

UC San Diego Health

# Updates and Controversies in COVID

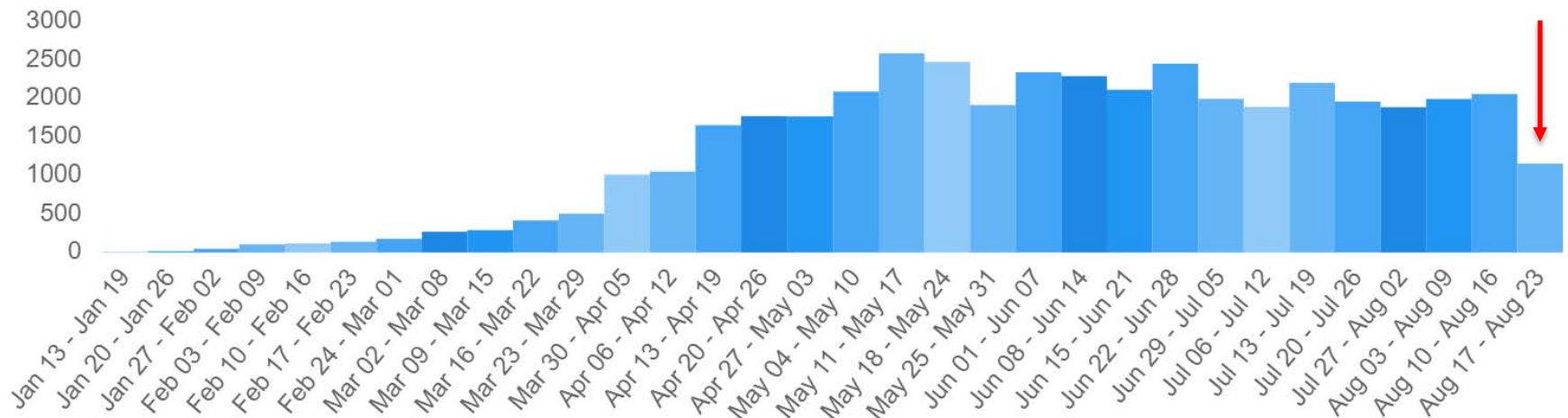
Erica Lin, PGY6

Pulmonary & Critical Care Fellow, UCSD



# Publications since Last Session

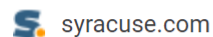
Weekly Publications





Daily coronavirus cases in the U.S. fall below 50,000 for seven straight days after summer surge

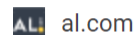
## Grim Milestone



NY coronavirus testing hits record low for positive cases, Cuomo says



California coronavirus case average, hospitalizations reach seven-week low



Alabama posts lowest coronavirus numbers in months: Week in review



Coronavirus update: Infections are trending upward in the Midwest



# Variant of SARS-CoV-2 with clinical implications?

## Effects of a major deletion in the SARS-CoV-2 genome on the severity of infection and the inflammatory response: an observational cohort study

*Barnaby E Young\*, Siew-Wai Fong\*, Yi-Hao Chan\*, Tze-Minn Mak, Li Wei Ang, Danielle E Anderson, Cheryl Yi-Pin Lee, Siti Naqiah Amrun, Bennett Lee, Yun Shan Goh, Yvonne C F Su, Wycliffe E Wei, Shirin Kalimuddin, Louis Yi Ann Chai, Surinder Pada, Seow Yen Tan, Louisa Sun, Purnima Parthasarathy, Yuan Yi Constance Chen, Timothy Barkham, Raymond Tzer Pin Lin, Sebastian Maurer-Stroh, Yee-Sin Leo, Lin-Fa Wang, Laurent Renia, Vernon J Lee, Gavin J D Smith, David Chien Lye, Lisa F P Ng*

- Investigating SARS-CoV-2 variant with 382-nucleotide deletion
- Patients with  $\Delta 382$  variant appeared to have a milder clinical course.  $\Delta 382$  variant was associated with a lower odds of developing hypoxemic respiratory failure, in comparison to wild-type virus or mix

# Upcoming diagnostic tests to look forward to!

- FDA issued EUA for
  - Yale's Saliva Direct COVID-19 diagnostic test
  - LumiraDX UK Ltd.'s SARS-CoV-2 Ag test and authorized its use in laboratories under the Clinical Laboratory Improvement Amendments and in clinical settings under CLIA Certificate of Waiver, Certificate of Compliance, or Certificate of Accreditation.



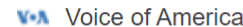
Saliva-based coronavirus test funded by NBA, NBPA gets emergency authorization from FDA



New COVID-19 saliva test could be a 'turning point'



Dr. Scott Gottlieb: Yale's new saliva coronavirus test funded by NBA could be widely rolled out



US Universities Roll Out COVID Spit Tests

# What about convalescent plasma as a therapy?

 NPR

## FDA Hesitates On COVID Blood Plasma Treatment

- FDA hesitates but finally issued EUA for convalescent plasma as a COVID-targeted treatment

**Effect of Convalescent Plasma on Mortality among Hospitalized Patients with COVID-19: Initial Three-Month Experience**

- While preliminary results suggest a lower mortality in hospitalized patients when administered within 3 days of diagnosis, this trial was performed without a standard treatment group or placebo group, as a point of comparison

# How do we mitigate misinformation about therapies?

We are following **21 coronavirus treatments** for effectiveness and safety:



- FDA and the Federal Trade Commission issued joint warning letters to:
  - SilveryGuy for promoting the sale of Colloidal Silver products with misleading claims that products can prevent or treat COVID-19
  - Living Senior, LLC for selling cannabidiol products with misleading claims that the products can prevent or treat COVID-19
  - Predictive Biotech, Inc. for marketing CoreCyte (unapproved umbilical cord-derived product) claiming to prevent or treat COVID-19

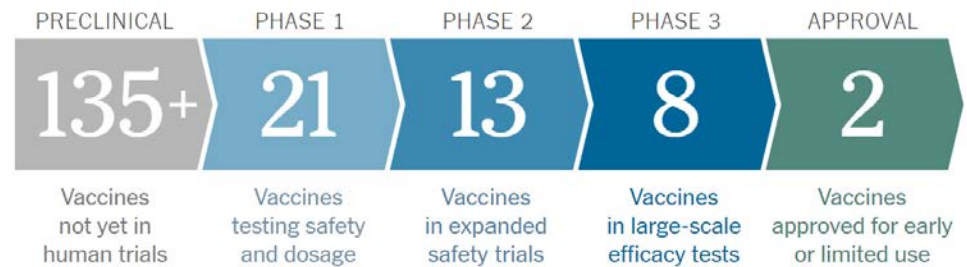
## Perspective Piece

How Do We Combat Bogus Medicines in the Age of the COVID-19 Pandemic?

Wubshet Tesfaye,<sup>1</sup> Solomon Abbrha,<sup>2,3</sup> Mahipal Sinnollareddy,<sup>4</sup> Bruce Arnold,<sup>5</sup> Andrew Brown,<sup>6</sup> Cynthia Matthew,<sup>2</sup>  
Victor M. Oguoma,<sup>1</sup> Gregory M. Peterson,<sup>2,7</sup> and Jackson Thomas<sup>2\*</sup>

# Coronavirus Vaccine Tracker

By Jonathan Corum, Denise Grady, Sui-Lee Wee and Carl Zimmer Updated August 21, 2020



CLINICAL IMPLICATIONS OF BASIC RESEARCH

## Amplifying RNA Vaccine Development

Deborah H. Fuller, Ph.D., and Peter Berglund, Ph.D.

## Operation Warp Speed

History of Medicine | 18 August 2020

### Biomedical Research in Times of Emergency: Lessons From History

Deborah Doroshow, MD, PhD, Scott Podolsky, MD, Justin Barr, MD, PhD

Author, Article and Disclosure Information

<https://doi.org/10.7326/M20-2076>

### Mistrust in biomedical research and vaccine hesitancy: the forefront challenge in the battle against COVID-19 in Italy

Lorenzo Palamenghi<sup>1</sup> · Serena Barellò<sup>1</sup> · Stefania Bocchia<sup>2,3</sup> · Guendalina Graffigna<sup>1</sup>

- Scientific community's effort to develop a vaccine may be hindered by public's perception of safety and overall vaccine hesitancy. We need to foster an environment of trust between medical community and society.
- 8 Vaccines in Phase 3 including mRNA vaccines
- 2 Vaccines Approved
  - Russian Gamelaya Research Institute's Sputnik V vaccine (Gam-COVID-Vac) has been approved for early use. There is concern that the vaccine has not yet entered Phase 3 clinical trials
  - Chinese CanSino Biologics's vaccine Ad5 has been approved for limited use



# Racial Disparities in Clinic Trials

Despite effort, enrollment of minorities for coronavirus vaccine trial is lagging

## Perspective

### Racial Disproportionality in Covid Clinical Trials

Daniel B. Chastain, Pharm.D., Sharmon P. Osaie, Pharm.D., Andrés F. Henao-Martínez, M.D., Carlos Franco-Paredes, M.D., M.P.H., Joanna S. Chastain, Pharm.D., and Henry N. Young, Ph.D.



- Studies have shown disproportionately higher rates of COVID-19 infection, hospitalization, and death in minority groups
- Underrepresentation of minority groups in COVID-19 clinical trials may stem from a number of reasons including medical distrust from minority communities, limited accessibility, hidden costs, poor health literacy, implicit biases, etc

Racial demographics and COVID-19 confirmed cases and deaths: a correlational analysis of 2886 US counties

**Uma V. Mahajan, Margaret Larkins-Pettigrew**

School of Medicine, Case Western Reserve University, Cleveland, OH 44106, USA  
Address correspondence to Uma V. Mahajan, E-mail: uvm2@case.edu

Greater risk of severe COVID-19 in Black, Asian and Minority Ethnic populations is not explained by cardiometabolic, socioeconomic or behavioural factors, or by 25(OH)-vitamin D status: study of 1326 cases from the UK Biobank

Zahra Raisi-Estabragh<sup>1,2</sup>, Celeste McCracken<sup>1</sup>, Mae S. Bethell<sup>3</sup>, Jackie Cooper<sup>1</sup>, Cyrus Cooper<sup>4,5,6</sup>, Mark J. Caulfield<sup>1</sup>, Patricia B. Munroe<sup>1</sup>, Nicholas C. Harvey<sup>4,5</sup>, and Steffen E. Petersen<sup>1,2</sup>

## Letters

### RESEARCH LETTER

**Assessment of COVID-19 Hospitalizations by Race/Ethnicity in 12 States**

# What to expect when influenza season arrives?

Medical News & Perspectives

ONLINE FIRST FREE

August 20, 2020

Flu Vaccination Urged During COVID-19 Pandemic

Mary Chris Jaklevic, MSJ

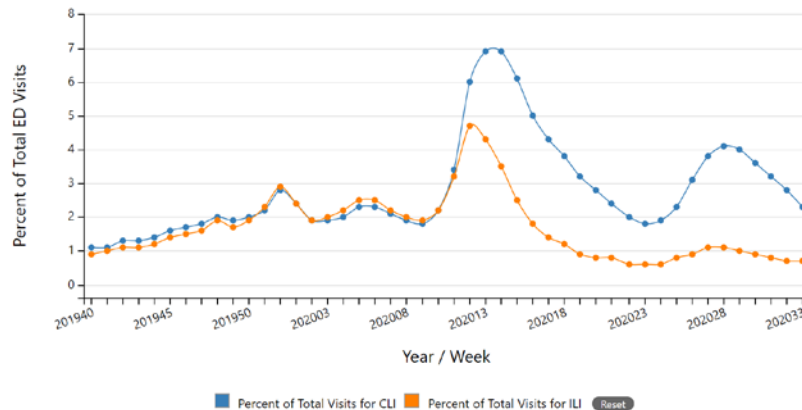
August 20, 2020

## What Happens When COVID-19 Collides With Flu Season?

Rita Rubin, MA

JAMA. Published online August 20, 2020. doi:10.1001/jama.2020.15260

NSSP: Percentage of Visits for Influenza-Like Illness (ILI) and COVID-19-Like Illness (CLI) to Emergency Departments, Weekly National Summary, September 29, 2019 - August 15, 2020



- Percentages of visits for COVID-19-like illnesses and influenza-like illnesses have decreased
- While the percentage of visits for ILI have decreased, it is higher than expected for this time of the year

# Changing Face of Medicine

Population Health Management, Ahead of Print | Original Article

 Free Access

## Health Inequalities in the Use of Telehealth in the United States in the Lens of COVID-19


Dena H. Jaffe , Lulu Lee, Stephanie Huynh, and Thomas P. Haskell

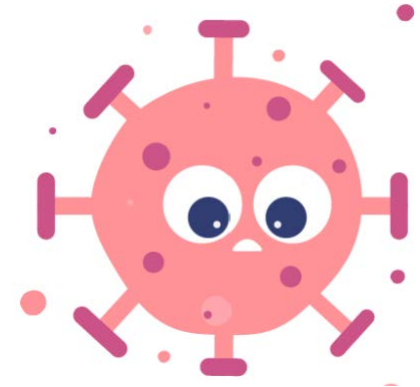
Digital Inequality During a Pandemic: Quantitative Study of Differences in COVID-19–Related Internet Uses and Outcomes Among the General Population

Alexander JAM van Deursen, Prof Dr 

- COVID-19 pandemic has led to the rapid advancement of telemedicine
- A significant portion of patients may meet criteria for “telemedicine unreadiness”. These vulnerable patients include the elderly and less educated with low literacy levels. Some even lack access to computers with high-speed internet or smartphones with wireless data
  - If a telemedicine visit is feasible, simple measures can be used to optimize the encounter including patient’s preference for phone/computer interface, use of video when possible, speaking slowly and clearly, summarizing, etc

## Telemedicine, the current COVID-19 pandemic and the future: a narrative review and perspectives moving forward in the USA

Asim Kichloo,<sup>1</sup> Michael Albosta ,<sup>1</sup> Kirk Dettloff,<sup>1</sup> Farah Wani,<sup>2</sup> Zain El-Amir,<sup>1</sup> Jagmeet Singh,<sup>3</sup> Michael Aljadah,<sup>1</sup> Raja Chandra Chakinala,<sup>3</sup> Ashok Kumar Kanugula,<sup>4</sup> Shantanu Solanki,<sup>3</sup> Savneek Chugh <sup>5</sup>



# Expert Discussants