



#### THE BIG RETURN

### What to Expect Coming Back to the Physical Workplace

BY DANA TALESNIK

Hundreds of NIH'ers who were on maximum telework throughout the pandemic began a staggered return to the physical workspace on Mar. 28. Questions, concerns and emotions abound. Everyone is returning to an altered landscape that may affect them both physically and emotionally. Staff will need to adapt to evolving safety guidelines, reduced amenities and anticipated service backlogs as the kinks get worked out.

Excited to see colleagues in person and move closer to normalcy? Apprehensive about safety? Wondering where to park? Curious what amenities await?

The online NIH Guidance for Staff on Coronavirus (https://employees.nih.gov/ pages/coronavirus/) has been tracking such developing issues since the start of the pandemic and has comprehensive updates available at a click.

For some quick basics, the NIH Record has you covered.



Now that more people are returning onsite, what will become the "new normal" at NIH? PHOTO: FLAMINGO IMAGES/SHUTTERSTOCK

#### **Keeping Each Other Safe**

The big return operates under the premise that some level of Covid-19 likely will persist, though now we have an array of tools to minimize community and workplace transmission. Regular risk assessments continue, and NIH may loosen or retighten its guidelines accordingly.

Every Friday, the Office of Research Services (ORS), Division of Occupational Health and Safety (DOHS) will assess workplace community levels and issue guidance that applies for the following week.

In non-healthcare areas, when workplace community levels are:

- Low: mask-wearing, physical distancing and testing are optional.
- Medium: masks remain optional but physical distancing is required; testing required for unvaccinated individuals.
  - High: mask-wearing and physical

SEE **RETURN**, PAGE 4

Mandatory mask policies in schools reduced Covid-19 cases. See Digest, p. 10.

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### STEM AMBASSADOR

### NINDS's Jones Featured in **Exhibit on Women in STEM**

BY SHANNON E. GARNETT

When Dr. Lataisia Jones, a scientific research officer in NINDS's Scientific Review Branch,



On the National Mall in D.C., Dr. Lataisia Jones with her 3D-printed statue

first began her science, technology, engineering and math (STEM) outreach efforts she never imagined her work would immortalize her as a life-size in an empowering exhibit. But that's exactly what happened.

3D-printed statue

"I am still SEE AMBASSADOR, PAGE 6

# **Reproductive Medicine Advances Linked to Slavery**



Dr. Deirdre Cooper Owens

Modern reproductive medicine has its origins in slavery, said Dr. Deirdre Cooper Owens during a Feb. 10 NLM History of Medicine talk.

"Physicians in the South developed

the field of obstetrics and gynecology as quickly as they did because of their access to enslaved bodies," said Cooper Owens, the Charles and Linda Wilson professor in the history of medicine and director of the Humanities in Medicine Program at the

SEE **REPRODUCTIVE**, PAGE 8

#### Tune into 10th Virtual Town Hall, Apr. 5

The 10th virtual Town Hall will take place on Tuesday, Apr. 5 at 11 a.m. ET. Topics on the agenda are the state of the pandemic; efforts to return staff to the physical workplace; the latest Covid-related statistics for NIH staff; the impact of Covid-19 community levels on NIH safety guidance, meetings and travel; and an update on workplace flexibilities. Tune in at https://videocast.nih.gov/watch=45064.

#### This April 'Give Your Community a Boost!'

April is National Minority Health Month (NMHM), a time to raise awareness about the importance of improving the health of people from racial and ethnic minority communities and reducing



#### Give Your Community A Boost! | April 2022

health disparities. The 2022 theme is "Give Your Community a Boost!" Throughout the month NIMHD will highlight ways we can all join in the fight against Covid-19 to protect our families, colleagues and friends.

- Follow us on social media at #NMHM2022 and #BoostYourCommunity
- Join the Covid-19 Gamechangers: Trusted Messengers Giving Communities a Boost! Twitter Chat on Wednesday, Apr. 20 at 2 p.m. ET #NMHM22Chat
- Play the Minority Health Bingo virtual game
- Share NMHM graphics on your favorite social media platforms

For the latest NMHM updates visit: https://nimhd. nih.gov/programs/edu-training/nmhm/.

### SPEAK UP FOR MENTAL HEALTH **Essay Contest for Teens Under Way**

Know a teen with something to say about mental health? "Speaking Up About Mental Health! This Is My Story," a national essay challenge cosponsored by NIMHD, NIMH and NICHD, aims to start conversations about mental health and encourage young people to seek help for mental health issues.

U.S. high school students ages 16-18 are invited to submit a short essay.

Topics may include resilience. ending stigma,



#### Virtual Women's **Health Awareness Conference Set,** Apr. 9

The eighth annual Women's Health Awareness Conference will be held virtually Saturday, Apr. 9, from

# Women's Health **Awareness**

**Transforming Communities by Enhancing Women's Health** 



8:30 a.m. to 4 p.m. This free event offers demonstration videos and sessions that focus on health education and healthy living.

Register at www.niehs.nih.gov/WHAconference. Principal sponsor of the conference is the NIEHS Office of Human Research and Community Engagement, led by Dr. Joan Packenham. Co-sponsors include the Durham alumnae chapter of Delta Sigma Theta Sorority, Inc., and North Carolina Central University's department of public health.

For more information about WHA webinars and resources, email (WHA@niehs.nih.gov), phone (984-287-4414) or visit online (www.niehs.nih.gov/womenshealthawareness).

Sign language interpretation and CART services for this event are available upon request. Individuals who need these or other reasonable accommodation may contact Lynae Baker (lynae.baker@nih. goy). Requests should be made at least 5 business days in advance of the conference. To access Telecommunications Relay Services, call 711.

improving communication among peers and adults and more. Submissions will be accepted through Apr. 30. Winners will be announced in September. Multiple winners will be chosen to receive cash prizes. For details, visit https:// www.nimhd.nih.gov/programs/edu-training/ mental-health-essay-contest/.

#### Postbac Poster Day Set, Apr. 26-28

NIH's virtual Postbaccalaureate Poster Day 2022 will take place on Apr. 26-28. Poster Day provides an opportunity for postbacs to share the research they have been conducting at NIH and at the same time develop their scientific communication and networking skills. Posters will be reviewed and judged by teams composed of graduate students. postdocs and staff scientists/clinicians.

Authors of the top 20 percent will receive a letter acknowledging their accomplishment. Investigators, staff scientists and scientific administrators can make a particularly important contribution by visiting posters and engaging authors in discussion.

The event's agenda will be available on the web page by Apr. 8. The full program book and presentation schedule will be available by Apr. 15. For more information, visit https://www.training. nih.gov/virtual\_postbac\_poster\_day.

#### **Webinar Planned on Social, Behavioral Health Impacts of Covid-19**

The NIH Social, Behavioral and Economic Health Impacts of Covid-19 initiative will host a webinar for 2 half-days on Apr. 27-28. The event will bring together more than 45 grantees to further connect researchers and foster collaboration opportunities. Presentations will cover Covid-19-related research topics including social networks, biological

correlates, impacts on disadvantaged populations, mortality and morbidity, family impacts, mitigation efforts, interventions and more.

Through your participation in this initiative, we hope to provide insight into our research progress, provide a forum for collaboration and continue to encourage data harmonization efforts. Register and view the agenda: https://www.eventbrite.com/e/ april-27-28-nih-social-behavioral-economic-covid-19-health-impacts-registration-241394225627.

If you require reasonable accommodation to participate, contact the webinar planning team via email (rayneisha.watson@nih.gov and jghanaim@ deloitte.com) or phone (732-397-8081).

#### **New Report Identifies Research Opportunities**

NIH's Sexual & Gender Minority Research Office announced the recent release of a new report from the National Academies of Science, Engineering and

Medicine on measuring sex, gender identity and sexual orientation. Commissioned by NIH in 2020, the report provides an overview of the current evidence base, recommends specific measures for use and



identifies research opportunities. SGMRO led the effort, which was also co-funded by several other NIH components. NIH acting director Dr. Lawrence Tabak thanked the academies for the report, reiterating its importance. Read his statement at: https:// go.usa.gov/xzfs5. Find the report's pre-publication version at https://dpcpsi.nih.gov/sgmro/reports.

## **NSABB Sets Aggressive Timeline for Committee** Charge

BY AMBER SNYDER

Meeting virtually for the first time in 2 years, the National Science Advisory Board for Biosecurity (NSABB) convened on Feb. 28. This was the first meeting of the board since activities were paused due to the rapid escalation of the pandemic to allow members to prioritize Covid-19 research and response activities.

NSABB provides insight to the federal government to help ensure U.S. oversight frameworks are keeping up with rapid advances in science that may raise biosecurity concerns.

NSABB, which is managed by NIH's Office of Science Policy, addresses issues related to biosecurity and dual-use research. Harnessing lessons learned from the Covid-19 pandemic, the federal

government charged NSABB to evaluate policy frameworks for the biosecurity oversight of life sciences research.

"Biosecurity policy considerations are an important component of ongoing efforts to bolster U.S. biodefense and pandemic preparedness," explained NSABB chair Dr. Gerald Parker, associate dean for Global One Health at Texas A&M University's College of

Veterinary Medicine and Biomedical Sciences. U.S. biosecurity frameworks should "strike the right balance of allowing the benefits of vital research to continue at a rapid pace, while managing the biosecurity risk."

NSABB will evaluate two policy frameworks overseeing dual use research of concern (DURC) and enhanced pandemic potential pathogens (PPPs).

DURC is a subset of life sciences research that has the greatest potential for generating information

Acting NIH director Dr. Lawrence Tabak gave NSABB its charge.

that could be readily misused to threaten public health and national security

DURC policies "serve to preserve the benefits of life sciences...while minimizing risks that the knowledge, information, products or technologies produced could be misapplied to cause significant harm," explained Dr. Andrew Hebbeler, assistant

director for health and life sciences at the White House Office of Science and Technology Policy.

PPPs are likely to be highly transmissible and virulent, with the potential for significant morbidity and/ or mortality in humans. Enhanced PPP (or ePPP) is a PPP that results from the alteration of a PPP that can increase a pathogen's trans-

missibility and/or virulence. Policies focused on PPP and ePPP research are collectively called potential pandemic pathogen care and oversight (P3CO).

"Research involving agents subject to this oversight helps us understand the fundamental nature of human-pathogen interactions, assess the pandemic potential of emerging infectious agents such as viruses and inform public health and preparedness efforts including surveillance and the development of vaccines and other medical countermeasures." said acting NIH director Dr. Lawrence Tabak, who

gave the board its charge.

The upcoming review process will be undertaken by NSABB working groups and informed by listening sessions with the public and other relevant stakeholders. The scope and effectiveness of current P3CO policies are first up to be reviewed. The evaluation will consider questions such as, should wild-type pathogens and animal models of transmissibility be considered within the scope?

And what are considerations for supporting ePPP research internationally?

The second step of the review process will take on two tasks: analyzing and evaluating federal and institutional DURC policies, and possible P3CO guidance incorporation into frameworks associated with any recommended revisions of the DURC policies. Leadership hopes to have the review completed by the end of the calendar year.

This timeline is aggressive, Parker conceded, but the NSABB's

"incredible breadth of experience and expertise" gave him confidence. The review is important, he concluded, for making sure research "is done in a safe, secure and responsible way" while also keeping up with the rest of the world.



ON THE COVER: Sneaker made of whole grain foods from a "Choose Healthy" campaign poster by the National Institute of Diabetes and Digestive and Kidnev Diseases

IMAGE: NIDDK

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The NIH Record







#### Return

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distancing required for all and testing required for the unvaccinated.

Masks continue to be required at all times at locations with patient touchpoints and other facilities with elevated safety needs, including:

- The entire Bldg. 10/Clinical Center complex
- The Children's Inn and the Safra Family Lodge
  - All NIH shuttles

For weekly community-level updates and evolving guidance for all NIH buildings and facilities, see: https://go.usa.gov/xzyrV.

#### **Parking and Getting Around**

All staff returning to the main Bethesda campus will be greeted by large, multi-year construction projects, but a little patience and flexibility will help get you where you need to go.

The construction that began on campus this year adjacent to Bldg. 10 will affect

staff parking and traffic flow for years to come, but ORS and the Office of Research Facilities (ORF) have launched efforts to alleviate the burden.

#### **Parking**

A new express shuttle now runs from staff parking Lots 41 and 42 to Bldg. 10, from 6:30-9:30 a.m. and 4:30-7:30 p.m., daily.

The MLP-9 garage on

Convent Drive and the P2/P3 levels of Bldg. 10's underground garage have converted to parking *only* for Bldg. 10 employees.

NIH Shuttles are a patient

board is still required

touchpoint. Wearing masks on

Lot 4A, the visitor lot across from Bldg. 31, has converted to patient valet parking.

The new Lot 18 being built on the south side of campus will open this summer as a dedicated visitor parking lot. In the meantime, visitors can park in MLP-11 near the Medical Center metro station.

Off-campus shuttles return to operations. For routes, times and updates, see: https://ors.od.nih.gov/pes/dats/nihshuttleservices/Pages/shuttle.aspx

#### **Road and Entrance Closures**

The Lincoln Drive entrance off Old

Building For Breakthroughs



Building For All



The Building for All campaign was launched in response to major construction projects begun this year on the northwest side of the Bethesda campus.

Georgetown Rd. is closed until June for upgrades.

Once the expanded Lincoln Drive entrance reopens, the Old Georgetown Rd.

entrance at Center Drive will close for 6 years. It will become a dedicated entrance for construction materials. This closure will include Center Drive from Old Georgetown Rd. to just past the front of the Northwest Child Care Center, as well as Convent Drive north of MLP-9.

The Rt. 355-North Drive staff entrance will soon open for exiting in the afternoons, after the

Center Drive entrance closes. Note, there's no light there, so it will be a right-turn-only exit.

"There was extensive traffic modeling and studies done to determine if and how to make this all work," said ORF/ORS communication director Brad Moss. With these mitigation strategies, along with an assumption of increased, across-the-board telework, it was determined pre-pandemic traffic levels could be maintained.

When construction is completed, there will be a 9-story Surgery, Radiology and Laboratory Medicine wing of the CC, a 5-story addition to the Vaccine Research Center and a new patient and visitor parking garage with a utility vault housing backup generators and electrical equipment. Ultimately, these additions will revolutionize research capabilities and improve hospital operations and patient access.

"These construction projects don't just benefit one group at NIH," said Moss. "They're meant to benefit everyone, and not just NIH staff but also the country and world as a whole."

For the latest: https://traffic.nih.gov.

#### **Meetings & Greetings**

ORF opened such larger-scale gathering sites as Lipsett Amphitheater, Masur Auditorium and other conference rooms and meeting facilities. To reserve a space, visit: https://ors.od.nih.gov/pes/emb/facilities/Pages/conferencefacilities.aspx.



Everyone is returning to an altered landscape that may affect them both physically and emotionally.





#### Dining: What's on the Menu?

This month, food trucks return to the south side of Bldg. 10 Tuesdays to Thursdays and the weekly farmer's market resumes Apr. 5. Organizers are aiming to bring new trucks,

"Amenities we're able to provide are based on utilization," said Tammie Edwards, director of ORS's Division of Amenities and Transportation Services (DATS). "If vendors can't have a level of profitability, they will be hard to sustain."

Bottom line: To open cafeterias and concession stands, and keep them open, she said, "we need to use them."

#### **Hungry? What's Open or in the Works**

In the CC, the B1 cafeteria, concession stand and CRC and FAES coffee shops are open.

Bldg. 35 cafeteria is open with hot food, grab-n-go items, such as pastries, sandwiches and sushi; plans are in progress to open the concession stand.

Bldg. 31 cafeteria is slated to reopen on



# "Amenities we're able to provide are based on utilization."

~TAMMIE EDWARDS



healthier options, vegan and gluten-free options and more ethnic food diversity.

ORS is working with vendors to expand food services on and off campus in the coming months. Options will be limited at first and increase with demand.

#### **Resources for the Big Return**

#### **Return to the Physical Workplace Intranet**

https://employees.nih.gov/pages/coronavirus/ return-physical-workspaces-guidance.aspx

#### Updated Safety Guidance/Workplace Community Levels

https://go.usa.gov/xzyrV

#### **Campus Traffic and Parking**

https://traffic.nih.gov

#### **Technology Checklist**

https://go.usa.gov/xzytB

#### **Food and Concessions**

https://ors.od.nih.gov/pes/dats/food/Pages/index.aspx

#### **Campus Services**

https://go.usa.gov/xzyt9

#### Tips for coping with stress

https://go.usa.gov/xzytP

Monday, Apr. 4 with grab-n-go items; its concession stand remains closed.

Cafeterias in Bldgs. 12B, 38A, 45, Rockledge II and 5601 Fishers Lane remain closed.

Discussions are underway to reopen the Bldg. 12B concession stand and the Bldg. 50 coffee bar.

Rockledge II concession stand will reopen once population data supports the need; look for food trucks in the interim.

To ensure safety in case of changing Covid-19 community levels, DATS is working with DOHS to create a protective environment in cafeterias and dining rooms, arranging tables for proper spacing and working to add touchless payment self-checkout stations.

"We're monitoring the situation closely and making changes as we go along," noted Edwards. "It's a fluid process and we're looking at data and trends to make decisions that will help alleviate any type of overcrowding and congestion in service areas."

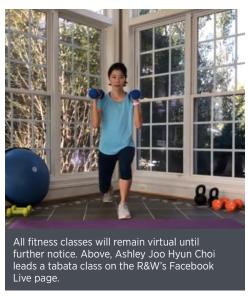
That said, anyone who prefers to avoid cafeterias and lines can order in advance using the Eatify mobile app and grab their grub to-go: https://ors.od.nih.gov/pes/dats/food/Documents/EatifyFlyer.pdf.

For cafeteria and concession updates, see:

https://ors.od.nih.gov/pes/dats/food/Pages/index.aspx.

#### Fitness, Banking and Retail

The fitness centers at Bldg. 53 and Rockledge are scheduled to reopen on Apr. 19. The Bldg. 31 gym remains closed while undergoing bathroom renovations. All NIH fitness classes will remain virtual until further notice.



The NIH Federal Credit Union is open in Bldg. 10 and is expanding hours of operation from 2 days (Wednesday and Friday) to 3 days a week (Monday, Tuesday and Wednesday) in mid-April. The Bldg. 31 Credit Union will reopen 2 days a week (Thursday and Friday). There currently are no short-term plans on reopening the branches at Shady Grove/NCI or at Fisher's Lane.

FAES retail operations in Bldg. 10—the atrium gift shop and bookstore by the Coffee Bar and the employee store on B1—are open Monday through Friday. R&W retail stores are expected to reopen later this spring.

"That will provide time to gauge what days of the week will have more traffic," said R&W co-president David Browne. "There's a chance I can set up opportunities for people to come to the store in late-April, at least to pick up online orders...We'll see."

To keep tabs on the changing status of campus services, see: https://employees.nih.gov/pages/coronavirus/status-campus-services.aspx.

If the big return seems overwhelming, you are not alone. You'll find tips on managing the stress at https://employees.nih.gov/pages/coronavirus/how-to-cope.aspx.



THEN initiative, which is designed to inspire young girls to STEM careers.

Ambassador

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PHOTO: MARGUERITE MATTHEWS

in disbelief that this little Black girl from Virginia who talked too much in her middle school science class could eventually serve as a global role model in STEM and have a statue placed at an exhibit down the street from the White House," said Jones.

She is one of 120 STEM innovators featured in #IfThenSheCan—The Exhibit, which debuted at the Smithsonian in Washington, D.C., during Women's History Month. The exhibit, which celebrates contemporary women leaders from a variety of STEM fields, is the largest collection of statues of women ever assembled together.

"The most memorable part of the opening weekend was being able to engage with the public and encouraging young girls and even the adults to pursue STEM careers regardless of barriers and challenges," Jones said. "I especially felt joy from the kids who ran up to my statue, asked me

about the brain and told me what they were learning in school. I kept things exciting by having them wiggle or dance to explore the mind-body connection and learn how neuroscientists study that connection."

#IfThenSheCan is part of a larger

effort—the Lyda Hill Philanthropies' (LHP) IF/THEN Initiative—designed to inspire young girls to STEM careers. LHP partnered with the American Association for the Advancement of Science (AAAS) to select and manage the AAAS IF/THEN Ambassadors program, which engages high-profile STEM role models to spark STEM excitement among middle school girls. The exhibit features life-size versions of the ambassadors.

Jones became involved in 2019 when she was looking to start her own STEM outreach activities. She found an advertisement for the IF/THEN initiative and immediately applied.

"At the time, it was advertised as a funding opportunity to support STEM outreach programs created by women in STEM," she recalled. "It wasn't until our first weekend of workshops, receptions and meetings that we learned about the amazing opportunity of being featured as full statues.

"The project and exhibit provide a powerful message to girls everywhere that they can be whatever they want. Seeing the statues at the Smithsonian is a bold way of shifting the culture to accept and establish normalcy behind women in STEM careers. LHP and AAAS have taken on this courageous task of exposing middle school girls to their STEM potential. As a result, so many others have been positively influenced by this initiative."

Jones earned her bachelor's and master's, both in science, at Virginia State University.

# Former NIH Postdoc Also a STEM Ambassador

Dr. Jessica Taaffe worked as a postdoc in Dr. Patrick Duffy's Laboratory of Malaria Immunology and Vaccinology at NIAID from 2011 to 2014. Currently an independent global health and science consultant, she's also an IF/THEN ambassador and most recently has been working with the World Health Organization and EpiPointe on pandemic threat projects, including SARS-CoV-2.

At IF/THEN's initial summit, the ambassadors learned they were going to have their statues made. It was natural for Taaffe both to stand up for STEM and be somewhat center stage during a global health threat.

"I was always interested in science one way or another, but I made the decision to pursue a research career in infectious diseases during the first SARS pandemic," Taaffe recalled. "I was a college junior taking a virology class, learning about the biology of viruses, including



Not so long ago, Dr. Jessica Taaffe was an NIAID postdoc. Recently she found herself cast in plastic on the National Mall alongside other ambassadors for women in STEM.

coronaviruses. At the same time, I saw in real time the global health impact that an emerging virus could have, which went beyond its impact on the body. I was fascinated by viruses and infectious diseases and I knew that I wanted to focus on them as a career."



Her years at NIH prepared her well for the opportunities that were in her future.

"I was a postdoctoral research fellow and my project focused on severe malaria in monkeys using *P. coatneyi* in rhesus macaques to "I fell in love with the laboratory setting and being able to answer questions that would advance the field of cancer through

experimentation and literature review," she explained. "This was also the first time I ever met a woman who led her own laboratory."

As an undergraduate, she traveled to Ghana where she taught science, English and math. Her work there ignited her passion for exposing youth to STEM topics and careers. She decided to earn her Ph.D. to make her outreach goals more achievable with a supportive network and additional science training.

In 2017, Jones became the first African American to earn a Ph.D. in the department of biomedical sciences at Florida State University.

She completed her postdoctoral research at

the Center for Neuroscience Research at Children's National Hospital in D.C., where her work focused on the involvement of plexins in corpus callosum development and their association with autism spectrum disorders.

As a graduate student, Jones studied a

debilitating, involuntary movement disorder called levodopa responsive dystonia and developed an antibody that improves

diagnostics.

"In my role at Children's National Hospital, I created 'Young Scientist Wednesdays,' which provided patients with weekly STEM engagement and exposure to diverse leaders who taught them how to extract DNA from strawberries, the science between centrifugation while making pottery and even helped them explore the inside of the brain using augmented reality," Jones said.

For safety reasons, the program was shut down during the pandemic.
Luckily, she came up with another option—*Kitchen Science with Dr. Tay*—a YouTube show that explores STEM topics

using live experiments with materials found at home. This virtual engagement has gained increasing interest and evolved into collaborations with several other organizations and STEM leaders.

Jones also volunteers as a writer and program host for the Association for Women

in Science and serves as a national mentor and keynote speaker promoting STEM resources, programs and careers. She has earned numerous awards for her education efforts and advocacy for STEM diversity.

"I often reflect on constantly being the only Black woman sitting at the table," said Jones. "It takes a lot to stay motivated in careers that lack diversity when you are unable to visually see representation in those spaces. Nevertheless, I encourage everyone to understand that if that one person (whether it is you or someone else) doesn't take that journey alone and lift others while there, change may never occur."



# NIGMS Announces New Resource for K-12 Educators

Attention, educators. NIGMS has announced a new clearinghouse of free STEM education resources covering a wide range of health and biomedical research topics for students in grades K through 12.

The STEM teaching resources website (https://science.education.nih.gov/) provides links to great content from various institutes and centers within NIH, as well as materials developed under the NIGMS Science Education Partnership Award program (https://www.nigms.nih.gov/Research/DRCB/sepa/Pages/default.aspx).

The resources are easy to navigate within the following subject areas:

- Being a Scientist
- The Brain & Mental Health
- Diseases & Conditions
- Drug Use & Addiction
- Genetics
- The Environment & Human Health
- Healthy Living
- The Human Body
- Molecules & Cells
- Scientific Tools & Methods

Share the website with the educators in your life; it can be a useful tool for them to bring STEM materials into their classrooms.

Check back for updates because new content will be added as it becomes available.—Rachel Crowley



Jones is one of 120 STEM innovators featured in #IfThenSheCan—The Exhibit, which debuted on the National Mall in Washington, D.C., during Women's History Month.





At left, Taaffe's daughter delights in discovering a mommy statue. Above, as an NIAID postdoc, Taaffe speaks at the first global health interest group symposium.

understand the etiology, presentation and pathogenesis of severe malaria," she said. "I led this project using my background doing a similar type of work from my Ph.D. with SIV in macaques. The work was clinically, immunologically and pathology focused. During my postdoc I also

founded and led NIH's Global Health Interest Group, including holding its first annual symposium, which continues and thrives today."

Taaffe later returned to NIH as an NIAID contractor (2016-2021), leading outreach initiatives for the TB Portals, a data science and sharing program. She offers this advice to like-minded young people.

"If you're passionate about something, go after it, even if there isn't an obvious path for you," she said. "Be open to new opportunities and what you can learn from them. Build a strong professional network, especially among your peers. It is my similarly minded friends and

colleagues that have helped me through my most challenging professional moments. Directly engage with relevant professional communities to learn and create a place for yourself. Develop excellent science communication skills—this has been a key reason for success in my career."

#### Reproductive

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University of Nebraska-Lincoln.

In 1807, the United States banned the importation of slaves into any port or place within the U.S. jurisdiction. As a result of this prohibition, Cooper Owens said, physicians in the antebellum South became interested in the reproductive health of enslaved women.

"The engine of slavery was dependent upon enslaved women's ability to live through pregnancy and to birth healthy children," she said. "The status of slavery was passed from the mother to the child."

One of the most famous surgeons of the 19th century was the slave-owning South Carolina physician J. Marion Sims. Known after his death as the "Father of Gynecology," Sims developed a more effective surgical technique to repair vesico-vaginal fistulas, a tear between the bladder and vagina that develops after childbirth. It causes pain and urine leakage. He conducted most of his research on enslaved woman without their consent or anesthesia.

Sims did not have to ask for permission to perform surgery. "Slave owners had no legal obligation to ask an enslaved person whether they would consent to surgery or medical treatment," Cooper Owens explained. "Consent had to come from the owner."

In the 1840s, most surgeons did not use anesthesia because the field wasn't very advanced. Many didn't know the correct dosage.

Sims's treatment of enslaved women wasn't exceptional for his time. Other physicians, such as Drs. Ephraim McDowell, John Peter Mettauer and Francois Marie Prevost, also pioneered surgical techniques related to women's reproductive health by experimenting on enslaved women.

McDowell
was the first
person to
successfully
remove an
ovarian tumor.
Mettauer
performed the
first successful
repair of

vesico-vaginal fistula. Prevost was the second American to perform a successful Caesarean section.

"There was brutality and cruelty to go around, especially from the perspective of enslaved women who had to undergo experimental surgeries that lasted for years after being taken away from their homes, families, friends and communities," Cooper Owens said.

Sims first conducted experiments on about half a dozen women in a slave hospital in Montgomery, Ala. His patients remain mostly unknown except for three first names; Lucy, Anarcha and Betsey.

"He had two white male surgical assistants who were learning from him," Cooper Owens said. "After a few years of failed experiments, they quit. Sims did what any other slave owner did: He told his enslaved patients they must now work as his assistants."

He trained the women in the same way he trained the aides who had quit. Once Sims had established a surgical team of enslaved women, he finally perfected several surgical

"Slave owners had no legal obligation to ask an enslaved person whether they would consent to

surgery or medical treatment."

~DR. DEIRDRE COOPER OWENS

techniques. The women were smart and dignified, "even though they lived in a world that didn't afford them dignity," Cooper

Owens pointed out.

Initially when Sims published his findings, he was transparent and honest about the experiments and the race of his patients-turned-assistants. In subsequent articles, however, Sims's staff and patients were depicted as white. "There was an erasure that was happening visually and historically," Cooper Owens said.

Interest in the reproductive health of Black women ended once slaves were granted freedom. According to Cooper Owens's research, the United States has been for a long time the most dangerous high-income country for Black women to become pregnant or have babies.

In cities across America, "Black women have higher rates of death and complications from pregnancy and childbirth. The rates of mortality and morbidity are very high," Cooper Owens said. In Washington D.C., for example, the African-American maternal mortality rate is almost twice the national rate, despite dramatic improvements since 2014. Between 2013 and 2017, 95 percent of pregnancy-related deaths in the city were African-American, even though they make up only 44 percent of the population.

Figures in medical research history must be seen as humans, not objects of inquiry, Cooper Owens concluded. More importantly, the descendants of these figures must be thought of as "people who deserve our care and protection, so that we cannot continue on with these really harmful statistics around the Black birthing crisis."



In her recent NLM History of Medicine lecture, Cooper Owens said the enslaved women Sims trained to assist him in his research were smart and dignified, "even though they lived in a world that didn't afford them dignity."



#### PURPOSE, PEOPLE, PROGRESS

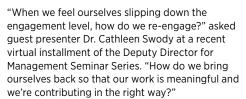
### Seminar Discusses Re-Engaging Employees Post Pandemic

BY CARLA GARNETT

Imagine you and your coworkers are traveling in a rowboat. You're trying to get to a shore in the distance. Are you constantly paddling and maybe shouting encouragement to your team? Or perhaps

you're occasionally rowing, but also taking breaks at times to enjoy the scenery. Maybe you're not helping the effort move forward at all and in fact are hauling in buckets of water to weigh down the boat.

Chances are we've all been in each position at one time or another in our careers. In the past 2 years of pandemic worklife, however, it may seem harder than ever to get our group to the other side of the lake together.



Dr. Cathleen Swody

#### **Recognizing Disengagement**

With close to 20 years of experience in coaching and professional development across various industries, Swody, partner and director of assessment at Thrive Leadership, offered insights on "Engaging employees as they transition to the post-pandemic workplace."

Just what is "engagement" in the workforce? The speaker, an organizational psychologist, gave context to the term.

"Employee engagement is focused energy, emotional commitment, giving that extra effort to support the organization's needs and goals," she said.

Engagement is not about happiness, job satisfaction or compliance—although all of those elements are valuable in getting the work done, Swody explained.

"But what drives emotional commitment? [Engagement] is about the bigger picture, about something bigger than the task itself," she continued. "How do we drive that psychological desire to do what's right for ourselves and the organization?"

Swody described three categories of workers—highly engaged, ok/satisfied and disengaged.

You'll recognize the highly engaged employees right away. They're making recommendations on ways to approach or improve the project. Focused

on the goals, they're cheering on or offering feedback to colleagues.

"Their actions show us that their heart and souls are in it," Swody said.

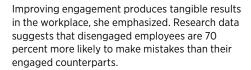
The ok/satisfied folks may not be actively moving the initiative ahead. They may be distracted sometimes or doing the bare minimum. Sometimes, they are not adding a ton of value, but they are also not working against the mission or "rowing backward."

The final category—detractors—are the folks who need the most immediate help, Swody pointed out. Disengaged employees are not only underperforming, but also dragging down the effort or project.

#### **Regaining Mojo at Work**

"It's unrealistic to expect everyone to be highly engaged—that's impossible," Swody noted, "but we want to increase the number of highly engaged people and at the very least convert some of the actively disengaged people into

that satisfied/ok category."



"The more highly employees are connected and engaged, the higher are productivity levels," Swody reported. "They have better outcomes as well as better patient care and customer care...When people are doing their best work, it shows."

The executive coach identified three themes that drive employee engagement across all fields—purpose, people and progress.

Employees perform better when they feel connected to the larger mission, Swody pointed out.

"We're really talking about creating meaningful work for people" that they can see clearly contributing to something bigger than the task itself and bigger than themselves, she explained.

Also, people need to be seen as valuable—both as individuals and as teammates.

"This means managers treating employees as human beings each with their own challenges, situations, personalities, strengths, tendencies and preferences," Swody said. "People want to be acknowledged as individuals and they also want to know they are not alone—they are working with other people who want the same big picture item."

Finally, progress is "the feeling that we're chipping away at something, that we're all contributing to forward momentum," she said. Such changes can be incremental and don't have to be seen as huge gains. It's the sense of accomplishment that matters.

#### Find Your 'Why'

In the last 2 years, a lot of folks have felt disconnected, given the global pandemic and its widespread, residual effects. Forty percent of surveyed employees say their professional development opportunities decreased over the past 2 years.

To re-energize yourself and others, practice behavior that may seem like common sense: Remind yourself and your team of how the work connects to the bigger purpose, connect to people one-on-one by asking them how they're coping and recognize both individual group milestones—no matter how minor.

"What gets me out of bed each morning is believing in the mission of our center and of NIH," said NCCIH executive officer Ginger Betson, who participated on screen in the virtual seminar. "NIH is massive and knowing that I contribute in even a small way to making things better and moving things forward really drives me every day."

NIMH executive officer Ann Huston, the third NIH'er to share on screen along with NIH deputy director for management Dr. Alfred Johnson, said colleagues motivate her, above all else.

"I have to put the people first," Huston said. "I have terrific people that I get to work with every day...I work with a really innovative staff and the innovation drives us. We're always looking for new ways to make progress."

Swody said, "Engaged teams have higher levels of creative problem-solving and that creates a positive spiral in the workplace."

Participants also shared tips for moving forward when they feel "stuck."

Take a break and maybe go for a walk, advised Huston. Call a colleague to commiserate and perhaps strategize, Ginger offered.

"I have to physically exhaust myself," Johnson said. "It's like pushing the reset button. That totally clears my mind."

Often new outlooks and different approaches reveal themselves afterwards.

"The key message is find what works for you and what gets you out of your own head," Swody summarized. "That's a theme I heard from all of you—different techniques for getting out of your own way and regaining that perspective so you can bring your best to yourself and your team."

# What Are You Most Looking Forward to About Working in Person?

It's been a minute since many of us have reported on site to work. What are some of the things you're most looking forward to about returning? The *Record* wants to know. Email us at: nihrecord@nih.gov or send responses anonymously via our Feedback feature at https://nihrecord.nih.gov/feedback.

## NIDCR Report Recommends Strategies to Address Oral Health Inequities

Oral health is intrinsic to overall health and well-being, yet CDC data shows nearly half of adults over age 30 have periodontal (gum) disease, and 90 percent have tooth decay. These and other oral diseases disproportionately burden people from marginalized and underserved groups.

Americans' oral health has improved over the last two decades, but disparities in oral health have persisted and pose a major global public health threat, write NIDCR director Dr. Rena D'Souza, acting science advisor to the President and former NIH director Dr. Francis Collins and U.S. surgeon general Dr. Vivek Murthy in a new perspective published in the *New England Journal of Medicine*.

Drawing on findings and recommendations from NIH's comprehensive report, *Oral Health in America: Advances and Challenges*, the authors write that equalizing oral health and access to care

# **Oral Health in America**



will require research and policy initiatives that make dental care more affordable, accessible and responsive to communities.

The Covid-19 pandemic, which has disproportionately affected the same groups that experience oral health inequities, highlights the effects of social and systemic factors on health and well-being, write the authors.

One threat to oral health is misuse and addiction to opioids, which are commonly prescribed to patients who lack access to dental care and seek treatment for dental problems in hospital emergency departments. In addition, people with certain mental illnesses have particularly high rates of oral disease.

The authors call for several policy changes to improve access to oral health care. These include integrating oral, medical and behavioral health care in traditional and non-traditional health care settings, such as schools and community health centers, as well as including communities in the planning, design and execution of oral health care systems.

Efforts are also needed to diversify the composition of oral health professionals, address education and training costs and build a strong oral health research enterprise. Such policy changes, with a greater emphasis on prevention, can disrupt inequities and improve overall oral health care.

For details, visit: https://www.nidcr.nih.gov/oral-healthinamerica

# FAES Announces Public Policy Workshops in Science & Technology

Learn how science and technology intersect and influence public policy with a series of workshops taught by public policy analyst and expert Dr. Deborah Stine. She has conducted public policy analysis for the National Academies of Sciences, Engineering and Medicine; the Congressional Research Service; the White House Office of Science and Technology Policy; and Carnegie Mellon University.

Foundation for Advanced Education in the Sciences (FAES) will offer a series of 2-day online workshops in science and technology public policy to grow skills and increase participants' understanding of and eligibility for policy-related fellowships, positions and promotions.

Workshops will enhance the analytical tools available to address program needs and assess programs funded by your organization.

Successful completion of each FAES workshop will earn a digital badge to demonstrate learning in the content area.

FAES Spring Public Policy Workshops (higher-level courses are more analytical):

- May 9-10 The Role of the White House, Congress, Federal Agencies and Judiciary in Science & Technology Policy (Level 1)
- June 6-7 Public Policy Analysis for Scientists, Engineers and Health Professionals: A Systematic Process for Analyzing and Developing Policy Options to Respond to Societal Challenges (Level 2)
- July 11-12 Public Policy Analytical Methods for Scientists, Engineers and Health Professionals:



Understanding and Evaluating Benefit-Cost, Cost-Effectiveness and Risk Analysis (Level 3)

• Aug. 1-2 Program Evaluation for Scientists, Engineers and Health Professionals (Level 4)

Register for all four workshops in the series to receive a significant discount.

FAES, a nonprofit located at NIH, conducts advanced training in the biomedical and related sciences. Register at https://education.faes.org/.

#### **Test Calculator Adjusted for Omicron**

NIBIB supported development of "When To Test," a Covid-19 testing calculator that is adjusted for the Omicron variant and considers positive cases in

your area. The tool has two versions: one for individuals and one for organizations to reduce risk of spreading of the virus. For details, check out https://whentotest.org/about.

FACT:
COVID-19 at-home tests should be used as authorized, which means following the instructions on how to obtain the sample for testing.

### **VOLUNTEERS**

# Airway Study Seeks Healthy Volunteers

Interested in participating in research as a healthy volunteer? Willing to undergo a bronchoscopy to help advance tuberculosis (TB) research? The National Heart, Lung and Blood Institute is conducting a study to evaluate airway immunity in adults with a positive or negative TB skin test. Want to participate? Contact the Office of Patient Recruitment at (866) 444-2214 (TTY users dial 711) or ccopr@nih.gov. Refer to study 21-H-0027. Online: https://go.usa.gov/xM4mH.

### **Individuals Needed for Testing**

Are you willing to undergo testing for research? By giving a little of yourself, you will be helping researchers in the neuroimmunology diseases section at NIH with discoveries in diagnosing and treating multiple sclerosis and other neurodegenerative diseases. This study will compare tests performed on healthy volunteers and individuals who have signs or symptoms of immune-related damage to their brain and spine. There is no cost to participate and compensation may be provided. Interested? Contact the Clinical Center Office of Patient Recruitment at (866) 444-2214 (TTY dial 711) or ccopr@nih. gov. Refer to study #09-I-0032. View online details: https://go.usa.gov/xeRUR.

### **Inside the Mouths of Vapers**

Electronic cigarette use—also called vaping—has been on the rise. Thought to produce fewer toxic



alters mouth microbes.

PHOTO: ASLYSUN/SHUTTERSTOCK

compounds than conventional cigarettes, e-cigarettes can still contain many harmful substances, including nicotine and heavy metals like lead.

Smoking conventional cigarettes is a known risk factor for the

development of gum disease, or periodontitis. Part of this risk is driven by changes in the bacterial communities that normally live in the mouth, called the oral microbiome. Do e-cigarettes induce similar changes?

A team from New York University examined 84 volunteers over a 6-month period: 27 people who smoked conventional cigarettes, 28 who only used e-cigarettes and 29 nonsmokers. All participants had at least mild gum disease at the start of the study and none of the volunteers had a dental cleaning during the study period.

The team compared the types of bacteria found where the gums meet the teeth at the outset and after 6 months, as well as markers of inflammation and immune cell activity. Results of the NIDCR-funded study appeared in *mBio*.

The number of unique bacterial species—a measure called alpha diversity—living in and around the gums increased for all participants during the study. This can be a sign of worsening gum disease.

But the specific types of microbes found in the oral microbiomes differed so substantially between the 3 groups that a machine-learning program could predict the people in each group with 74 percent accuracy.

However, the program was least accurate at picking out e-cigarette users. The patterns of their oral microbes shared characteristics with both smokers and nonsmokers, with slightly more similarities to smokers.

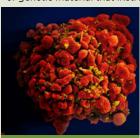
Unique traits among e-cigarette users included enrichment with *Fusobacterium* and *Bacteroidales* species, both of which are linked with gum disease. Also, several markers of inflammation and immune response were higher in smokers and e-cigarette users than in non-smokers.—adapted from *NIH Research Matters* 

# NIH Launches Trials of Three HIV mRNA Vaccines

NIAID has launched a phase 1 clinical trial evaluating three experimental HIV vaccines based on a messenger RNA (mRNA) platform—a technology used in several approved Covid-19 vaccines. The NIAID-funded HIV Vaccine Trials Network (HVTN), based at Fred Hutchinson Cancer Research Center in Seattle, is conducting the trial, called HVTN 302.

"Finding an HIV vaccine has proven to be a daunting scientific challenge," said NIAID director Dr. Anthony Fauci. "With the success of safe and highly effective Covid-19 vaccines, we have an exciting opportunity to learn whether mRNA technology can achieve similar results against HIV infection."

An mRNA vaccine works by delivering a piece of genetic material that instructs the body to



Electron micrograph of an HIV-infected H9 T cell PHOTO: NIAID

make a protein fragment of a target pathogen (such as a virus), which the immune system recognizes and remembers, so it can mount a substantial response if later exposed to that pathogen.

The HVTN 302 study will examine whether three

experimental HIV mRNA vaccines are safe and can induce an immune response. Each investigational vaccine candidate is designed to present the spike protein found on the surface of HIV that facilitates entry into human cells. Each of these experimental vaccines encodes for different but highly related, stabilized proteins.

The specific mRNA sequences contained in the vaccines were designed and developed by investigators at the NIAID-funded Scripps Consortium for HIV/AIDS Vaccine Development at Scripps Research Institute and the Bill & Melinda Gates Foundation-funded IAVI Neutralizing Antibody Center at Scripps, in collaboration with scientists at Moderna, Inc.

The HVTN 302 study will enroll up to 108 adults ages 18 to 55 at 11 sites across the country. Each participant will be randomly assigned to 1 of 6 groups each receiving 3 vaccinations over 6 months of 1 of the experimental vaccines.

Safety and immune responses will be examined via blood and lymph node fine-needle aspiration samples taken at specified timepoints throughout the trial. Clinical staff will monitor participant safety throughout the study. The clinical trial is expected to be completed by July 2023.



Mandatory masking was associated with a 72 percent reduction of in-school Covid-19 cases, during the Delta surge.

PHOTO: JR-50/SHUTTERSTOCK

# Mandatory Masking Reduced Covid-19 Cases in Schools During Delta

Schools with mandatory masking during the Delta surge had approximately 72 percent fewer cases of in-school transmission of SARS-CoV-2 compared with schools with optional or partial masking policies, according to an NIH-funded study.

The study included more than 1.1 million students and more than 157,000 staff attending in-person school across 9 states: North Carolina, Wisconsin, Missouri, California, Washington, Georgia, Tennessee, Kansas and Texas. The study, published in *Pediatrics*, is supported by NICHD and RADx-UP.

The study was conducted when Delta was the dominant variant and does not include data on school masking in preventing the spread of the Omicron variant.

The study included 61 school districts (kindergarten through grade 12) that provided data from July 2021 through Dec. 13, 2021, a period encompassing the Delta surge and preceding the Omicron surge.

In this study, most Covid-19 cases among students and staff were acquired from the community and approximately 10 percent of cases were acquired within school. The researchers found that for every 100 community-acquired cases, school districts with mandatory masking had approximately 7.3 cases of in-school infections, while optionally masked districts had 26.4 cases of in-school infections.

In other words, school districts with optional masking had approximately 3.6 times the rate of in-school cases compared to schools with mandatory masking.

The authors noted masking remains a critical preventive measure during high community infection rates with more transmissible variants, such as Delta and Omicron.

### All of Us Releases First Genomic Dataset

NIH's All of Us Research Program has released the whole genome sequences from nearly 100,000 participants. About half of the data comes from individuals who identify with racial or ethnic groups that have historically been underrepresented in research. This data will enable researchers to address yet unanswerable questions about health and disease, leading to new breakthroughs and advancing discoveries to reduce persistent health disparities.

"Until now, over 90 percent of participants from large genomics studies have been of European descent," said All of Us CEO Dr. Josh Denny. "All of Us participants are leading the way toward more equitable representation in medical research through their involvement. And this is just the beginning."

The genomic data is available via a cloud-based Workbench at https://www.researchallofus. org/. The research hub also includes genotyping arrays from 165,000 participants. Whole genome sequencing provides information about almost all of an individual's genetic makeup, while genotyping arrays, the more commonly used genetic



All of Us makes genomic data available to scientists across the U.S.

testing approach, capture a specific subset of the genome.

In addition to the genomic data, the Workbench contains an array of other deidentified participant information to help researchers better understand how genes can cause or influence diseases in the context of other health determinants. The ultimate goal is to enable more precise approaches to health care for all populations.

"As the Researcher Workbench matures, it will create nearly

endless possibilities for discovery to understand the role of genes and variants, as well as many other factors that combine to affect health and disease," said Dr. Gail Jarvik, who heads the division of medical genetics at the University of Washington School of Medicine, Seattle.

All of Us works with a consortium of partners across the country to help reach participants and collect data and samples, including community organizations and medical centers. The Researcher Workbench is managed by Vanderbilt University Medical Center in collaboration with the Broad Institute of MIT and Harvard and Verily.

Plans are underway to begin to share health-related DNA results on hereditary disease risk and medication-gene interactions later this year.



# **New Tribal Consultation Policy Issued**

NIH issued a new Tribal Consultation Policy, marking an important step that reflects NIH's commitment to:

- sovereign Tribal Nations
- a transparent and consistent Tribal Consultation process
- supporting the health of American Indians and Alaska Natives through biomedical and behavioral health research.

With an emphasis on trust and shared

responsibility, Tribal
Consultation is a formal government-to-government process for open and free exchange of information.
At NIH, it is a foundational opportunity for the scientific community



to listen and learn from Tribal leaders and respectfully consider the rights, knowledge, priorities, concerns, history and culture of Tribal Nations before developing research

priorities,
policies and
programs that
have significant
implications for
Tribal communities. Regular,
meaningful
engagement
with Tribal
partners helps
ensure American
Indians and
Alaska Natives
are well-rep-

resented in research and benefit from its outcomes.  $\,$ 

"We care deeply about the relationships we are building with American Indian and Alaska Native communities and are grateful for the incredible efforts of Tribal leaders and Tribal members, researchers and policymakers who advocate for Tribal Nations to guide biomedical and behavioral

research on behalf of their people," said Dr. David R. Wilson, director of NIH's Tribal Health Research Office and a member of the Navajo Nation.

The new policy reflects NIH's commitment to sovereign Tribal Nations.

Tribal Nations.

PHOTO: MONA MAKELA/SHUTTERSTOCK

policy's expectations and goals and to ongoing conversations with Tribal leaders about how NIH can

"We look

months to help

NIH institutes,

exceed the new

forward to contin-

ued discussion and

work in the coming

centers, offices and other components

uphold Tribal sovereignty and respond to the interests and priorities of Tribal Nations."

The NIH Tribal Consultation Policy requires all parts of NIH to engage in Tribal Consultation before any actions with significant Tribal implications are taken.

Learn more about the new policy and Tribal Consultation at NIH: https://go.usa.gov/xzPUw.