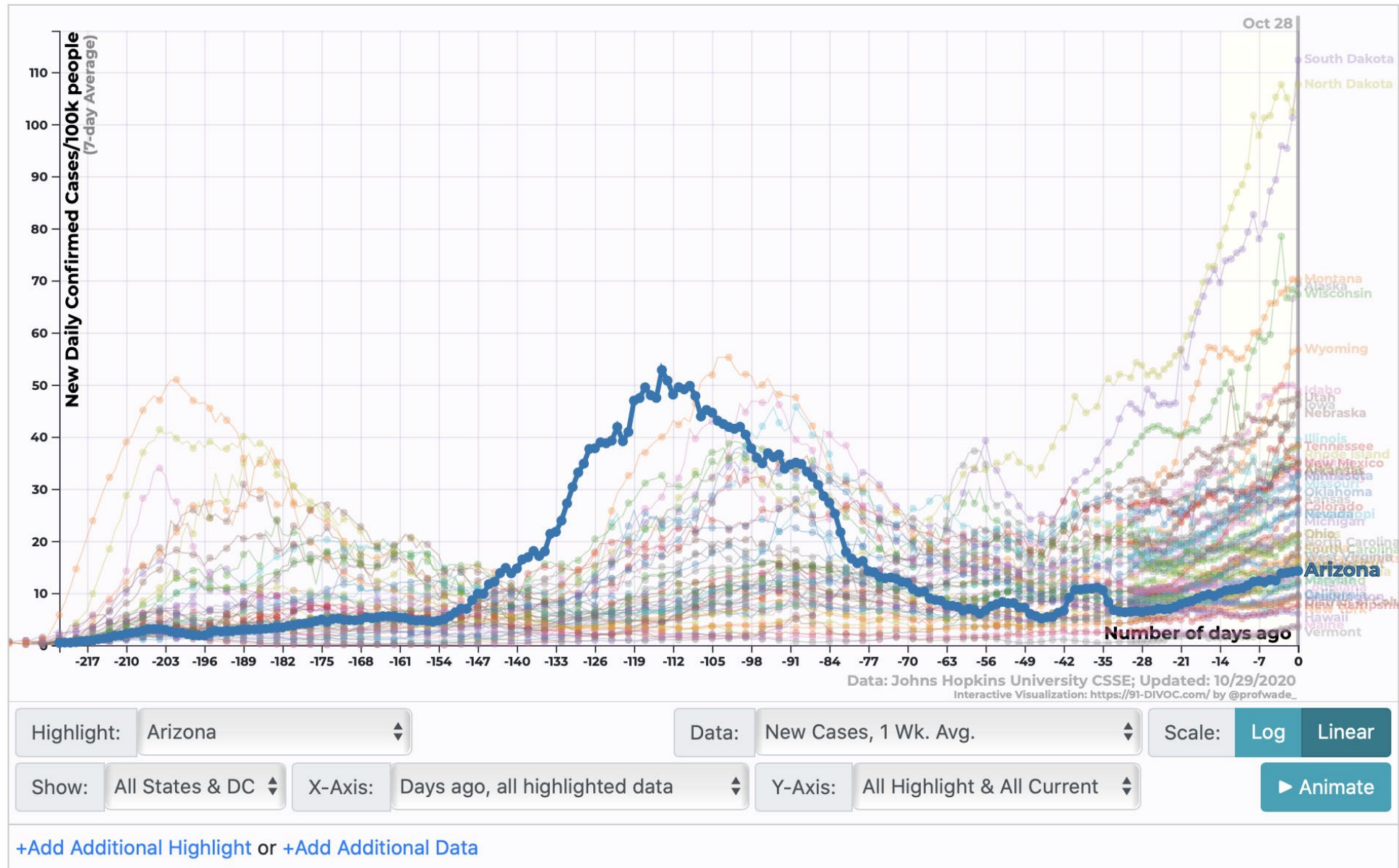
A photograph of a man with grey hair, glasses, and a beard, wearing a green button-down shirt. He is smiling and pointing his right hand towards a rock formation. The background is a light-colored, textured rock wall.

**CAVEAT!**

**I am not THAT kind of doctor.  
I study rocks.**

**Ariel D. Anbar  
Professor  
School of Earth and Space Exploration  
School of Molecular Sciences  
Arizona State University**

# New Confirmed COVID-19 Cases per Day by US States/Territories, normalized by population



8,697,104

Confirmed Cases

Tuesday, 10/27/20

22 cases per 100k people  
7 Day Moving Average  
224,611 Deaths

Geolocation:

Worldwide

United States

US Geo-Level:

States

Counties

Congressional Districts

Search

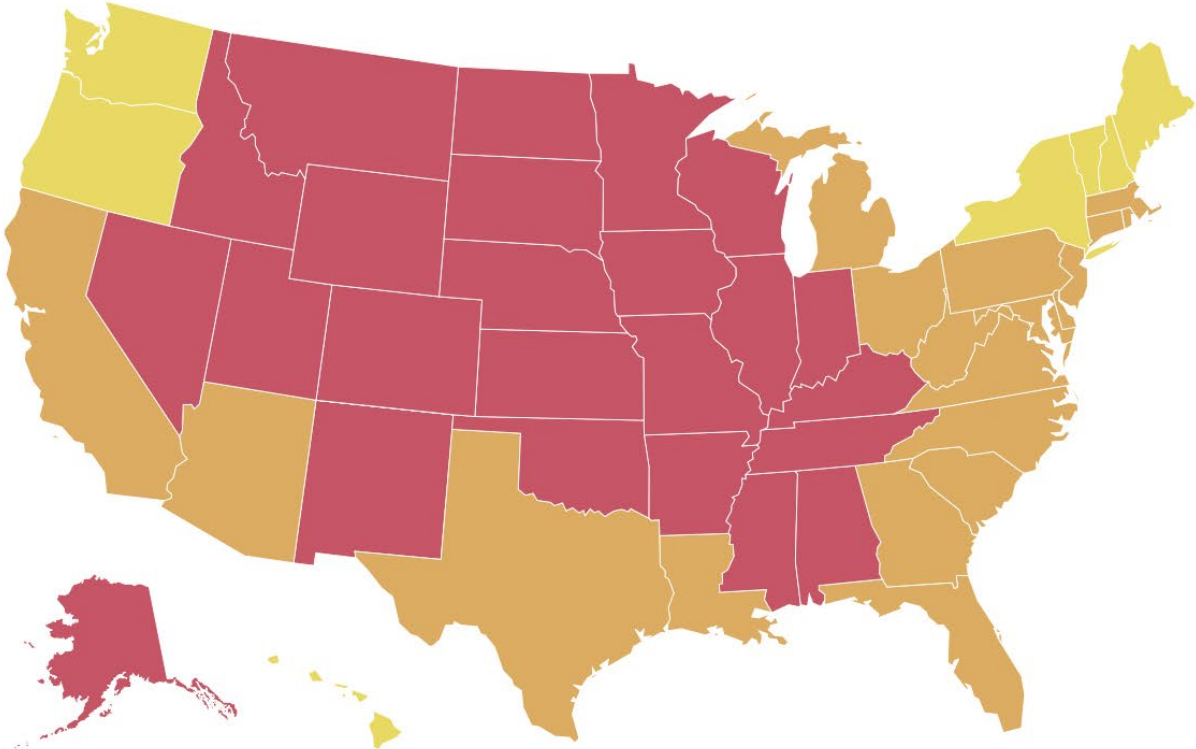
- ☐ Alabama
- ☐ Alaska
- ☐ Arizona
- ☐ Arkansas
- ☐ California
- ☐ Colorado
- ☐ Connecticut
- ☐ Delaware
- ☐ District of Columbia
- ☐ Florida
- ☐ Georgia
- ☐ Hawaii
- ☐ Idaho
- ☐ Illinois

<https://globalepidemics.org/key-metrics-for-covid-suppression/>

This map displays COVID Risk Levels for each state in the United States. Hover over a state for detailed information on cases and deaths counts. Risk Levels are calculated based on daily cases per 100,000 population (7 day rolling average).

[Learn more](#)

Risk Levels by State



Hover over visuals for more details

Risk Levels:

Green

Yellow

Orange

Red

View:

Map

Chart

State	Rank	Daily new cases per 100k people (7d moving avg.)	Daily new cases (7d moving avg.)
Kentucky	18	32.3	1,442.7
Oklahoma	19	32.0	1,268.1
Missouri	20	32.0	1,966.1
Kansas	21	29.8	866.7
Colorado	22	27.7	1,593.1
Mississippi	23	26.4	785.3
Nevada	24	25.2	777.7
Michigan	25	23.4	2,336.4
Rhode Island	26	21.3	225.1
Ohio	27	20.9	2,443.0
Texas	28	20.4	5,901.7
South Carolina	29	19.7	1,014.3
North Carolina	30	17.7	1,852.0
West Virginia	31	17.5	313.7
Florida	32	17.3	3,724.9
Connecticut	33	17.0	604.9
Pennsylvania	34	15.2	1,944.0
Georgia	35	14.9	1,579.1
New Jersey	36	14.8	1,311.9
Massachusetts	37	14.7	1,013.6
Arizona	38	14.1	1,026.6
Delaware	39	13.7	133.6
Louisiana	40	13.3	619.9
Virginia	41	12.8	1,095.9
Maryland	42	11.8	713.9
California	43	11.6	4,564.7

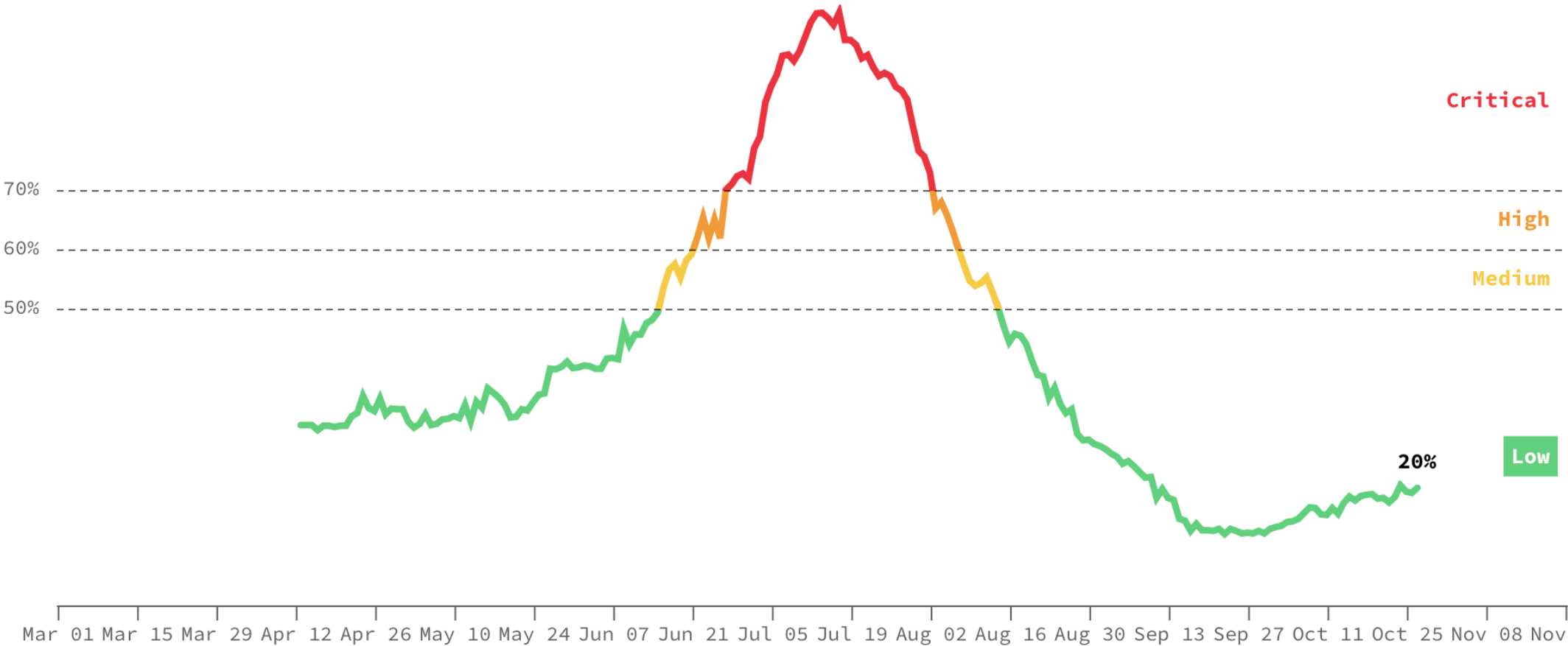
# ICU headroom used Beta

ARIZONA

Save

Share

Arizona has about 1,652 ICU beds. Based on best available data, we estimate that 43% (715) are currently occupied by non-COVID patients. Of the 937 ICU beds remaining, 187 are needed by COVID cases, or 20% of available beds. This suggests there is likely enough capacity to absorb a wave of new COVID infections.





**MY MASK PROTECTS YOU, AND  
YOUR MASK PROTECTS ME.**

# SARS-CoV-2 is Likely Airborne

*(as we've been saying... CDC finally caught up Oct. 5)*

The New York Times

PLAY THE CROSSWORD Account ▾

## Yes, the Coronavirus Is in the Air

Transmission through aerosols matters — and probably a lot more than we've been able to prove yet.

By Linsey C. Marr  
Dr. Marr is a professor of engineering.

July 30, 2020



A sneeze. And what it spreads. Just how much does the new coronavirus circulate in the tiny airborne aerosols we spew out simply by breathing? Bettmann, via Getty Images

Plus

 nature

NEWS FEATURE · 08 JULY 2020

UPDATE 23 JULY 2020

## Mounting evidence suggests coronavirus is airborne — but health advice has not caught up

Governments are starting to change policies amid concerns that tiny droplets can carry SARS-CoV-2. And after months of denying the importance of this, the World Health Organization is reconsidering its stance.

Dyani Lewis

 PDF version

<https://www.nytimes.com/2020/07/30/opinion/coronavirus-aerosols.html>

<https://www.nature.com/articles/d41586-020-02058-1>



Current  $R_t$

**1.16**

Cases

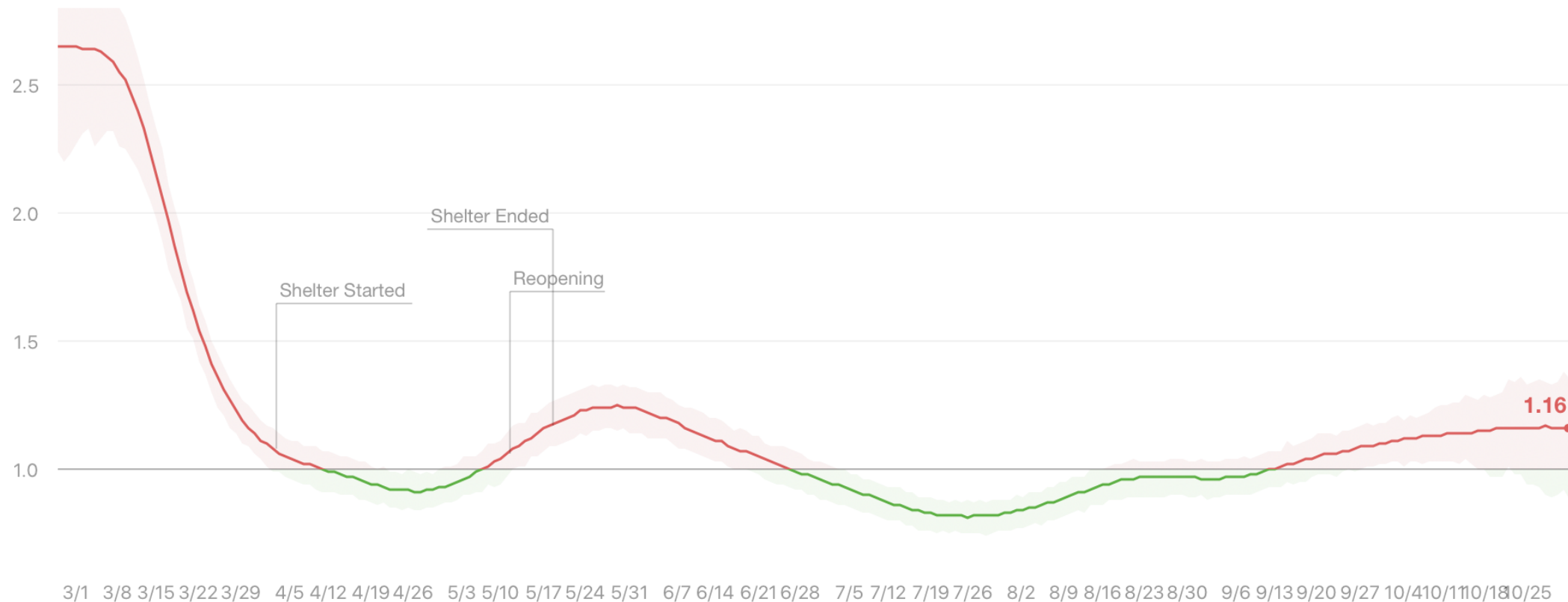
**241,163**

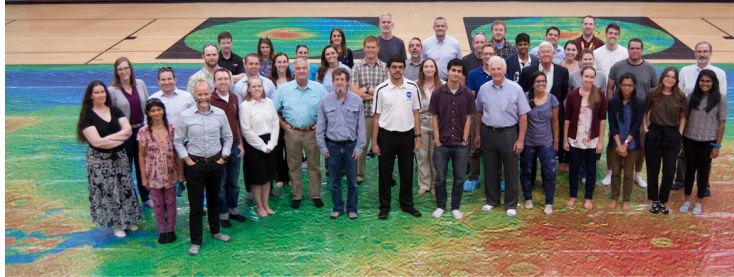
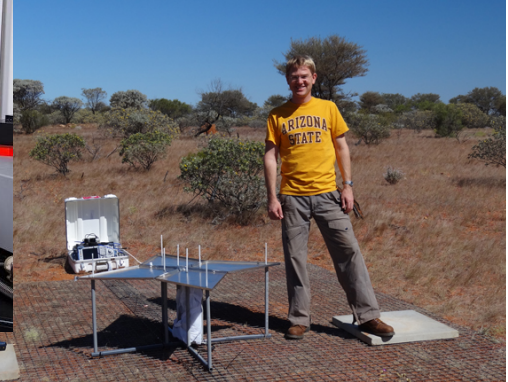
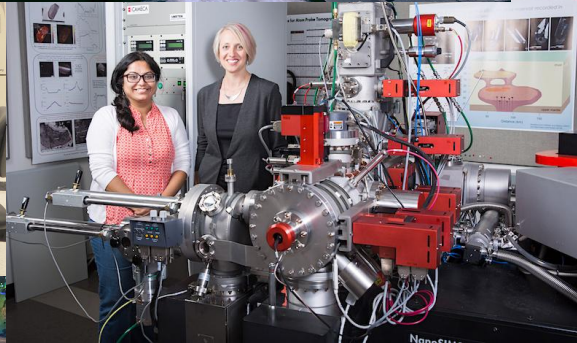
Tests

**1,731,418**

## Effective Reproduction Rate • $R_t$

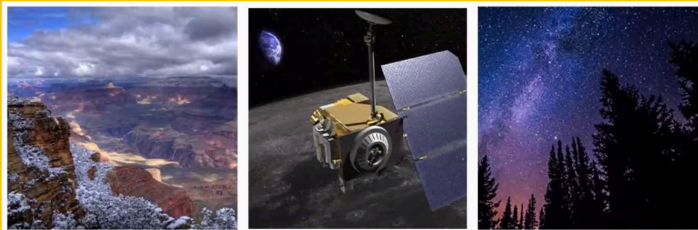
$R_t$  is the average number of people who become infected by an infectious person. If it's above 1.0, COVID-19 will spread quickly. If it's below 1.0, infections will slow. [Learn More](#).





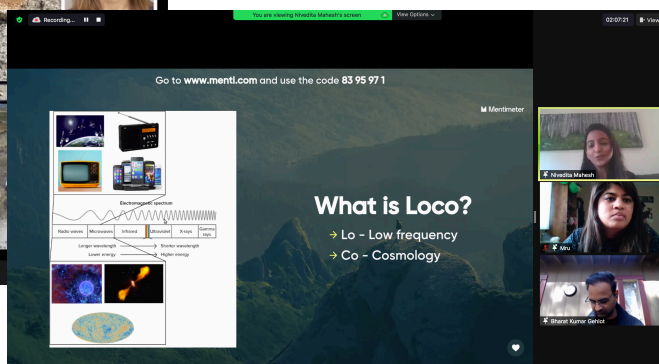
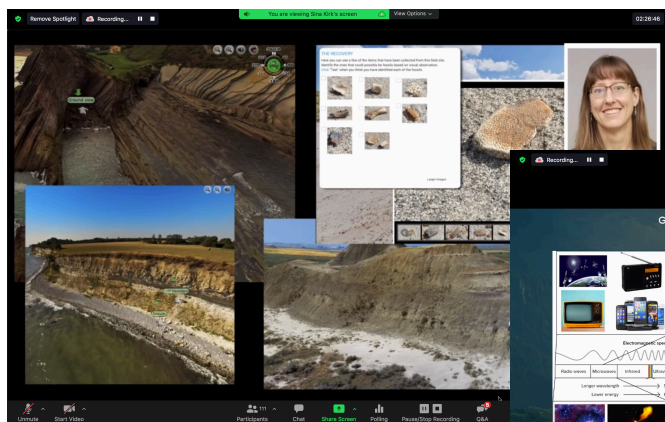
SESE Community Conversation: 29 October 2020

A 3x3 grid of nine video call windows showing participants in a virtual meeting. The participants are diverse in age and appearance. The backgrounds vary, including indoor settings, a bookshelf, a globe, and space-themed virtual backgrounds. The bottom-left window has a name tag that reads "Catherine Shappell".

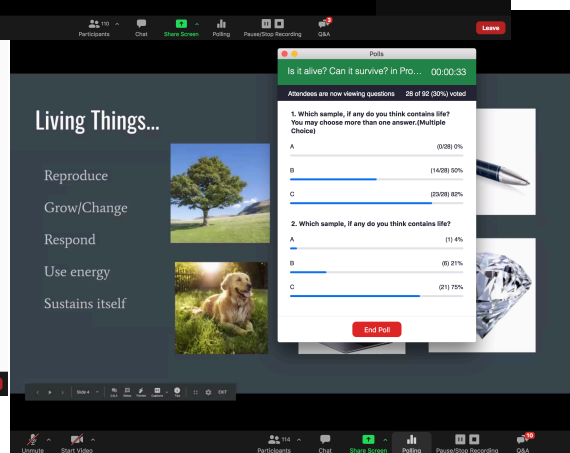


- Cross-disciplinary - combining work in two ontologically similar fields, i.e. astrophysics and geosciences
- Transdisciplinary - combining work in two extremely disparate fields, i.e. astrobiology and theater





## Impact Experiments



Huge thanks to:

COG: Ric Alling, Kim Baptista, Meg Hufford, Cathy Shappell, Karin Valentine, Patrick Young. SESE Docents Alex Blanche and Sphurti Kachare & ASU's Explorer-in-Residence Cady Coleman

Astrobiology

ASU/NASA Space Grant Program

Biology and Astrophysics for Graduate Exploration of Life in Space Group (BAGELS)

Center for Education Through eXploration (ETX), and Infiniscope

Center for Isotopic Analysis (CIA)

Center for Meteorite Studies (CMS)

Cosmology Research Group

Dr. Impact

Low-frequency Cosmology Group (LoCo Lab)

Lunar Reconnaissance Orbiter Camera (LROC)

Science Operations Center

Marston Theater Presenters - Alicia Hyatt

Multicultural Milky Way

Psyche Mission: Journey to a Metal World

Ronald Greeley Center for Planetary Studies

Secondary Ion Mass Spectrometer Laboratory

Society of Physics Students (SPS)

Sun Devil Rocketry

Sundial Program

The Hydrogen Epoch of Reionization Array (HERA)

The Planetary Society @ Arizona State University

## ASU's Commitment to JEDI: University-wide Initiatives

- September 2: President Crow outlined 25 actions that “will be undertaken with the goal of enhancing diversity, growth and opportunity for Black undergraduate and graduate students, faculty and staff, while also expanding our academic offerings, community services and collaborative relationships to the benefit of all underrepresented groups and individuals at ASU.” <https://president.asu.edu/statements/asus-commitment-to-black-students-faculty-and-staff>

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- October 26: Establishment of Advisory Council on African American Affairs
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  - Between now and July 2021, townhall meetings to address key issues related to the action plan
- Searches are currently on-going for two key leadership positions:
  - Provost (leading ASU's Academic Enterprise)
  - Vice President for Research (leading ASU's Knowledge Enterprise)

## ASU Commits to:













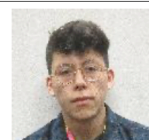
- Establishing a **multicultural space** on campus and establishing and funding a working group to assess and begin design options for this space.
- Investing in and providing enhanced **service support to student organizations** and their initiatives on behalf of Black students
- Hosting an annual spring recruitment fair for undergraduates of color into graduate programs across all disciplines with **scholarship investments in acute areas of underrepresentation.**
- Establishing a **Presidential Postdoctoral Fellowship Program** funding a minimum of 30 postdoctoral fellowships from underrepresented communities over the next two years who will — presuming satisfactory performance — continue on after two years into a tenure-track position.
- Creating a new class of **graduate fellowships (Community Fellows)** for Black students and other students of color.
- Establishing **graduate assistantships for underrepresented students** to go to graduate school. ASU will support the addition of 50 new graduate assistantships over the next two to three years.
- Establishing a university-wide **student entrepreneurship, career advising and student success initiative** to inspire and assist Black students and all students of color.
- **Training** of all faculty and staff on all search committees to address issues such as systemic bias in identification of candidates and hiring.
- **Cluster hiring** around leading faculty members from underrepresented groups with a commitment to 10 positions this year and continuing in subsequent years.
- Implementing the **“To Be Welcoming” training** for all continuing and new ASU employees and students.
- Implementing a program of **service time** for Black employees and other employees to serve as mentors to Black students and other students at ASU.



## ASU's Commitment to JEDI: The College Initiatives

- The College JEDI Task Force
- The College Natural Sciences JEDI Seed Grant opportunity
- Associate Dean for Diversity, Equity, and Inclusion (applications due Nov 6, 2020): [https://thecollege.asu.edu/sites/default/files/associate\\_dean\\_-\\_dei\\_advertisement\\_job16490.pdf](https://thecollege.asu.edu/sites/default/files/associate_dean_-_dei_advertisement_job16490.pdf)

# ASU's Commitment to JEDI: SESE Initiatives

- SESE JEDI Task Force established
  - Meets weekly for 1 year
  - Highest priority activity is developing a 3-5 year plan to improve equity within SESE structures & communities
  - Oversee SESE JEDI Small Grants Program

 <b>Christy Till</b> , Associate Professor and Associate Director for an Inclusive Community	 <b>Elizabeth Trembath-Reichert</b> , Assistant Professor	 <b>Phil Christensen</b> , Full Professor	 <b>Enrique Vivoni</b> , Full Professor and Associate Dean for Graduate Programs	 <b>Desiree Crawl</b> , SpaceGrant Coordinator
 <b>Kimberly Baptista</b> , Alumni & Special Events Coordinator	 <b>Aaron Boyd</b> , LROC research staff	 <b>Sean Peters</b> , LROC research staff	 <b>Christine O'Donnell</b> , postdoc	 <b>Ed Buie II</b> , 5 <sup>th</sup> year grad student
 <b>Alexa Drew</b> , 1 <sup>st</sup> year grad student	 <b>Miles English</b> , undergrad	 <b>Eric Gutierrez</b> , undergrad		

Ex-Officio Members of the Task Force	
 <b>Hilairy Hartnett</b> , (ex-officio) Full Professor and College JEDI Task Force chair	 <b>Patrick Young</b> (ex-officio), Associate Professor

## School of Earth and Space Exploration JEDI Seed Grant

### --Fall 2020 Application--

#### **Motivation**

The School of Earth and Space Exploration solicits seed grant applications that promote the mission statement of the JEDI Task Force: *The SESE JEDI Task Force empowers a just, equitable, and inclusive School of Earth & Space Exploration by facilitating and promoting individual action, dialog, education, long-term planning and systemic change.*

#### **Who Can Apply?**

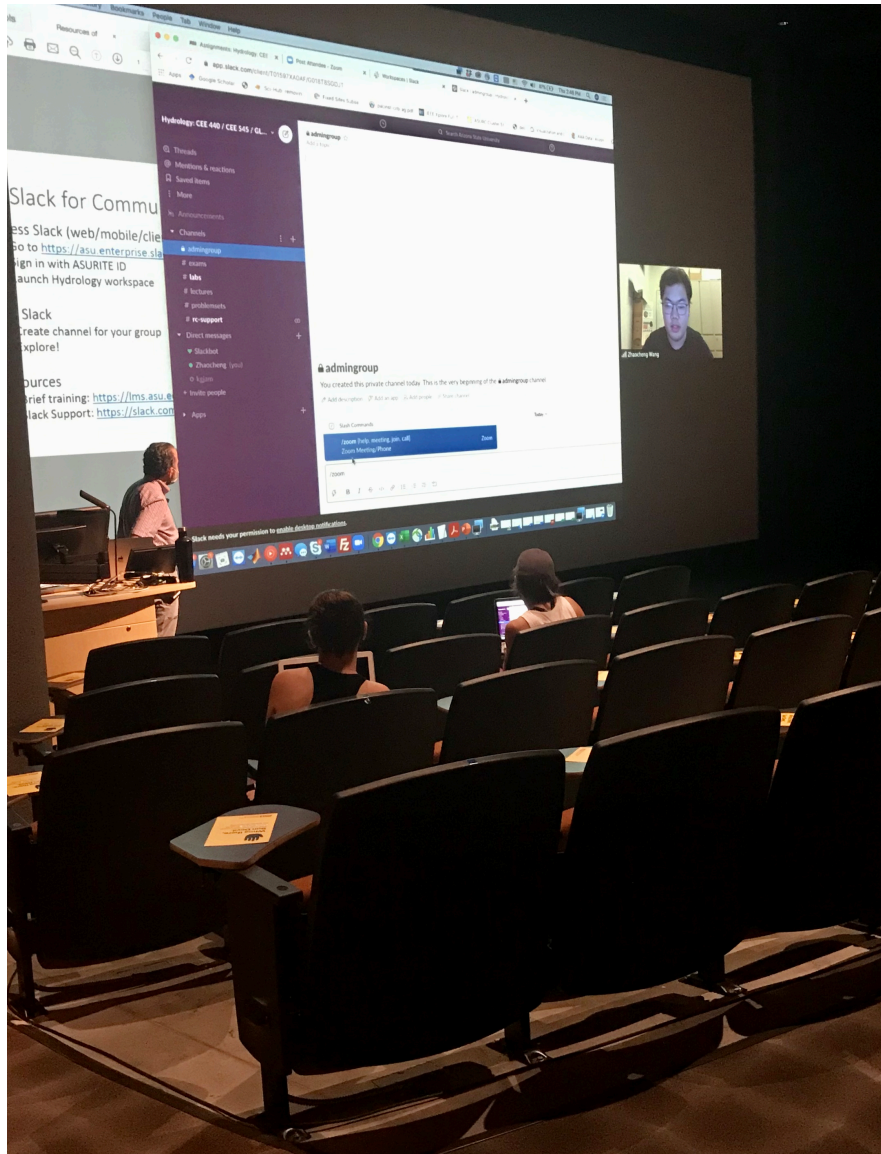
We encourage applications from the broad SESE community including students, staff, and faculty. Alumni are welcome to co-propose with current SESE students, staff, and/or faculty.

#### **Funding Amount and Relevant Dates**

Total funding available for all grants awarded through this call is \$2,000. The number of grants awarded will depend on the number and size of the submitted compelling applications. To fund as many grants as possible, we encourage applications with the minimum funding necessary to accomplish goals. We welcome applicants to reach out to the SESE Seed Grant Task Force to discuss their proposed budget. Applications are due by **November 20th**. We anticipate the first round of selections by the end of Fall term.

## News/Communications: Research and Other Ops

- Most SESE research labs and other operations are open and running, with appropriate physical distancing and safety protocols in place.
- Grad and undergrad students and volunteers can work on campus as needed.
- All work-related travel (local or domestic) needs to be approved by the Dean; such requests (including for field work) are being approved as long as safety protocols are clearly defined.
- Work-related international travel is still being restricted.



## News/Communications: Teaching

- For Spring 2021, most classes will continue to be taught in ASU Sync mode (synchronous teaching via Zoom, allowing students to join remotely or in-person for limited numbers).
- All courses with enrollments >115 will be online only.
- Similar to Fall 2020, a subset of our courses will have an in-person component.

# News/Communications: COVID management

- ASU COVID-19 case updates provided at:

<https://eoss.asu.edu/health/announcements/coronavirus/management>

## **On-campus students**

Tests from 10/18 – 10/24 = 739

Positives = 3

Percent positive = 0.41%

Cumulative tests = 5,655

Positives = 89

Percent positive = 1.57%

## **Off-campus students**

Tests from 10/18 – 10/24 = 1,955

Positives = 8

Percent positive = 0.41%

Cumulative tests = 15,436

Positives = 154

Percent positive = 1.00%

## **Employees**

Tests from 10/11 – 10/17 = 587

Positives = 0

Percent positive = 0.00%

Cumulative tests = 5,536

Positives = 9

Percent positive = 0.16%

## **Cumulative data:**

Since August 1, 98909 tests

Students (+ve): 2052

Faculty & Staff (+ve): 49

## News/Communications: Fall Activities

Fall 2020 activities **open to ALL in the SESE Community:**

- SESE Community Conversations (Final one for this semester will be on Nov 19, noon-1 PM)
- SESE Colloquium (Wednesdays, 3:30-4:30 PM, weekly)
- Virtual Tea (Thursdays, 3:00-4:00 PM, weekly)
- Engineering Coffee (Fridays, 2:30-3:30 PM, weekly)
- Open listening sessions with SESE leadership (weekly, 9-10 AM Tuesdays)
- One-on-one office hours with the director (weekly, 3-5 PM Thursdays) – sign up for 30 min slots on weekly basis
- Open office hours with AD Inclusive Community (3-4 PM Thursdays)

# Fall Colors in Arizona!

