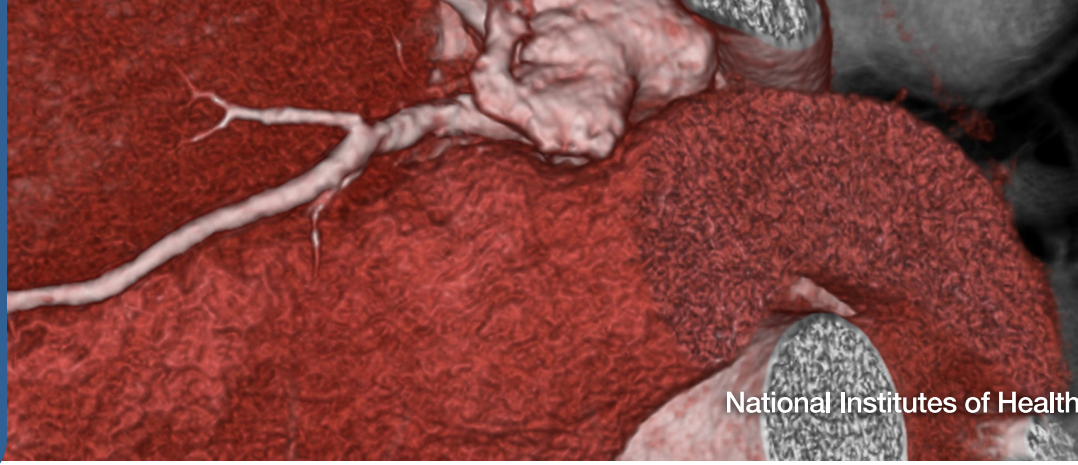


NIH RECORD

February 18, 2022
Vol. LXXIV, No. 4

National Institutes of Health



'THIS TOO WILL PASS' 9th Town Hall Addresses Plans Altered Due to Omicron

BY ERIC BOCK

The omicron variant of Covid-19 has disrupted NIH's plans to return to the workplace, said acting NIH director Dr. Lawrence Tabak during the 9th Virtual Town Hall on Jan. 27.

"This too will pass, as will any other variant nature throws at us," Tabak said. "We at NIH are a big part of why I'm so confident in our ultimate success. NIH-supported research has been key to global progress against this disease. We will continue to help counter whatever new challenge this wily virus presents."

The United States is still in the middle

of the pandemic phase of the Covid-19 outbreak, said NIAID director Dr. Anthony Fauci. In January, the country averaged between 600,000 and 700,000 new cases per day, 150,000 hospitalizations daily and 2,000 deaths per day.

Omicron now accounts for more than 90 percent of new U.S. Covid-19 cases. "From



At the 9th virtual town hall, acting NIH director Dr. Lawrence Tabak thanked staff for remarkable successes through challenging times.

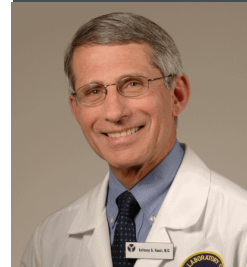
what we've learned from our South African colleagues, it appears to be less severe in the sense of causing hospitalizations and leading to death," Fauci said.

The decrease in severity is likely due to a lower degree of virulence compared to previous variants,

SEE TOWN HALL, PAGE 6



Presenting at the recent virtual town hall were (clockwise from I, above) acting NIH principal deputy director Dr. Tara Schwetz, NIH deputy director for management Dr. Alfred Johnson, OHR director Julie Berko and NIAID director Dr. Anthony Fauci.



NINDS BEACON Program Holds Inaugural Event

BY SHANNON E. GARNETT

Radm. Susan Orsega, senior advisor to the assistant secretary for health and surgeon



Radm. Susan Orsega

general in the Public Health Service, recently shared her experience and career highlights during a career forum hosted by NINDS's BEACON (Building Engagement and Community for Nurses) program.

The conversation—which was held on Zoom and moderated by Capt. Antoinette Jones, a registered nurse and patient

SEE BEACON, PAGE 8

ODS TURNS 25

Symposium Highlights Dietary Supplements Research

BY DANA TALESNIK

Many Americans routinely use dietary supplements. From vitamins and minerals to



Dr. Regan Bailey

herbal products, most adults report using supplements to improve or maintain their health.

But what does the science say? For more than 25 years, NIH's Office of Dietary Supplements

(ODS)—located in the Office of the Director—has been working to find out, supporting

SEE ODS, PAGE 4



White House event boosts Cancer Moonshot. See story, p. 3.

ALSO THIS ISSUE

- Cancer Moonshot Initiative Reenergized by Biden Administration 3
- NIDCR Appoints King Director of Extramural Activities 5
- COSWD Launches New Season of Seminars on Scientific Workforce Diversity Topics 7
- Digest 9
- Milestones 10
- Clinical Center Engages Gamers. 12



If you need to vent or talk through a particular challenge, call the support line, even if you're not sure you need help.

IMAGE: ASHT PRODUCTIONS/SHUTTERSTOCK

Staff Support Line Again Available

A Staff Support Line is available again for any NIH staff members who need it. The National Institute of Mental Health initially staffed the line from May 2020 to June 2021 as a supplement to services offered by the NIH Employee Assistance Program. The pandemic has continued to challenge us and the line is available again as an additional resource to staff.

If you need to vent or talk through a particular challenge, call the support line, even if you're not sure you need help. Mental health clinicians can listen to emotional challenges and stressors, provide encouragement and problem-solving approaches, promote resiliency and offer resources. Calls are confidential.

The call line, (301) 451-1151, is staffed Monday through Friday, from 9 a.m. to noon and from 1 to 4 p.m. EAP is also available at (301) 496-3164.

Emergency national services continue to be available as well. These services are free and available 24 hours a day, 7 days a week, and include:

- Calling the National Suicide Prevention Lifeline at 1-800-273-TALK (8255)
- Texting the Crisis Text Line (text HELLO to 741741)
- Calling SAMHSA's Disaster Distress Helpline at 1-800-985-5990
- Maryland 211 | MD Health and Human Services | Get Help (211md.org)

MI Program Unlocks New Career Paths

Have you heard of the NIH Management Intern (MI) Program? It is a highly competitive, 2-year career development program for current NIH employees. MIs come from a variety of job backgrounds, including both scientific and administrative fields.

Recent MIs have joined the program from positions as diverse as intramural program specialist, police officer, contract specialist, high-voltage electrician and extramural support assistant.

MIs rotate through different administrative career

Fauci Among 'Portrait of a Nation' Awardees

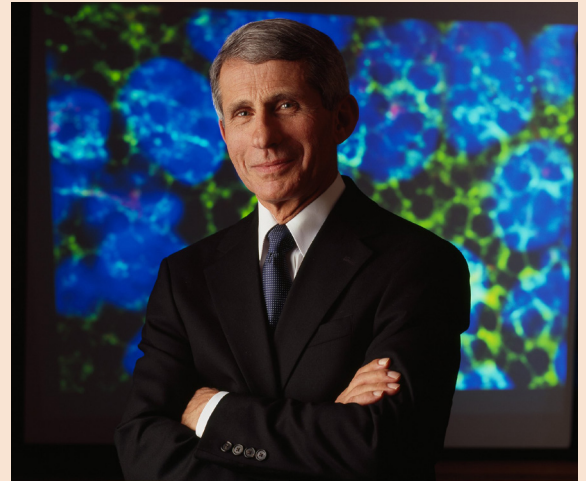
NIAID director and President Biden's chief medical advisor Dr. Anthony Fauci will be among several 2022 Portrait of a Nation awardees, who will be celebrated by the Smithsonian Institution's National Portrait Gallery.

The Portrait of a Nation Award goes to individuals selected from the roster of contemporary Americans whose portraits reside in the gallery's collection. "Recipients have made significant contributions across diverse fields and have demonstrated a significant commitment to service, and the values of creativity, individuality, insight and inquiry," according to the gallery's website.

Artists, musicians and friends of the National Portrait Gallery will celebrate the renowned honorees at a "Portrait of a Nation" gala in the museum's Robert and Arlene Kogod Courtyard.

The NIH'er is one of seven individuals to be recognized "for their transformational impact on the nation's history, development and culture," noted the gallery on its site. "We are proud to introduce [this year's honorees] who embody creativity, individuality, excellence and service to the people of our country."

Fauci's fellow honorees are chef José Andrés, music producer Clive Davis, filmmaker Ava DuVernay, Children's Defense Fund founder Marian Wright Edelman and tennis stars Serena Williams and Venus Williams.



fields to gain invaluable insight into NIH while contributing to the work through targeted assignments and challenging projects. After 2 years and upon completion of the program, MIs transition into an administrative-management career in one of many areas throughout NIH.

The NIH Management Intern Program vacancy announcement will be posted in USAJobs Mar. 1-11 under the title of Management Intern.

To learn more about the program or to view a recording of a recent MI Information session, visit: <https://hr.nih.gov/training-center/programs/intern/mi/management-intern-program-mi>.

Next 'Mind the Gap' Webinar Features Kadane, Feb. 23

Join the Office of Disease Prevention for a Methods: Mind the Gap webinar with Dr. Joseph "Jay" Kadane on Wednesday, Feb. 23 at 2 p.m. ET.

In the presentation, "Assessing the Accuracy of Binary Tests In Vivo Without Assuming a 'Gold Standard': Covid-19 and Chlamydia," Kadane proposes a method to analyze in vivo data from Covid-19 testing, particularly aiming at antigen tests, which give results quickly but do not always give results accurately.

Kadane, the Leonard J. Savage professor of statistics and social sciences at Carnegie Mellon University, is known for his contributions to Bayesian theory, econometrics and a wide variety of fields of application.

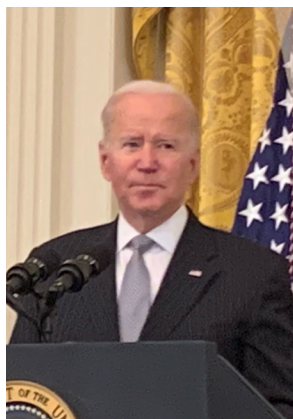


Dr. Joseph "Jay" Kadane

Registration is required. You can register at prevention.nih.gov/education-training/methods-mind-gap/assessing-accuracy-binary-tests-vivo-without-assuming-gold-standard-covid-19-and-chlamydia. The webinar will be recorded and available on the ODP website within approximately 2 weeks.

The webinar series explores research design, measurement, intervention, data analysis and other methods of interest in prevention science.

For more information, visit prevention.nih.gov/MindTheGap.



President Joe Biden, Vice President Kamala Harris and First Lady Dr. Jill Biden speak Feb. 2 at a White House event that set new goals and directed additional resources to the administration's Cancer Moonshot initiative.

the cabinet, along with sister agencies in the Department of Health and Human Services—the Food and Drug Administration, Centers for Medicare & Medicaid Services and Centers for Disease Control and Prevention.

In addition, the President proposed a bold new vision for biomedical and health research in the

President Reinfuses Cancer Moonshot at White House

President Joe Biden announced the relaunch of the anti-cancer initiative he prompted 6 years ago. The Cancer Moonshot has set new ambitious goals and will be overseen by the White House Office of Science and Technology Policy.

On Feb. 2, at a White House East Room event, Biden, Vice President Kamala Harris and First Lady Dr. Jill Biden spoke about their personal experiences with loved ones diagnosed with cancer.

The President noted that because of recent progress in cancer therapeutics, diagnostics and patient-driven care, as well as scientific advances and public health lessons gained from the Covid-19 pandemic, it's now possible to set ambitious goals: to reduce the death rate from cancer by at least 50 percent over the next 25 years and improve the experience of people and their families living with and surviving cancer—and, by doing this and more, “end cancer as we know it today.”

On hand for the announcement were acting NIH director Dr. Lawrence Tabak, acting NIH principal deputy director Dr. Tara Schwetz, NCI director Dr.



Cancer Moonshot will bring together dozens of agencies and organizations as part of a “Cancer Cabinet.” At the Feb. 3 event relaunching the initiative are (from l) National LGBT Cancer Network executive director Dr. Scout, acting NIH principal deputy director Dr. Tara Schwetz, acting NIH director Dr. Lawrence Tabak and community activist and author Tony Walker.

Ned Sharpless and NCI deputy director Dr. Doug Lowy.

“We will work with our partners to supercharge the Cancer Moonshot and #EndCancerAsWeKnowIt,” said Sharpless, on social media.

At the White House in 2016, then-Vice President Biden brought together a task force and challenged the public and private sectors to join together in making progress against cancer. President Barack Obama lauded the initiative in his State of the Union address.

Fast forward to 2022. The Biden-Harris administration has pledged to maintain and expand that commitment. In Biden's first budget, he sustained strong funding for biomedical and health research with increased funding for NIH and NCI, and full funding for the 21st Century Cures Act and the Beau Biden Cancer Moonshot Initiative at NCI.

Moonshot will form a “Cancer Cabinet,” convened by the White House and bringing together departments and agencies across government to address cancer on multiple fronts. NIH and NCI will be part of

Projects Agency for Health (ARPA-H), which is slated to develop as part of NIH. **R**



ON THE COVER: Cardiac computed tomography angiography, or CT scan, from a 60-year-old man with coronary artery disease. February is American Heart Month.

IMAGE: MARCUS CHEN, NHLBI

The NIH Record

Since 1949, the *NIH Record* has been published biweekly by the Editorial Operations Branch, Office of Communications and Public Liaison, National Institutes of Health, Department of Health and Human Services. For editorial policies, email nihreford@nih.gov.

Editor:
Carla Garnett • Carla.Garnett@nih.gov

Associate Editor:
Dana Talesnik • Dana.Talesnik@nih.gov

Assistant Editor:
Eric Bock • Eric.Bock@nih.gov

Editorial Intern:
Amber Snyder • Amber.Snyder@nih.gov

Subscribe via email: <https://go.usa.gov/x6mgQ> Follow: nihrecord.nih.gov/



The *NIH Record* is recyclable as mixed paper.



At the White House East Room event to relaunch Cancer Moonshot are (from l) Association of American Cancer Institutes Executive Director Jennifer Pegher, American Cancer Society CEO Dr. Karen Knudsen, HHS Secretary Xavier Becerra, NCI director Dr. Ned Sharpless and NCI deputy director Dr. Doug Lowy.

ODS

CONTINUED FROM PAGE 1

research on supplements to help confirm or refute health claims.

In 1995, when ODS was established, there was minimal research into the benefits or risks of dietary supplements. Back then, there were only about 4,000 products on the market. Today, there's a staggering array of more than 80,000 products in what has grown into a nearly \$56 billion industry.

Throughout the past year, ODS hosted several virtual events to celebrate its 25th anniversary, culminating in a 2-day symposium on supplements led by ODS acting director Dr. Joseph Betz.

Trends Across the Lifespan

More than half of U.S. adults take one or more dietary supplements regularly. Use increases significantly over time, with more than 70 percent of adults over age 65 taking them. Use is also high among other subgroups, such as pregnant women.

Prevalence data “indicate that micronutrients or vitamin and mineral supplements are the most commonly used products in the country,” said Dr. Regan Bailey, professor of nutrition and associate director of the Institute for Advancing Health through Agriculture at the Texas A&M University system.

About one-third of children take a micronutrient-containing supplement, mainly vitamins. In recent years, there's been increased use of other types of supplements, such as melatonin, omega-3 fatty acids and probiotics, with the intention of improving sleep, reducing stress or promoting bowel health.

Dietary supplement use varies by sex, race and ethnicity, educational attainment and income, as well as lifestyle factors such as physical activity. Among seniors who take supplements, 40 percent take a multivitamin, said Bailey, and nearly one-third take 4 or more supplements daily.

It's important to report supplement use to health care providers, recommended Bailey. From a clinical and research perspective, “If we don't include supplements in our total estimates of nutrient exposure,” she said, “we overestimate the proportion of the population at risk for inadequacy and we underestimate the proportion at risk for potentially excessive intakes.”

Eye Health

One NIH randomized clinical trial looked at whether a mix of specially dosed vitamins and minerals might reduce the risk of age-related macular degeneration (AMD), a leading cause of blindness.

The Age-Related Eye Disease Study (AREDS) was launched “at a time when a lot of studies were going on for cancer and cardiovascular disease,” said Dr. Emily Chew, chief of the Clinical Trials Branch at the National Eye Institute. “We as ophthalmologists latched onto that, and nutritional specialists helped us” with the formulations.

Investigators found that a combination of antioxidant vitamins A (beta-carotene), C and E along with zinc and small amounts of copper reduced the risk of progression to late-stage AMD over 5 years. “We also looked 10 years out and were surprised to find the beneficial effects persisted,” she said.

Building on the promising finding, NEI launched AREDS2, adding two plant-derived substances—lutein and zeaxanthin—as well as omega-3 fatty acids. The study found no benefit using omega-3s for the progression of AMD but lutein and zeaxanthin showed a significant benefit over beta-carotene. Going forward, investigators replaced the

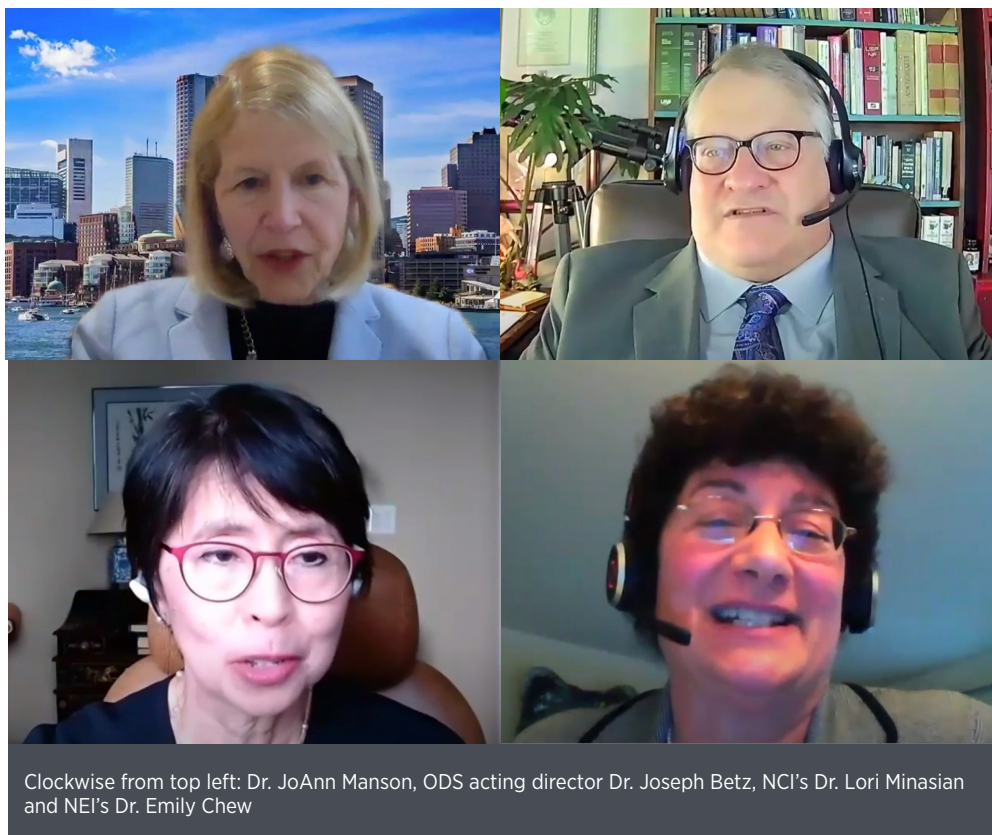
beta-carotene—which studies have shown increases lung cancer risk in smokers—with the more effective and safer lutein-zeaxanthin combination.

Cardiovascular Disease

Several NIH institutes collaborated with ODS on a large, randomized prevention trial studying the potential effects of vitamin D [2000 IU daily] and omega-3s [1 g daily] on cardiovascular disease (CVD) prevention. More than 25,000 people nationwide, including 5,100 African Americans, with a median age of 67 participated in this 5-year trial, called VITAL.

“A pattern was beginning to emerge by around 2012 that coronary events were more affected by omega-3 supplements than stroke,” said Dr. JoAnn Manson, a Harvard Medical School professor, chief of preventive medicine at Brigham and Women's Hospital and director of VITAL. VITAL confirmed that hypothesis.

For study participants who received omega-3s, there was a 28 percent reduction in fatal and non-fatal myocardial infarctions (MIs) but no reduction in stroke, Manson said. Digging deeper, the most significant reduction occurred among African American participants—a 77 percent lower risk of MI.



Vitamin D did not reduce major CVD risk but suggested a reduction in cancer mortality, a finding that requires further study. Digging deeper, “those who were at normal or healthy weight did have a 24 percent significant reduction in the primary endpoint of total invasive cancer with vitamin D,” said Manson. However, she cautioned, “We strongly discourage mega-dosing with either of these supplements.”

Prostate Cancer

The National Cancer Institute has long studied the potential of dietary supplements to reduce the risk of different types of cancer. One such trial, selenium and vitamin E in cancer prevention (SELECT), was based on the reported anti-tumor-igenic properties of these nutrients.

Focused on prostate cancer, the SELECT study recruited more than 34,000 men starting in 2001, intending to follow them for 12 years. The supplements were stopped, though, in 2008 after the data and safety monitoring committee for the trial found that administering selenium, an antioxidant, and/or alpha tocopherol, a form of vitamin E, did not reduce prostate cancer incidence. In fact, the alpha-tocopherol appeared to



“Some dietary supplements do have health benefits, but others need more research to determine if they have value or if benefits outweigh risks.”

—DR. JOSEPH BETTS




increase prostate cancer risk; follow-up with the study participants after a few more years confirmed this finding.

“We had at this point two basic scenarios of vitamins not only not preventing cancer but also potentially causing harm,” said Dr. Lori Minasian, deputy director of NCI’s Division of Cancer Prevention. Prior studies had pointed to beta-carotene’s link to lung cancer in smokers and then SELECT showed vitamin E increased prostate cancer risk.

SELECT continued as an observational cohort study and the ongoing collection of biospecimens inspired multiple collaborations, consortia and publications. Because of the high rate of use of multivitamins in the general public, SELECT investigators also developed a multivitamin without selenium and vitamin E. More than 90 percent of participants took the study multivitamins, providing an opportunity to explore other questions going forward.

ODS continues to support and collaborate on research evaluating the benefits and risks of dietary supplements, while updating consumer fact sheets, a dietary supplement label database and an ingredients database to inform consumers, health professionals and policymakers.

“Some dietary supplements do have health benefits, but others need more research to determine if they have value or if benefits outweigh risks,” said Betz. “We look forward to continuing to support scientific research on these products.”

For more information on the symposium, including links to the archived video recording, see: https://events-support.com/events/ODS_25th_Anniversary_Scientific_Symposium. 



There’s a staggering array of more than 80,000 products in today’s dietary supplement industry.

PHOTO: SHUTTERSTOCK/PROSTOCK STUDIO

NIDCR Names King Director of Extramural Activities

BY MICHAEL SOMES

Dr. Lynn Mertens King has been chosen as the director of NIDCR’s Division of Extramural Activities (DEA). A long-serving leader within NIDCR, she began the role on Jan. 3, after having worked in DEA since 2001.

“I am excited about the opportunity to lead the DEA, having worked in the division in different roles, and among an accomplished and dedicated team of individuals in the division and across NIDCR,” said King. “I welcome the opportunity to apply my experience and expertise in scientific administration to new challenges serving as the DEA director and continuing to support NIDCR’s mission to improve dental, oral and craniofacial health through research and training.”



Dr. Lynn Mertens King

Before becoming director, King was chief of the Research Training and Career Development Branch within DEA, where she served as the principal advisor to the NIDCR director on administrative and fiscal management of the extramural research training portfolio. Prior to that role, she was the chief of DEA’s Scientific Review Branch, a role she held after serving for 5 years as a scientific review officer.

While with DEA, she initiated a dental specialty and Ph.D. program funding opportunity announcement to support career development of dentist-scientists along with a new Mentoring Network program to enhance research career advancement of underrepresented postdoctoral and early-career faculty investigators.

“DEA has been doing great work and Lynn has played a major role in the stories of several successful programs over the years,” said NIDCR director Dr. Rena D’Souza. “Her experience and dedication bode well for her success in this expanded role. I am confident that under Lynn’s guidance and leadership DEA will help advance NIDCR’s strategic priorities in significant ways.”

A former assistant professor at the University of Miami, Coral Gables, King earned her Ph.D. in population biology from Washington University in St. Louis. She completed a postdoctoral fellowship at Harvard University in population genetics and molecular evolution.

She has won numerous awards for her contributions to NIDCR and led efforts to enhance the research careers of dentist-scientists and promoted diversity in dental, oral and craniofacial research.



Berko reported that the HHS return plan has been paused due to the status of the pandemic. Tabak praised staff performance over the last nearly 2 years of dealing with Covid-19-related uncertainties.

Cloth masks will not be permitted, unless worn over a surgical mask. N95 and KN95 masks are not required on campus.

Johnson said anyone who enters the Clinical Center and employees returning to onsite work after a positive Covid-19 test or exposure must wear a special type of surgical mask, called an ASTM level 3.

Recently, a federal court order placed a temporary hold on the implementation and enforcement of the federal employee vaccine mandate. The Department of Justice has appealed the decision. The vaccine mandate for federal contractors also remains on hold.

“When we get more details, we will communicate that to you,” Johnson said.

Due to the status of the pandemic, the Department of Health and Human Services paused its four-phased Return to Physical Workspace plan, said Julie Berko, director of NIH’s Office of Human Resources. [On Feb. 7, HHS announced the pause would end in March; see sidebar below.]

“This was a culmination of an effort that HHS began last summer in June, when the President signed an Executive Order that directed agencies to develop phased plans for reentry and post reentry,” Berko said. “This was coordinated at the HHS level and as a result, NIH had to modify its own plan that had been in place since June of 2020.”

Beginning in September 2021, NIH’s plan made federal employees, fellows and trainees who perform laboratory and clinical activities that must be done on site eligible to apply for voluntary return. In November, the voluntary return process expanded to include all federal employees, fellows and trainees, regardless of



Fauci described the omicron variant and gave a status report on the pandemic in the U.S. Schwetz talked about next steps in NIH’s transition to a new director.

the type of work they perform.

Early this January, the NIH Coronavirus Response and Recovery Team paused the review/approval of new applications to voluntarily return to the physical workplace, Berko said.

“This pause will continue at least until mid-February as we continue to monitor the situation in our communities,” she said. “Staff who have portable work and do not need to physically be on site are strongly encouraged to limit their onsite presence.”

In December, senior NIH leadership—including the NIH director and deputy directors and institute and center directors, scientific directors, clinical directors and executive officers—and their support staff returned.

As part of the plan, budget/finance, grants, acquisitions, human resources, equal employment opportunity and information technology employees were due to return at the beginning of January. They were to be followed by all other remaining employees.

Pausing applications for staff who want to voluntarily return and extending the timeline for bringing back remaining employees allows “NIH and HHS to take additional steps to ensure a safe, efficient and orderly return to onsite work,” Berko said.

There will be leadership changes at NIH, said NIH acting principal deputy director

Town Hall

CONTINUED FROM PAGE 1

higher vaccine coverage and infection-derived protection, he noted.

As a result of the increase in Covid-19 cases, NIH has made several changes to its safety guidance for NIH staff on coronavirus, said NIH deputy director for management Dr. Alfred Johnson.

All staff working in NIH buildings—except for the Clinical Center—must wear a well-fitting disposable surgical mask, he explained.

HHS Updates Return to Physical Workspace Plan

HHS has updated its Return to Physical Workspace plan for all operating divisions, including NIH, as pandemic conditions are improving.

As part of the return, budget/finance, grants, acquisitions, human resources, equal employment opportunity and information technology employees will begin returning on the pay period that starts Mar. 27. All remaining employees are anticipated to begin returning Apr. 10.

“While the Covid-19 pandemic has affected each of us in a variety of ways, much of our workforce has experienced a shift in their work/life fit, beginning with our shift to maximum telework in March 2020,” said acting NIH director Dr. Lawrence Tabak in a Feb. 9 all-hands email. “At NIH, our most important investment is each of you and it has been our priority to ensure that all flexibilities are considered as the state of the pandemic evolved.”

For many employees in these groups, the return to onsite work will be gradual with only a few days per pay period. For details about each phase, visit the Return to the Physical Workplace at <https://employees.nih.gov/pages/coronavirus/return-physical-workspaces-guidance.aspx>.




Berko shares a laugh as Johnson offers an impromptu demo on the various types of face masks available to onsite staff. For updates on the latest policies about masks, Covid-19 at-home testing and various pandemic-related guidance for the NIH workforce, visit <https://employees.nih.gov/pages/coronavirus/all-staff-email-20220204.aspx>.

Dr. Tara Schwetz. “In preparation for the transition to a new NIH director, we’ve identified four key areas that build on several of our current efforts, and that we believe are important to advance over the next 6 months.”

According to Schwetz, the four key areas are:

- Developing a transition plan for the new director
- Preparing to launch the Advanced Research Projects Agency for Health in case Congress funds the DARPA-like health agency
- Increasing support to minority-serving institutions in fiscal year 2022
- Integrating research and development contracts and other transaction awards into the Electronic Research Administration (eRA) system

“The NIH community has been truly remarkable throughout very trying times for everybody,” Tabak concluded. “If ever there was a model of government service at its best, it can be found in the people of today’s NIH.”

NIH’ers can view the entire town hall at <https://videocast.nih.gov/watch=44500>. 

COSWD To Host Virtual Forum on Fostering Cohort Recruitment, Feb. 23-24

NEW SEASON FOR SERIES

The Chief Officer for Scientific Workforce Diversity (COSWD) office is hosting its first Scientific Workforce Diversity Seminar Series event of the year on Feb. 23 and 24.

The Fostering Cohort Recruitment Virtual Forum will be held over 2 half-days (noon to 5 p.m. ET). It aims to galvanize the wider scientific community around the success of cohort recruitment models geared toward enhancing diversity, equity, inclusion and accessibility (DEIA) for faculty.

The forum will introduce attendees to faculty cohort programs that have successfully enhanced diversity both within and outside of NIH and delve deeper into the science behind why these programs are successful.

The event will explore these topics:

- faculty cohort recruitment adoption and dissemination
- the impact of faculty cohort recruitment on DEIA
- successful faculty cohort recruitment practices and potential barriers
- methods to effectively evaluate both implementation and outcomes

The Scientific Workforce Diversity Seminar Series was started in 2021. Its purpose is to share the latest research on scientific workforce diversity topics by engaging with interested professionals and researchers at NIH and beyond. Upcoming seminars will host renowned researchers who have contributed to the growing body of knowledge on pressing topics relevant to scientific workforce diversity, evidence-based interventions and more.

To view the forum’s agenda or register, visit <https://diversity.nih.gov/science-diversity/swd-seminar-series-february>.

Heart Health Month Events Continue

February’s American Heart Month observance (<https://go.usa.gov/xtmvH>) is a special time for NHLBI and The Heart Truth because it offers an opportunity to bring even greater attention to U.S. heart health. And that has never been more important. As the pandemic continues, many of us are feeling more stressed than ever. This month NHLBI is focusing efforts on reminding Americans that self-care is heart care.

On Friday, Feb. 25, from noon to 12:30 p.m. ET, learn how we can respond better to stress. Dr. Laurie Friedman Donze of NHLBI and Dr. Krystal M. Lewis of NIMH will discuss stress and its impact on heart and mental health, and demonstrate ways to bring on your body’s relaxation response. Join here: <https://www.facebook.com/events/659310535421645/>. The event also will be on the NIMH Facebook page at [facebook.com/NIMHgov](https://www.facebook.com/NIMHgov) as a live event.

#OurHearts

are healthier with self-care

Devoting a little time every day to care for yourself can go a long way toward protecting the health of your heart.

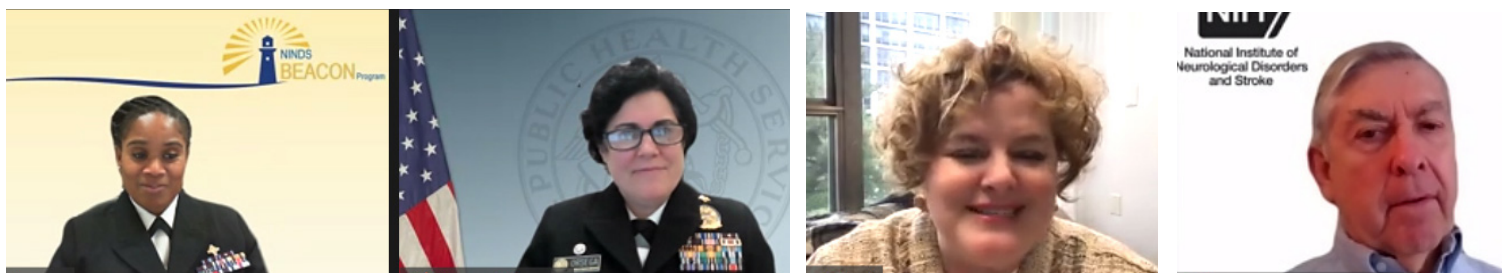
Try these simple self-care ideas, such as:

- Taking a moment to de-stress.
- Giving yourself time to move more.
- Preparing healthier meals.
- Getting quality sleep.

These acts can all benefit your heart. Connect with others to make these efforts more successful.

#OurHearts
are healthier together





Participating in BEACON's launch event are (from l) Capt. Antoinette Jones, Ortega, NINR director Dr. Shannon Zenk and NINDS director Dr. Walter Koroshetz.

BEACON

CONTINUED FROM PAGE 1

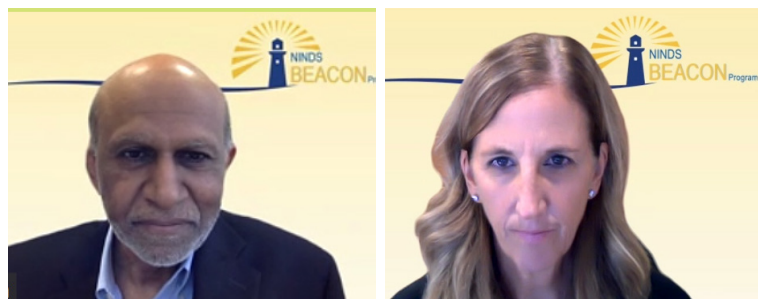
representative at the Clinical Center—was the inaugural event for the BEACON program.

A new career consortium sponsored by the NINDS clinical director, BEACON provides strategies to improve support and enhance inclusion for NINDS nurses in professional development, communication, collaboration and mentorship.

The program is the brainchild of Dr. Maureen Gormley, a senior advisor to the NINDS Executive Leadership Team.

Gormley—who retired as NINDS's deputy director for management in 2020—conceptualized the BEACON program and has played a key role in its development.

"We are very glad to sponsor this program for our hardworking nurses who not only help with our clinical research program



BEACON, a new career consortium sponsored by NINDS clinical director Dr. Avindra Nath, is the brainchild of Dr. Maureen Gormley.

but also provide outstanding care to our patients," said NINDS clinical director Dr. Avindra Nath.

The forum featured career advice and highlights from Orsega, who serves as a remarkable example of the expanded role of nurses in health care, research and global public health. Her long and distinguished career as a nurse includes contributions to the HIV/AIDS epidemic, Ebola, Covid-19 and other emerging infectious disease outbreaks.

Orsega earned her bachelor of science degree in nursing from Towson University

and her master of science degree from the Uniformed Services University of the Health Sciences Nurse Practitioner program.

Although she officially began her NIH career in 1989 in the PHS Commissioned Corps, she previously worked at NIH in the summer between her junior and senior years of college.

"I came into nursing because I had a real love of science," recalled Orsega. She said the summer she spent working at NIH "was a pivotal part for me because it cemented why I wanted to go into nursing. NIH gave me a forum to collaborate. One of the unique components of NIH is our ability to collaborate—to have a seat at the table."

In fact, NIH's community of collaboration led her to become a nurse practitioner.

During the forum, Orsega shared the principles that help guide her career—the hardiness resilience gauge and VUCA.

"Resilience requires a leader to be disciplined," she emphasized. "The hardiness resilience gauge is comprised of three qualities—challenge, control and commitment. It allows me to frame my thinking to be more purposeful. Challenge is about taking that risk and putting yourself out

there. Control is your belief and your ability to influence outcomes and commitment is about the purpose—believing that you are spending time on what matters most."

VUCA—which stands for volatility, uncertainty, complexity and ambiguity—was first used by the U.S. Army War College to describe conditions resulting from the Cold War. The concept has since been used in business and other organizations to guide leadership and now exemplifies the ability to shift and respond to changes.

"As you go through your career, you will

pick principles that will guide you as a person and as a leader in and out of your work life," Orsega said. "The principles of the hardiness resilience gauge and VUCA drive who I am and my approach as a leader."

Orsega also shared ways in which nurses can collaborate and make significant contributions at decision-making tables and how they can grow their careers by pursuing new opportunities.

"So many of us came into the workforce when there was a great need for nurses. And, we are in the same challenge now," she said. "What's exciting now is that you can take nursing and use it as a launching pad to determine where you can make inroads."

After a brief question and answer session, the event closed with remarks from NINDS director Dr. Walter Koroshetz and NINR director Dr. Shannon Zenk.

"What we've learned is that each of us has opportunities to contribute to the greater good, but these opportunities change, and they change unpredictably," said Koroshetz. "I think it's important that trying new things is always on your plate. Opportunities will arise. You don't know where you will end up. You could end up as an admiral."

Zenk concluded, "I want to commend my colleagues for launching the BEACON program. Building engagement and community for nurses is vital to the research missions of NIH. As we continue to take on important roles, please take note of the ingenuity, creativity and originality with which Rear Admiral Orsega practices nursing and let her career path inspire your own." **R**

Take Your Child to Work Day Returns Virtual in 2022

On Thursday, Apr. 28, NIH will celebrate its 28th Take Your Child to Work Day. The event will once again be held virtually for grades 1 through 12. To learn more about the day and registration details and dates, visit: <https://takeyourchildtowork.nih.gov>.

Oral Immunotherapy Induces Remission of Peanut Allergy

An NIH clinical trial found that giving peanut oral immunotherapy to highly peanut-allergic children ages 1 to 3 years safely desensitized most of them to peanut and induced remission of peanut allergy in one-fifth.



PHOTO: SHUTTERSTOCK/HAFIEZ RAZALI

The immunotherapy consisted of a daily oral dose of peanut flour for 2.5 years. Remission was defined as being able to eat 5 grams of peanut protein, equivalent to 1.5 tablespoons of peanut butter, without having an allergic reaction 6 months after immunotherapy. The youngest children and those who started the trial with lower levels of peanut-specific antibodies were most likely to achieve remission.

The results of this trial, called IMPACT and sponsored by NIAID, were published in *The Lancet*.

Peanut allergy affects about 2 percent of children in the U.S., or nearly 1.5 million individuals ages 17 years and younger. The risk of a life-threatening allergic reaction to accidentally eaten peanut is significant for these children, most of whom remain peanut-allergic for life.

Nearly 150 children ages 1 to 3 years participated in the IMPACT trial at 5 U.S. academic medical centers. The children were assigned at random to receive either flour containing peanut protein or a placebo flour.

During a 30-week period, children in the treatment group ate gradually escalating daily doses of up to 2 grams of peanut protein, equivalent to about 8 peanuts. The children then continued to consume their daily dose of peanut or placebo flour for an additional 2 years.

Next, the children received gradually increasing doses of peanut protein, then stopped treatment and avoided peanut for 6 months.

Finally, the children were given 5 grams of peanut protein. Those who did not have an allergic reaction were later fed 8 grams (2 tablespoons) of peanut butter, on a different day to confirm they could safely eat peanut.

At the end of the treatment period, 71 percent of children who received peanut flour were desensitized to peanut, compared to only 2 percent of those who received the placebo flour.

Signs of Mental Health Resilience in Youth During Pandemic

Longitudinal survey data of more than 3,000 adolescents ages 11-14 recorded before and during the early months of the Covid-19 pandemic in 2020 found that supportive relationships with family and friends and healthy behaviors—such as engaging in physical activity and better sleep—appeared to shield against the harmful effects of the pandemic on adolescents' mental health.

The research, published in the *Journal of Adolescent Health* and supported by NIDA, is based on data from the Adolescent Brain Cognitive Development Study, the largest long-term study of brain development and child health ever conducted in the United States.

Researchers also explored predictors of perceived stress, anxiety and depressive symptoms, and found that girls were more likely than boys to experience psychological distress during the pandemic. Psychosocial factors, including poorer quality and functioning of family relationships, more screen time and witnessing discrimination in relation to the pandemic, also predicted youth distress.

In this study, adolescents and their parents completed pre-pandemic assessments by February 2020, which documented baseline parent/caregiver reports of externalizing problems (e.g., acting aggressively) and sleep disturbances (e.g., sleep duration) and youth reports of internalizing problems (e.g., feeling anxious or depressed). Participating parents and youth then separately completed 3 online Covid-19 surveys, conducted between May and August 2020, which featured more than 200 items across psychosocial and lifestyle domains.



PHOTO: SHUTTERSTOCK/MJTH

Researchers used machine-learning methods to look for patterns of positive affect, anxiety, stress and depressive symptoms across the surveys. They then interpreted the results through an algorithm, ranking variables according to their importance for predicting youth mental health outcomes.

“This study helps us understand how modifiable lifestyle factors affect the mental health and well-being of adolescents, and it can inform the development of interventions to protect youth during a major life stress” now and in the future, said NIDA director Dr. Nora Volkow.

Silencing a Faulty Gene May Uncover Clues to Rare Forms of ALS

Using an experimental drug, researchers suppressed a mutated amyotrophic lateral sclerosis (ALS) gene. Studies in mice demonstrate the therapy shows potential in treating rare, aggressive forms of ALS caused by mutations in the fused in sarcoma (FUS) gene.

The study, funded in part by NINDS, was published in *Nature Medicine*.

“The study models how promising gene-targeting therapies can move expeditiously from pre-clinical development to clinical testing,” said Dr. Amelie Gubitza, NINDS program director.

ALS, also known as Lou Gehrig's disease, is a fatal neurological disorder that causes the degeneration of motor neurons in the brain and spinal cord. Most cases of ALS are sporadic, but at least 10 percent of cases are due to gene mutations. Severe forms of ALS, including a rare type that begins in adolescence or young adulthood, are caused by mutations in the gene FUS.

In the study, Dr. Neil Shneider of Columbia University and his team delayed the onset of motor neuron degeneration in mice by using an antisense oligonucleotide drug designed to silence FUS by blocking cells from making specific proteins. Following encouraging results, they administered the drug to a human patient with ALS.

In mice, injecting a single dose of the drug into the ventricles, fluid-filled spaces surrounding the brain, delayed the onset of inflammation and motor neuron degeneration by 6 months. The drug also knocked down levels of FUS by 50 to 80 percent in the brain and spinal cord.

Under a compassionate-use protocol reviewed by FDA, Shneider administered the drug to a patient, who received repeated infusions into her spinal canal for 10 months. During the treatment, the patient's rate of motor function deterioration slowed and there were no adverse effects.

Treatment began more than 6 months after clinical onset, by which time the disease had already significantly advanced. The disease progressed rapidly, and the patient died from complications of the disease.

By studying the patient's brain and spinal cord tissue, researchers found the drug had silenced FUS throughout the nervous system. By targeting the faulty gene in a way that suppresses toxic FUS activity, gene-silencing products like the antisense oligonucleotide drug could potentially reduce or prevent disease progression.

Six NIH'ers Elected 2021 AAAS Fellows

The council of the American Association for the Advancement of Science (AAAS) recently announced election of 564 members as 2021 AAAS fellows. Six NIH'ers are among the honorees. Election acknowledges members whose efforts on behalf of the advancement of science or its applications in service to society have distinguished them among their peers and colleagues.

Section on Biological Sciences

Dr. Ying E. Zhang, senior investigator in the Laboratory of Cellular and Molecular Biology, NCI

Section on Education

Dr. Kenneth D. Gibbs Jr., chief of the Undergraduate and Predoctoral Cross-Disciplinary Training Branch in the Division of Training, Workforce Development and Diversity, NIGMS

Section on Medical Sciences

Dr. Michail Lionakis, chief of the fungal pathogenesis section and deputy chief of the Laboratory of Clinical Immunology and Microbiology, NIAID

Dr. Avindra Nath, senior investigator of the section of infections of the nervous system and clinical director, NINDS

Dr. Vivian W. Pinn, senior scientist emeritus, Fogarty International Center

Section on Neuroscience

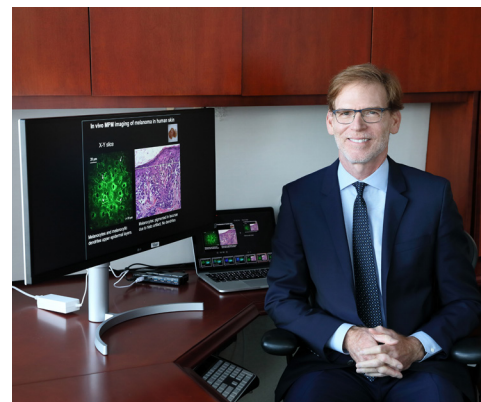
Dr. David R. Sibley, senior investigator in the molecular neuropharmacology section, NINDS

AAAS fellows are a distinguished cadre of scientists, engineers and innovators who have been recognized for their achievements across disciplines, from research, teaching and technology, to administration in academia, industry and government, to excellence in communicating and interpreting science to the public.

In a tradition stretching back to 1874, these individuals are elected annually by the AAAS council. Newly elected fellows are recognized for their extraordinary achievements at the ceremonial fellows Forum, a time-honored event at the AAAS annual meeting where they are presented with a certificate and blue and gold rosette. Election as an AAAS fellow is a lifetime honor.



Among recently named 2021 AAAS fellows are NIH'ers (clockwise from top l): Dr. Ying E. Zhang, Dr. Kenneth D. Gibbs Jr., Dr. David R. Sibley, Dr. Avindra Nath, Dr. Michael Lionakis and Dr. Vivian W. Pinn.



NIBIB director Dr. Bruce Tromberg

NIBIB's Tromberg Receives Awards

NIBIB director Dr. Bruce Tromberg is among the 164 academic innovators recently named to the 2021 class of National Academy of Inventors (NAI) fellows. The 2021 fellows will be inducted at the 11th annual NAI meeting in June.

The fellows program highlights academic inventors who have demonstrated a spirit of innovation in creating or facilitating outstanding inventions that have made a tangible impact on the quality of life, economic development and the welfare of society.

Tromberg specializes in the development of optics and photonics technologies for biomedical imaging and therapy. He has co-authored more than 450 publications and holds 24 patents in new technology development as well as bench-to-bedside clinical translation, validation and commercialization of devices.

Last month, Tromberg won the 2022 Britton Chance Biomedical Optics Award by the International Society of Optical Engineering (SPIE). The award recognizes outstanding lifetime contributions to the field of biomedical optics through development of innovative, high-impact technologies. The award particularly honors pioneering contributions to optical methods and devices that have facilitated advancements in biology or medicine.

The award recognizes Tromberg's high-impact translational research and overall leadership in the development of biophotonic technologies for diagnostics and therapeutics.

Retired NCI Biostatistician Gart Is Mourned

Dr. John Jacob Gart, a mathematical statistician at the National Cancer Institute from 1965 to 1991 died on Jan. 24 at age 90.

Born in Chicago in 1931, Gart graduated summa cum laude in 1953 with a bachelor of science degree from DePaul University. He earned an M.S. at Marquette University in 1955 and his Ph.D. in 1958 at Virginia Tech. He was a fellow at Oak Ridge Institute of Nuclear Studies, an assistant professor at Johns Hopkins University and a visiting research fellow at the University of London, before joining NCI in the Biometry Branch in 1965.

From 1967 until his retirement in 1991, Gart served as chief of NCI's mathematical statistics and applied mathematics section. The section developed novel statistical methods for problems arising in a variety of areas of medical and biological research and provided statistical consultation services to NCI investigators involved in laboratory and epidemiologic research.

Former NCI colleague Dr. Robert Tarone noted that Gart's numerous published papers demonstrate both his many important methodological contributions, particularly in the area of the statistical analysis of categorical data, and also the wide range of areas of biomedical research in which he provided skilled consultation.

Gart was one of the world's foremost experts in the statistical analysis of categorical data, particularly in the development of methods that were appropriate and accurate for data from experiments with small sample sizes. Importantly, he also published papers providing code for computer programs that allowed his methods to be implemented by a wide range of researchers.

Tarone noted that as section chief, "John demanded the same level of rigor and effort be given to statistical consulting efforts as was given to the application of statistical theory in method development. He was generous with his time—both with regard to technical or theoretical problems arising in method development and with regard to issues arising in statistical consultations. He was an outstanding mentor to the section staff, assisting both with technical scientific



Dr. John Jacob Gart

aspects of consulting efforts, and when needed, with advice on handling rare difficult interactions arising with consulting clients. He was an exceptional leader, and his leadership style allowed staff to become strong and independent in both method development and in providing effective statistical consultation services throughout the NCI."

A member of the International Statistical Institute, Gart received numerous honors and accolades throughout his career, including an NIH Special Achievement Award. He received a North Atlantic Treaty Organization postdoctoral fellowship, served as an advisor to the World Health Organization and was an associate editor for *the American Statistician*.

The excellence of Gart's research career is attested to by the number of professional organizations that made him an honorary fellow, including the American Association for the Advancement of Science, the American Statistical Association, the Royal Statistical Society, the Institute for Mathematical Statistics and the Biometric Society.

Gart's survivors include his wife of 60 years, Sheila Gart of Chevy Chase, Md.; sons Matthew Gart of Salem, Va., and Thomas Gart of West Orange, N.J.; daughters Jacqueline Griffin of Truckee Calif., and Rebecca Bowers of Olney, Md.; 10 grandchildren and 3 great-grandchildren. **R**

Do You Have a RASopathy Syndrome?

RASopathies are rare disorders caused by a genetic change often diagnosed in infancy or early childhood. People with RASopathy syndromes may have developmental issues, cognitive and congenital disabilities and poor growth, and may also have an increased risk of developing cancer. An NCI study will look to better understand medical conditions in individuals with RASopathies. If you or a relative have been diagnosed with a RASopathy syndrome and want to know how to enroll in the study, contact the Clinical Center Office of Patient Recruitment at (866) 444-2214 (TTY users dial 711) or email ccopr@nih.gov and reference study #20-C-0107 Online: <https://rasopathies.cancer.gov>.

Volunteers Needed for Taste/Smell Study

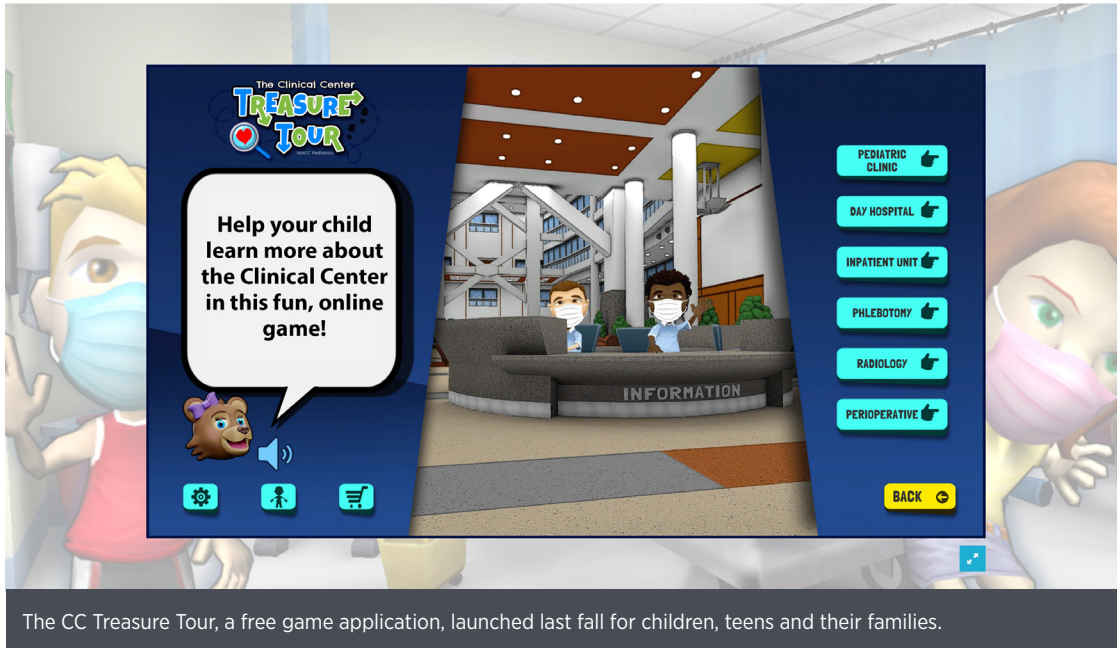
Investigators at NIH are seeking volunteers between ages 18 and 65 to participate in a study to better understand taste and smell alterations and how they differ in obese versus non-obese individuals. All study-related tests provided at no cost and compensation is provided. Contact the Clinical Center Office of Patient Recruitment at (866) 444-2214 (TTY users dial 711) or ccopr@nih.gov. Refer to study 000261-AA. <https://go.usa.gov/xeuse>.

Adults with Diabetes Wanted

NIDDK researchers seek adults with type 2 diabetes to join a study. Doctors will investigate physiology of vitamin C in red blood cells of diabetic subjects as a function of the presence of glucose in the blood, with and without vitamin C supplementation. Compensation is provided. For details, contact the Clinical Center Office of Patient Recruitment at (866) 444-2214 (TTY users dial 711) or ccopr@nih.gov. Refer to study #14-DK-0060. Online: <https://go.usa.gov/xyTaY>.

Volunteers with Type O Blood Sought

NIAID is looking for volunteers with type O blood to create a supply of malaria-rich blood for future malaria research. Volunteers will be infected with a mild case of malaria, donate their blood for future research and then be treated with a highly effective malaria treatment. Participants may experience mild, flu-like symptoms but will be monitored closely and treated quickly. Volunteers will receive compensation for participating. For details, call (866) 444-2214 or email ccopr@nih.gov. Refer to study #000212-1 or visit <https://go.usa.gov/xejfb>.



The CC Treasure Tour, a free game application, launched last fall for children, teens and their families.

can navigate the hospital with ease,” said CC CEO Dr. James Gilman.

Treasure Tour is designed to be a fun and interactive game. Players can customize their character and explore the hospital before visiting in person.

Treasure Tour provides a look at six different CC patient care areas. All are presented in a kid-friendly way and are easily recognizable to anyone who has visited, or will soon visit, the hospital.

“Leaving home to receive care at a new hospital can be very frightening, especially to young children,” said Dr. Lori Wiener, co-director of the Behavioral Health Core and director for

New Game Introduces Youngest Patients to the CC

BY DONOVAN KUEHN AND MARIA MASLENNIKOV

The NIH Clinical Center is giving its patients the chance to “level up” with a new app.

The CC Treasure Tour is a free game application. Launched last fall, the app is aimed at children, teens and their families to help them better understand the layout of the hospital, the programs and services offered onsite and the procedures and tests patients might undergo.

“At the NIH CC we want to make every effort to ensure children and their families coming to receive treatment feel comfortable and

the Psychosocial Support and Research Program of NCI’s Pediatric Oncology Branch.

The game is another way to “help to reduce uncertainty, decrease associated distress and enhance adjustment to the new hospital and treatment,” she added.


Kavya Nadella, a student majoring in speech therapy at the University of Houston and a patient at the hospital, narrates the game.

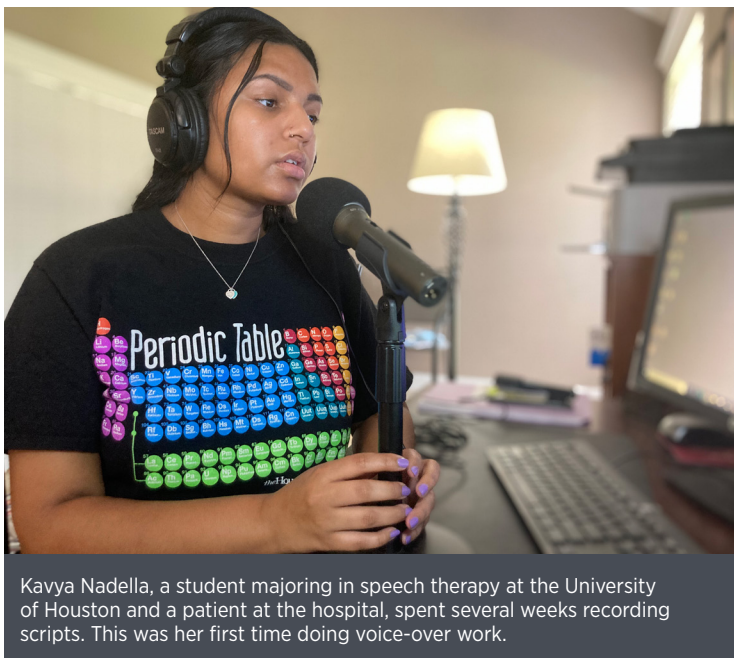
“I was a part of the clinical research for Dock 8 immunodeficiency and I was part of that study from when I first got in contact with NIH in 2014 to now,” she said.

Nadella spent several weeks recording scripts daily this past summer during a break from her studies. This was her first time doing voice-over work. She was very excited to participate.

The CC Office of Communications and Media Relations came up with the idea for the app and shepherded the project in close partnership with Wiener and her staff, as well as with guidance from the pediatric care committee, department of clinical research informatics, the Children’s Inn at NIH and other stakeholders.

Treasure Tour is a single-player game, so children aren’t in a game environment with strangers. The app does not gather personally identifiable information during play nor track users’ geo-location or use their social media in any way.

For information about downloading the app, see: <https://cc.nih.gov/treasuretour>. Questions can be emailed to treasuretour@nih.gov. 



Kavya Nadella, a student majoring in speech therapy at the University of Houston and a patient at the hospital, spent several weeks recording scripts. This was her first time doing voice-over work.