

ENGINEERING, CREATIVITY HUB IDEAS Abound in NIBIB Lab

BY AMBER SNYDER

Imagine you're an NIH scientist who needs a specific instrument or software program for an unconventional experiment or method, but that laboratory 'tool' doesn't exist yet. Luckily, the National Institute of Biomedical Imaging and Bioengineering



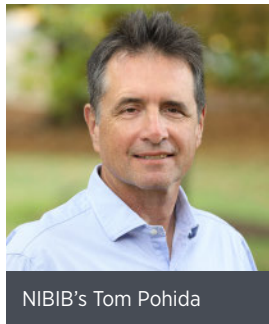
NIH Makers

ALEX KICH/SHUTTERSTOCK

(NIBIB) has a resource that can help.

The Instrumentation Development and Engineering Application Solutions

(IDEAS) lab is the central, on-campus engineering resource within the Intramural Research Program (IRP). Established in



NIBIB's Tom Pohida

1995 by lab chief and electrical engineer Tom Pohida, IDEAS is a go-to resource for NIH researchers looking to develop novel biomedical laboratory and clinical research

enabling systems, instrumentation and methodologies. The lab has collaborated, truly hand-in-hand, with investigators to build and test first-of-a-kind technologies, many leading to NIH Director funding awards, patents, publications and other means of sharing innovations.

How did IDEAS begin? "It's kind of an

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Collins Reflects on 70 Years of Clinical Center Research

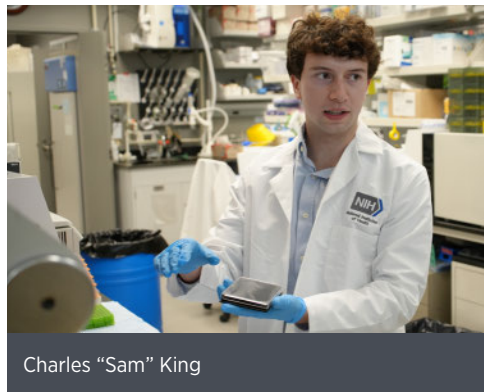
BY SEAN MARKEY

Pioneering researcher and former NIH Director Dr. Francis Collins addressed the Clinical Center community in a recent Grand Rounds talk marking the CC's 70th anniversary.

During his presentation, "Seven Decades at the Forefront of Medical Research: The NIH Clinical Center," the physician-geneticist surveyed the CC's history of groundbreaking research and shared his insights into its future challenges and opportunities.

Known for his landmark research into disease genes, Collins led the international Human Genome Project and later worked as NIH director under three presidents, becoming the longest serving presidentially

SEE CC AT 70, PAGE 4



Charles "Sam" King

REPUTATION MATTERS

Summer Fellow King Chose NIH for Internship Opportunity

BY LAUREN BURDEN

For Charles "Sam" King, a rising senior at Purdue University majoring in pharmaceutical sciences, the decision about where to work over the summer was influenced by

SEE INTERN, PAGE 10

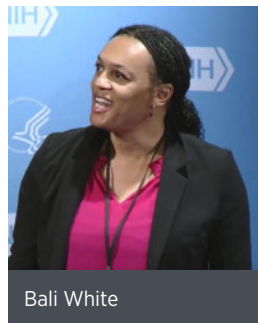
HEALTHY, AUTHENTIC ENGAGEMENT

Proper Use of Pronouns Creates a More Welcoming NIH

BY ERIC BOCK

NIH is working to ensure that everyone, including the lesbian, gay, bisexual, transgender and queer (LGBTQ+) community, can live authentically without prejudice or discrimination.

Understanding the differences between sex and gender and the proper use of pronouns can help create a welcoming, respectful and inclusive workplace for sexual and gender minorities (SGM), said Dr. Karen Parker, director of NIH's Sexual and Gender Minority Research Office at a recent Pride



Bali White

SEE RESPECT, PAGE 8



NIH'ers lift weights to combat hunger. See p. 12.

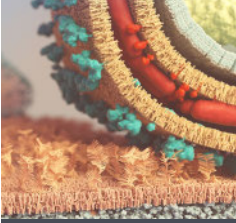
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NIH Research Festival is Back

After a three-year hiatus, join the first in-person celebration of intramural research since 2019.

- Sept. 18: NIH Resource Information Fair
- Sept. 18–19: NIH Early-Career Investigator Lectures, Poster Sessions and Concurrent Workshops
- Sept. 19: Green Labs Fair
- Sept. 20: WALS G. Burroughs Mider Lecture, featuring Dr. Dale Sandler, NIEHS (See details, p. 9)
- Sept. 20–21: Vendor Exhibit and Workshops
- Sept. 21: National Academy of Science Mini-Symposium
- Sept. 22: Philip Chen Technology Transfer Lecture, featuring Dr. Carlos Zarate, NIMH



An extracellular enveloped version of the mpox virion

IMAGE: NIH/NIAMD/RTB

Stay tuned for more science and fun in the works at Researchfestival.nih.gov.

NIH Partners with 'Kahoot!'

Up Your Game

A new partnership with the global learning platform 'Kahoot!' was recently launched to provide quizzes from across NIH in a single place.

"Reaching young people to teach them about biomedical science and inspire them to pursue careers in science is critically important to ensuring a diverse and vibrant biomedical research enterprise," says Dr. Jon Lorsch, director of the National Institute of General Medical Sciences. "Our partnership with Kahoot! expands NIH's STEM offerings, providing educators with free, interactive learning tools to spark student interest in health sciences."

Look for games that hundreds of thousands of people have already played and for brand new games that we've recently created! Familiar games include Superbugs!, National Drug & Alcohol IQ Challenge and the Brain, Pain Prevention, and Anesthesia. Now there's a Kahoot! course called the Science of Sleep. Be sure to check out these new games from across NIH:

Health Literacy from NCCIH—helps students better understand scientific research to make informed decisions about their health

How Does Noise Damage Your Hearing? from NIDCD—encourages children to adopt healthy habits to protect their hearing

Lung Health from NHLBI—provides information on the respiratory system and tips for keeping lungs healthy

Teen Depression from NIMH—examines how to recognize and deal with depression

View a full listing of quizzes on NIH's Kahoot! page at <https://tinyurl.com/bdd47uza>.

COSWD Addresses Graduates of CUNY School of Medicine

Dr. Marie Bernard, NIH chief officer for scientific workforce diversity, was the keynote speaker at the City University of New York (CUNY) School of Medicine's 2023 B.S. Commencement and White Coat



Dr. Marie Bernard, NIH chief officer for scientific workforce diversity, gives the keynote at CUNY School of Medicine's 2023 commencement.

Ceremony on Aug. 3. CUNY Med's mission is to address health care inequities in New York City and beyond and to increase diversity and representation in medicine.

"It'll be your job to make sure that biases are limited, that your patients' voices are heard, that different ways of seeing and receiving things are appreciated," Bernard told the graduates. She also shared her five rules for success: listen, take every opportunity to learn, be generous, take care of yourself and your loved ones and enjoy the ride.

Bernard also encouraged the students to consider a career at NIH, noting that the acting director of NIH is a CUNY graduate. Dr. Lawrence Tabak graduated from CUNY in 1972.

Bernard also encouraged the students to consider a career at NIH, noting that the acting director of NIH is a CUNY graduate. Dr. Lawrence Tabak graduated from CUNY in 1972.



At left, CUNY Med Dean Dr. Carmen Renée Green (l) greets Bernard. At right, Bernard chats with students at a roundtable event.

New CC Exhibit Honors Nobelist Alter

Opening Sept. 7

"Harvey Alter and the Discovery of Hepatitis C: Making Our Blood Supply Safe," a new exhibit, is now on view in the central corridor of the Magnuson portion of the Clinical Center, near

the FAES coffee shop. A ceremony and reception will mark its official opening on Sept. 7.



New exhibit in the Clinical Center honors 2020 Nobelist Dr. Harvey Alter.

PHOTO: DEVON VALERA

Likely speakers include NIH Acting Director Dr. Lawrence Tabak, Clinical Center CEO Dr. James Gilman and former NIH Director Dr. Francis Collins. Alter will also attend.

Black History Feature Photo Adds Name to Face

BY DEVON VALERA

This February, for Black History Month, the Office of NIH History and Stetten Museum (ONHM) honored Black scientists and staff from across NIH's history. As part of the salute, the Feb. 17 *NIH Record* published an ONHM photo featuring an unidentified technician in the National Cancer Institute's Laboratory of Pathology.

In the historical record, many support staff go unnamed or unrecorded. For that reason, ONHM was delighted when the *Record* received an email putting a name to the technician's face:

"A family friend came across a picture of my grandfather, Charles Green, on your website...Thank you for honoring my grandfather on Black History Month. It means more than you would ever know."

As a result, ONHM sat down with Green's daughter, Cynthia Green, and grandson, Joshua Spivey, to talk about Charles's life and career.

Born Jan. 18, 1927, near Libertytown, Md., Charles Green served in the U.S. Army during World War II. After completing his tour, he returned home and married Bernice Williams in December 1951 and started looking for a job. Although opportunities for a Black man in the Jim Crow South were limited, Green landed a position at the NCI Laboratory of Pathology in the mid-1950s.

Green's daughter said his job at NCI was a good position that helped him support his family, which was his priority in life. After joining NIH, Green was able to move his family from an apartment to a house in Frederick, Md.

The Greens had three children, a son and two daughters, and regularly returned to Libertytown to visit family.

"He was a man that enjoyed his family and being



The photo that started it all. Charles Green is shown loading a histomatic tissue processor.



Green and his grandson Joshua Spivey in the late 1980s

around family...just the simple life," said Cynthia. He loved boxing, cars, holidays and picnics out in Pinecliff Park. "During the holiday season, anything we wanted, my sister and I, we would have it. We didn't want for anything.

"Being a Black man, there were some things that were challenging to him and his position [at work]," she acknowledged. Despite the obstacles, he loved his job and believed in the importance of the work he was doing.

In the lab, Green worked alongside such scientists as Dr. Alan Rabson, who spent 20 years in the Laboratory of Pathology before being named director of NCI's Division of Cancer Biology and, later, NCI deputy director. Rabson was a leader in the field of cancer pathology and studied how certain viruses could cause cancer.

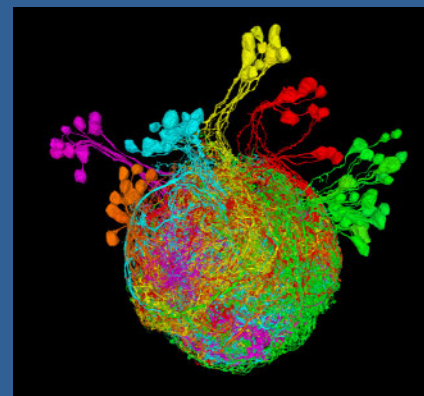


After searching its archival photo collection, ONHM was able to identify Green in several group photos from the NCI Laboratory of Pathology. This one is from 1968. Green can be seen in the back row, fourth from left.

Spivey takes after his grandfather. They share a love of boxing, cars and family. Observant from a young age, Spivey learned to tie a Windsor knot by watching his grandfather get ready for church on Saturdays.

Green died from brain cancer in 1989 at age 62, when Spivey was just four years old. Despite the brief acquaintance, Green's legacy left a lasting impression on his grandson, who is now a teacher earning his doctorate in education at New Mexico Junior College.

During the school year, Spivey makes sure to teach students how to properly knot a tie. **R**



ON THE COVER: "Premotor Neurons Controlling the Fruit Fly Leg." Reconstruction of premotor neurons from a serial-section electron microscopy dataset of the *Drosophila* female adult nerve cord. 2nd place winner. 2023 Show Us Your BRAINS! image contest.

IMAGE: ANDREW COOK, JASPER PHELPS, ANTHONY AZEVEDO, ELLEN LESSER, LEILA ELABBADY, BRANDON PRATT, WEI-CHUNG ALLEN LEE & JOHN TUTHILL/UNIVERSITY OF WASHINGTON & HARVARD MEDICAL SCHOOL

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National Institutes of Health
Turning Discovery Into Health

CC at 70

CONTINUED FROM PAGE 1

appointed NIH director. He currently serves as a senior researcher for the National Human Genome Research Institute's Center for Precision Health Research, where he investigates the role genes play in a range of human diseases with the aim of discovering new treatments.

The special Grand Rounds lecture was one of several events held in honor of the CC's milestone year; two art exhibitions were also installed. (See sidebar on STEM statues.)

In his retrospective, Collins celebrated a long list of major Clinical Center research advances that transformed understanding and treatment of cancer, sickle cell anemia, infectious diseases such as HIV and Ebola, vaccines, mental illness and rare diseases.

The first cure of a solid cancer tumor with a chemotherapy drug, the first approved human gene therapy and the use of ketamine to treat severe depression and suicidality, were just some of the many milestones Collins cited. The Presidential Medal of Freedom recipient said he hoped his "romp" through 70 years of remarkable Clinical Center research left listeners in awe.



At the recent event celebrating the Clinical Center's 70th birthday are (from l) CC CEO Dr. James Gilman, Grand Rounds speaker Dr. Francis Collins and Dr. Thomas Burklow, senior research physician and director of the CC Office of Clinical Research Training and Medical Education.

PHOTO: LISA HELFERT

"To see this track record—this number of major advances that have really changed the course of medicine—all coming from this Clinical Center is pretty phenomenal," he said. "There's no place else on Earth that comes close to that level of achievement."

Collins noted, for example, the vision of Dr. Steve Rosenberg, senior investigator and chief of the Surgery Branch at the National Cancer Institute, who joined the Clinical Center in 1974 and embarked on

a decades-long quest to discover how to activate the immune system to fight cancer.

"I think Steve would tell you this is the kind of facility that made it possible over this stretch of time, with many high-risk...protocols that did not succeed, to keep pushing forward those boundaries," Collins said. "[That] might have been very difficult to do in any other place and now [his research] has unleashed an entire field of cancer immunotherapy."

Collins used the second half of his presentation to spotlight key opportunities and challenges he believes the Clinical Center will face in the years ahead.

"We're in this exponential phase of progress in biomedical research, much of it driven by technology," he said.

He highlighted the importance of cell therapy, gene therapy, vaccine research, Alzheimer's research and precision medicine and emphasized the need to maintain cutting-edge facilities, focus on patient safety and support the NIH-wide UNITE initiative to address structural racism in biomedical research.

Collins also shared his hope that the Clinical Center can grow its capacity to treat pediatric patients younger than two years old, particularly when it comes to gene therapies.

Reflecting on the CC's role as a "House of Hope" for patients who serve as fellow partners in research, Collins said, "The people that we are most grateful to are the patients, who have come here and put their trust in us."

He expressed optimism that the Clinical Center will continue to evolve in ways that will save many lives and reduce much suffering.

"It's going to take every bit of energy and creativity and risk-taking that has characterized this Clinical Center from the very beginning back in 1953," he concluded.

Watch the archived Grand Rounds lecture online at: <https://videocast.nih.gov/watch=49881>. **R**

So Long, STEM Statues

With the summer waning, the art installation celebrating the Clinical Center's 70th anniversary also saw its final days at NIH.

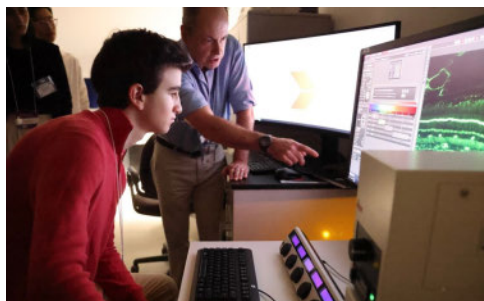
The hospital hosted 10 statues from #IfThenSheCan—The Exhibit, 3-D printed, life-size figures of women innovators in science, technology, engineering and math (STEM). The exhibit, on loan to NIH courtesy of Lyda Hill Philanthropies, was on display in the CC atrium and east courtyard/Healing Gardens.



Above, STEM statues were on display in the CC atrium east courtyard/Healing Gardens. Shown (top, r) are Dana Bolles (top, r), American spaceflight engineer and advocate for people with disabilities, and at right, a close-up image with texture details.

PHOTOS: ERIC BOCK





Mark Leschinsky (l) works a microscope in the laboratory under the direction of Dr. Robert Fariss, chief of the NEI Biological Imaging Core Facility. At right, the students and their families gather outside of Bldg. 35. Below, NEI Director Michael F. Chiang (r) speaks with the students at NEI's 2023 Eye on the Future event.

NEI High School Student Video Contest Winners Visit NIH

BY LESLEY EARL

The National Eye Institute (NEI) hosted winners of the 2023 Eye on the Future Video Contest on July 14 on the NIH campus in Bethesda.

In its second year, the contest invited high school students to submit videos about how they are engaged with science. This year, NEI received more than 60 submissions. Thirteen high school students from around the U.S., including three winners and 10 honorable mentions, came to campus for a day of eye and vision science-related activities and for the opportunity to network with each other and with NIH scientists.

Early in the day, NEI director Dr. Michael Chiang

and NIH Acting Director Dr. Lawrence Tabak met with the students and discussed the challenges and joys of a career in science.

Tabak took questions from the students about NIH and his role as its leader. In addition to sharing his own journey to becoming a scientist, Tabak talked about his experience being the first person in his family to attend college—a challenge shared by some of the visiting students.

Kevin Williams, who directs NIH's Office of Equity, Diversity and Inclusion, hosted a panel discussion that included Dr. O'Rese Knight, University of California San Francisco, and Dr. Michael Tri Hoang Do, Harvard University, as well as NEI researchers Dr. Ximena Corso-Díaz and Dr. Dinusha Rajapakse Todd.

Students asked about aspects of scientific careers, like how the panelists got interested in



science and medicine, paths towards becoming a physician or researcher, and a day in the life of a scientist.


Following the discussion, the students participated in networking activities with NEI intramural scientists and trainees.

"I really enjoyed meeting all these amazing scientists and learning what they do," said Thuy-Tien Tran, one of the video contest winners. "It helps to inspire me, [to figure out] what I would like to do in my future."

In the afternoon, the students toured NEI laboratories and dissected animal eyes with NEI scientists Dr. Noor White and Dr. Robert Fariss. Working in groups, the students learned about eye anatomy and got a bit of lab experience.

"My favorite thing about the visit was...meeting people my age with similar interests and sharing with them," said Celia Cooley, another video contest winner. "I never really thought I would be interested in the health sciences. This visit has changed my perspective on what I can do...There's room to explore and come up with experiments that merge disciplines."

Remarking on one of the advanced microscopes in the NEI Biological Imaging Core Facility, "It was truly amazing to have a hands-on experience at this microscope, to see how a real scientist would do the job," said Mark Leschinsky, the final video contest winner. "Overall, it's been a wonderful experience for me."

At the end of the day, the students and their parents visited exhibits from NEI, the Foundation for Advanced Education in the Sciences (FAES), the National Human Genome Research Institute, the National Institute on Alcohol Abuse and Alcoholism, the National Cancer Institute and the NIH Office of Research Services. FAES co-sponsored the event. 

About the Winning Videos

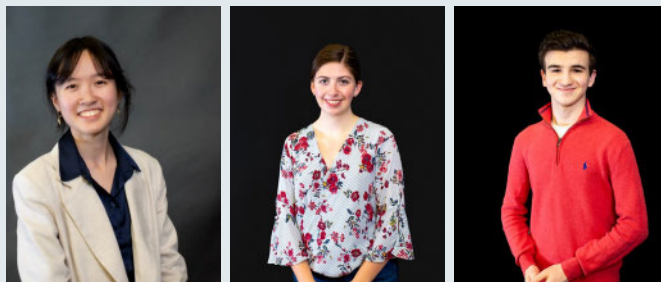
The 2023 Eye on the Future Video Contest chose winners in three categories.

"Science in your world" Thuy-Tien Tran described her work in an optician's office helping screen children's vision. She has also conducted interviews to better understand the experience of people with vision loss. "I enjoy science, but I'm also passionate about art," she said. "This video contest allowed me to use animation and storytelling to convey the science that I learned in a unique and fun way."

"Science in the field or lab" Celia Cooley is most interested in working with the community to preserve our environment. Her video shared steps for how volunteers can help monitor water quality and count macroinvertebrates—small insects like water pennies—in rivers and streams. A volunteer river monitor in her own community, Cooley loves to use film as a way to educate and facilitate conversations.

"Science in your future" Inspired by the 2014-2016 Ebola outbreak, at eight years old Mark Leschinsky designed and won a patent for a unique, self-disinfecting hazmat suit. His video describes the features of his invention, which includes disinfecting solution pockets behind a porous outer layer. "I want to be able to help other people and have science be a benefit to society," he said. Like Tran and Cooley, Leschinsky is keen to use the arts and film as a way to communicate. "I think we can use the intersections between science and film... to raise awareness about scientific topics."

View the winning videos at <https://go.nih.gov/RYWlxe7>.



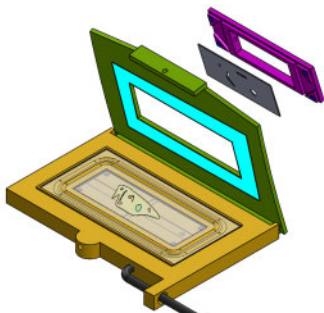
Winning videographers are (from l) Thuy-Tien Tran, Celia Cooley and Mark Leschinsky.

IDEAS

CONTINUED FROM PAGE 1

interesting story,” said Pohida. He started at NIH in the former National Center for Research Resources Biomedical Engineering and Instrumentation Program’s electrical engineering group in 1992, but the group was disbanded several years later. A subcommittee of scientific directors expressed their dismay, saying “the loss of in-house [engineering] capability has adversely affected intramural research.”

Pohida set up shop in his home garage and got to work (with young daughters in tow) designing and building novel instruments and developing software on a volunteer basis, after his NIH hours working in other disciplines. Several scientific directors learned of his evening and weekend efforts and gave him permission



System components developed to enable automated machine-vision monitoring of fruit-fly behavior in high-throughput drug-efficacy, phenotyping, and toxicology studies (NIBIB, NIDDK, NIEHS, NHLBI). The latest version uses a custom plastic-injection-molded 24-well plate to house the flies during monitoring.



Pohida (front, c) with other members of the IDEAS lab

to set up an on-campus engineering lab, and thus, IDEAS was born.

“[The lab] has grown organically over the years” to meet technology development needs as NIH IRP scientists propose collaborations, Pohida said. “We stay up to date on modern engineering design and prototyping methods, and try to foresee how these capabilities can be applied to facilitate research at NIH.”

IDEAS has collaborated with nearly all institutes and centers on hundreds of IRP advances, and they often foster multiple ICs working on projects together. The number of IDEAS/IRP collaborations continues to increase every year.

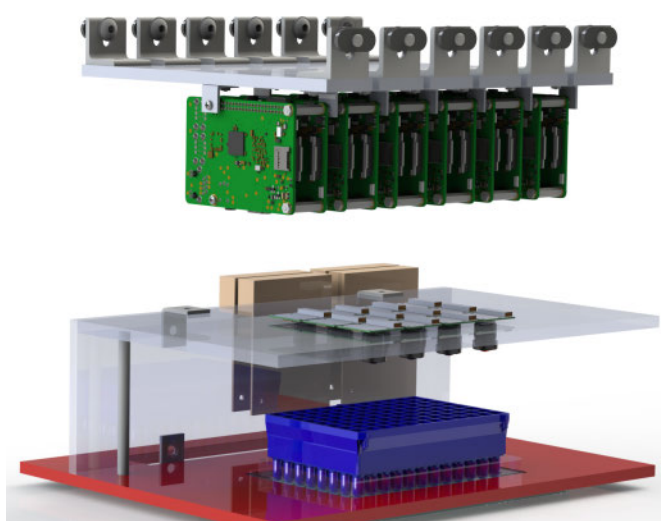
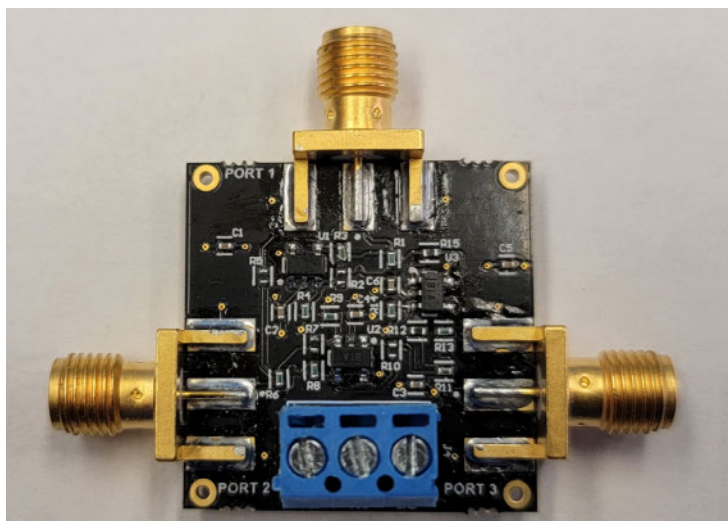
Pohida also wanted to emphasize that the value or impact of an IDEAS’ innovation is far more than just patentability. “We consider an engineering development a success if the work enables an IRP

investigator to further their laboratory or clinical research in ways otherwise not possible,” he explained.

IDEAS also has a robust intern program. “Many of our full-time staff began their NIH careers as student trainees,” Pohida said. “Most years, our IDEAS full-time staff are outnumbered by trainees.”

Appreciating his talented IDEAS staff, he said, “I point [them] in a general direction, and then they do wonders in engineering design, prototyping and research in labs all over campus.”

What draws so many people to the lab? “The opportunities and available resources to be creative, explore new ideas and contribute to impactful research are almost unlimited,” said Pohida. “I think this is one reason why I have not had an employee leave my group since 1995.” **R**



At left, in-house designed and fabricated radiofrequency printed circuit board for electron paramagnetic resonance imaging technology development on the Bethesda campus (NCI, NIBIB); at right, custom histology microscope slide assembly prototype associated with NIH IRP patents on automated tissue microdissection methods (NICHHD, NCI, NIBIB, NIMH, NIDA).

Marrazzo Named NIAID Director

Dr. Jeanne M. Marrazzo is the newly named director of the National Institute of Allergy and Infectious Diseases (NIAID). She currently serves as director of the Division of Infectious Diseases at the University of Alabama at Birmingham. She is expected to begin her role as NIAID director in the fall.

“Dr. Marrazzo brings a wealth of leadership experience from leading international clinical trials and translational research, managing a complex organizational budget that includes research funding and mentoring trainees in all stages of professional development,” said Acting NIH Director Dr. Lawrence Tabak.

Marrazzo’s research in discovery and implementation science has focused on the human microbiome, specifically as it relates to female reproductive tract infections and hormonal contraception; prevention of HIV



Dr. Jeanne Marrazzo
PHOTO: UAB/LEXI COON

infection using biomedical interventions, including PrEP and microbicides; and the pathogenesis and management of bacterial vaginosis, sexually transmitted diseases in HIV-infected persons and management of antibiotic resistance in gonorrhea. She has been a principal investigator on NIH grants continuously since 1997 and has served frequently as a peer reviewer and advisory committee member.

Marrazzo will oversee NIAID’s budget of \$6.3 billion, which supports research to advance the understanding, diagnosis and treatment of infectious, immunologic and allergic diseases. NIAID supports research at universities and research organizations around the United States and across NIAID’s 21 laboratories, including the Vaccine Research Center on the Bethesda campus and the Rocky Mountains Laboratories in Hamilton, Mont. NIAID also has a unique mandate to respond to

emerging and re-emerging public health threats at home and abroad. The NIAID research response to outbreaks of infectious diseases, from HIV to Ebola to Covid-19, has led to new therapies, vaccines, diagnostic tests and other technologies.

Over the course of her career, Marrazzo also has served as a mentor to trainees at all stages of professional development, including on NIH-funded training grants. She was the recipient of the American Sexually Transmitted Diseases Association’s Distinguished Career Award, the highest recognition of contributions to research and mentoring in the field.

Marrazzo is a fellow of the American College of Physicians and of the Infectious Diseases Society of America and is board certified in infectious disease. She earned her bachelor’s in biology from Harvard University; her M.D. from Thomas Jefferson University, Philadelphia; and a master of public health in epidemiology from the University of Washington, Seattle.

Marrazzo also has chaired the American Board of Internal Medicine (ABIM) Council and the ABIM Infectious Disease Specialty Board. **R**

Feds Feed Families Events Fight Hunger

BY LIYA TADESSE

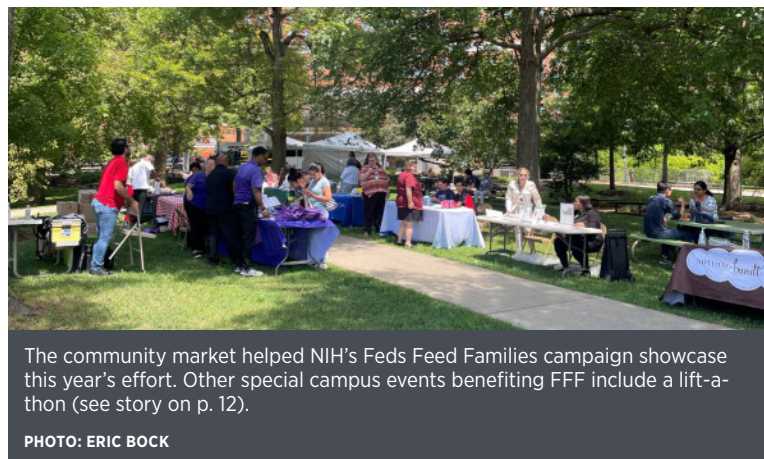
On July 18, the NIH Community Market hosted an in-person event to promote the annual Feds Feed Families (FFF) effort. Since 2009, FFF has aimed to combat hunger within communities by encouraging federal agencies to contribute to the cause. This year, from June 26 to Sept. 30, NIH is taking an active role in the campaign, with a particular focus on mobilizing efforts within the local Washington, D.C. metropolitan area.

Gregg Nelson, co-chair of this year’s FFF, embraced his role as food program manager. With a background in the restaurant industry and a deep understanding of food operations, Nelson—now in a federal position—brought his expertise to a larger platform.

The FFF role “gives me a good opportunity to have a nice macro view of food operations both on and off campus” that he wouldn’t otherwise have, he said.



Gregg Nelson



The community market helped NIH’s Feds Feed Families campaign showcase this year’s effort. Other special campus events benefiting FFF include a lift-a-thon (see story on p. 12).

PHOTO: ERIC BOCK

FFF is once again virtual this year due to the ongoing pandemic. Participants are encouraged to donate in multiple ways, from purchasing groceries online and having them delivered directly to a food bank or pantry of their choice, to making monetary donations. This virtual setup enables greater accessibility and participation across the NIH community.

In addition to online donations, NIH again offered a creative twist—collection points at the campus cafeterias. Throughout the month of August, employees could add a specific amount to their cafeteria bills, making the act of giving seamless and convenient.

The campaign shines a spotlight on partnering

organizations such as the Children’s Inn at NIH and the Safra Family Lodge, the Capital Area Food Bank and Manna Food Center. These local entities receive donations, ensuring that the impact of the campaign directly supports communities in need.

Nelson’s optimism and dedication are shared by co-coordinator Renee

Barnes, who has been a part of FFF for two years. She emphasizes the importance of community involvement in generating innovative initiatives. As different institutes and centers organize their own events and projects, the FFF campaign takes on a broader role.

By leveraging technology, fostering community partnerships and empowering employees to make a difference, FFF not only raises crucial food donations but also strengthens the bonds of unity and compassion within the NIH family.

Visit go.nih.gov/BI6wJo for more information on giving. **R**

Respect

CONTINUED FROM PAGE 1

Month forum focused on SGM/LGBTQ+ hot topics.

In 2015, NIH began using the term SGM. These include—but are not limited to—individuals who identify as lesbian, gay, bisexual, asexual, transgender, Two-Spirit, queer and/or intersex.

The terms sex and gender are often used interchangeably, Parker said. While these constructs are related, they are distinct, she pointed out. Sex refers to a set of biological traits in humans and animals. Every person is assigned a sex at birth, which is typically determined via the presence or absence of male or female sex organs.



“Someone’s gender identity is something that a person should identify themselves.”

—DR. KAREN PARKER



Gender refers to socially constructed roles, behaviors, activities and/or attributes that a society associates with being a woman, man, girl or boy, as well as relationships with each other. Then there is sexual orientation, which refers to emotional, romantic or sexual attraction.

People use many different terms to describe their gender. A few examples include non-binary (those who don’t subscribe to the concept of solely two gender alternatives—man or woman); nonconforming (individuals who don’t present themselves according to typical gender stereotypes); and transgender (people whose

gender identity is different from their sex assigned at birth).

“Someone’s gender identity is something that a person should identify themselves,” Parker noted. “You should not be identifying for them.”

She advised people who are unsure of someone’s pronouns to ask, “What are your pronouns?” One can also gather information about a person’s pronouns through a trusted source.

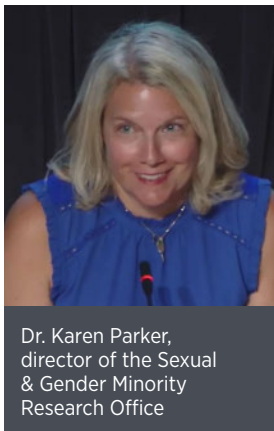
Allies of the SGM community can share their pronouns in email signatures, on name tags and at the beginning of meetings, suggested Bali White, principal strategist for the SGM portfolio in NIH’s Office of Equity, Diversity and Inclusion. Normalizing pronoun sharing creates a more inclusive workplace for everyone.

However, disclosing one’s personal pronouns is an individual choice, White added. “We don’t want to put pressure on people to identify if they don’t feel comfortable.”

Referring to someone using a pronoun or name that does not correctly reflect their gender identity is known as misgendering or deadnaming. It can be unintentional or intentional. White said calling a person the name they were given at birth instead of their chosen name can be “triggering,” because the previous name “is associated with a time in their life or experiences that they feel like are behind them.”

The best way to handle misgendering someone is to apologize, said Wade Atkins, supervisor of quality assurance and regulatory affairs in the Clinical Center’s department of transfusion medicine (DTM).

The power of “I’m so sorry” goes a long way, he said. “It opens



Dr. Karen Parker, director of the Sexual & Gender Minority Research Office

a communication channel that you accept and recognize changing cultural behavior.”

It’s important, however, to not turn an apology into “a conversation about yourself,” added Haley Maness, a senior CC clinical research and safety quality nurse. “That turns the focus on you and puts the onus on the other person to forcibly forgive you or accept what you’re saying.”

Health care providers must sometimes verify a patient’s demographic or identifying data even if that doesn’t align with a patient’s gender identity. DTM’s goal, for example, is to protect the blood supply.

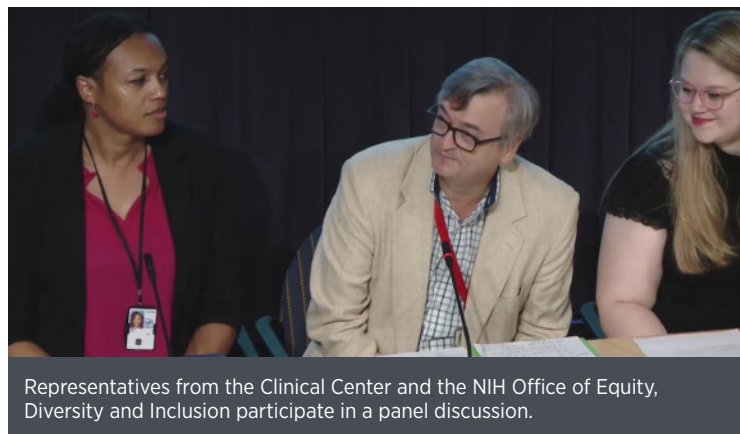
“Sometimes we have to confirm the person in front of us is legally registered,” Atkins said. After confirming a person’s identity, “we do have latitude to drift towards correct pronouns and names.”

In these situations, Maness advised providers to use comforting language to describe the policy and why it’s in place. In all other interactions, “try to be as affirming as you can. Use their correct name in any other instance.”

Creating a more inclusive environment will benefit everyone, Parker concluded.

According to a recent Gallup poll, one in five Gen Z adults identifies as SGM. Fostering a respectful workplace will help attract and retain top scientists and clinical staff.

“If we aren’t taking care of this community, we run the risk of losing top talent,” she concluded. **R**



Representatives from the Clinical Center and the NIH Office of Equity, Diversity and Inclusion participate in a panel discussion.

Sept. 11

CCDI Holds First Community Forum

Childhood Cancer Data Initiative (CCDI) will host its first Community Forum on Monday, Sept. 11 from 2 to 3 p.m. as part of the CCDI Webinar Series, bringing together experts, researchers and community members to discuss progress and what’s on the horizon.

Attendees will hear from multiple NCI staff and learn about the initiative’s plans and activities, including enhancements and additions to CCDI tools and platforms, progress related to the upcoming CCDI Rare Pediatric Cancer Initiative and more.

The forum is free and open to the public, though registration is required to get the event link. For details about CCDI events, including past event recordings, visit go.nih.gov/dD2TPp9. Individuals with a disability who need reasonable accommodation to participate in this event can email CCDIevents@mail.nih.gov by Sept. 4.



A group of students from Puerto Rico visited NIH via the Veterans Health Administration Diversity Summer Program.

AN INSPIRING JOURNEY

Puerto Rican Students Visit NIH

Under the Veterans Health Administration Diversity Summer Program banner, a group of students from Puerto Rico embarked on a memorable journey to NIH. The visit was a collaborative effort, coordinated by Patricia Saucedo Kramer of the Office of Equity, Diversity and Inclusion (EDI) and Dr. Ingrid M. Bonilla Mercado, a research health scientist at the Caribbean Health Care System of the U.S. Department of Veterans Affairs (VA) and assistant professor at the University of Puerto Rico School of Medicine.

The trip was more than just a standard educational excursion, said organizers. It was a bridge between academic knowledge and the vast enterprise of real-world research.

The main objective behind this effort was multifaceted, Kramer explained. “It aimed to give these budding researchers a firsthand experience of the groundbreaking research conducted at NIH, allowing them to visualize themselves as pivotal contributors to the future of medical science,” she said. “In addition, by interacting with the brilliant minds at NIH, the students got a taste of the diverse career avenues open to them in medical research.”

As the students navigated through various institutes within NIH, they met with leading researchers who shared their work, challenges and success stories. The interactions were more than just academic exchanges; they were powerful mentorship, guidance and inspiration moments.

While specifics of individual meetings varied, each encounter left an indelible mark on the young minds.

One of the most impactful moments was when Dr. Hugo Alejandro Tejada, a Latino researcher at the National Institute of Mental Health, opened up about his journey in the scientific world.

A Stadtman investigator who serves as chief of the unit on neuromodulation and synaptic integration, he spoke

about the challenges, the highs and lows, and the passion that kept him going. With heartfelt sincerity, he expressed his aspiration to mentor young Latinos, emphasizing the importance of representation in research.

Bonilla Mercado encapsulated the spirit of the visit, stating, “I would like to thank all the researchers, NIH and EDI for organizing an amazing experience for our future researchers and allowing the office of equity and diversity to take care of this. It was significant for our students to see the amazing research efforts at NIH and see themselves represented in those efforts.”

These initiatives are not just field trips but life-altering experiences, Kramer concluded. “They foster a sense of belonging, ignite passion and sow the seeds of future collaborations. They are endeavors that nurture the next generation of scientists and researchers.” **B**



WALS Launches New Season

The NIH Director's Wednesday Afternoon Lecture Series (WALS) launches its 2023-2024 season on Sept. 13. Most lectures will be on Wednesdays in person at 2 p.m. ET in Lipsett Amphitheater, Bldg. 10. All will be broadcast via NIH videocast.

Here's a sneak peek of September events.

In a prelude, the WALS Office will co-sponsor the annual John Daly Lecture on Sept. 6. Guest speaker Dr. Bryan Roth is the Michael Hooker distinguished professor of protein therapeutics and translational proteomics at the University of North Carolina School of Medicine. Roth is recognized for discoveries and inventions in molecular pharmacology, GPCR structure and function and synthetic neurobiology. The lecture is co-sponsored by the National Institute of Diabetes and Digestive and Kidney Diseases.

WALS officially begins on Sept. 13 with the William E. Paul Lecture presented by Dr. Diane Mathis of Harvard Medical School. The Mathis lab studies T cell differentiation and tolerance/autoimmunity, translating mechanistic studies on mouse models to normal and diseased humans.



Dr. Dale Sandler



Dr. Diane Mathis

Next up is the annual G. Burroughs Mider Lecture featuring Dr. Dale Sandler, chief of the Epidemiology Branch, National Institute of Environmental Health Sciences, on Sept. 20, in the heart of NIH Research Festival week.

Rounding out the month on Sept. 27 will be Dr. Heran Darwin, a professor in the department of microbiology at NYU Langone Health. Darwin's lab seeks to understand how *Mycobacterium tuberculosis*, the causative agent of tuberculosis, has become arguably the most successful pathogen on Earth.

WALS is NIH's highest-profile lecture program. Each season includes some of the best-known names in biomedical and behavioral research. The goal is to keep NIH investigators abreast of the latest and most important research in the United States and beyond. All speakers are nominated by the NIH community.

The upcoming season is special as WALS sets the new-normal, post-pandemic environment. Trainee lunches—with speakers and reception after the lecture—are returning. Lunches are limited to 5-6 trainees. Contact the WALS office, if you're interested in attending a lunch.

See <https://oir.nih.gov/wals> for the full schedule. For notice of future events, subscribe to the listserv via <https://go.nih.gov/LHfuqzV>.—**Diana Gomez**

SNEAK PEEK



Dr. Heran Darwin

Intern

CONTINUED FROM PAGE 1

numerous recommendations from friends and mentors.

The consensus was clear: NIH offered exceptional training opportunities for undergraduate students. With its well-respected programs, diverse research areas and cohort of experts at the top of their fields, NIH became the top choice for King's summer internship.

In early June, King began working in the molecular neuropharmacology section under Dr. David Sibley, a senior investigator at the National Institute of Neurological Disorders and Stroke. The opportunity to work in-person has been invaluable.

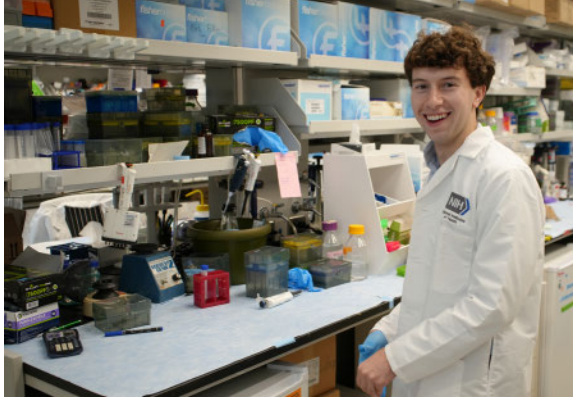
"I wouldn't do this internship if it wasn't in person," King said, expressing admiration for NIH's esteemed reputation and its commitment to cutting-edge research. He emphasized that the hands-on experience and collaborative atmosphere have significantly enhanced his learning and professional growth.

Prior to joining NIH, he gained valuable experience working at a startup biotech company called Babson Diagnostics in his hometown of Austin, Tex. There, he conducted blood draws from patient's fingers using an innovative device developed by the company.

Last summer, he further honed his skills at the Mayo Clinic, where he investigated how a drug named ICRF-193 causes DNA-damage. During the academic year, he studies how epigenetics affects cancer progression.

King spends a typical day at NIH focused on the study of dopamine receptors (DARs). There are five DARs in the human brain—D1 through D5. The goal of his research project is to aid development of a new D3 DAR (D3R)-selective small molecule that may one day be a research tool compound or medication for diseases such as schizophrenia and substance use disorder.

Many neuropsychiatric disorders are treated with dopamine antagonists, or drugs that block DARs. The current medications of choice are D2-like DAR antagonists. But due to limited distribution of D3R in the brain, D3R-selective antagonists may be better treatments for schizophrenia or drug addiction because they could reduce psychotic



For King, a typical day at NIH is spent focused on the study of dopamine receptors

symptoms or drug cravings without inducing some of the serious side effects often produced by D2R-preferring antagonists.

In his research King utilizes Chinese hamster ovary cells to detect DAR activation and inhibition. He uses live cells because he needs the "full cellular machinery" to detect whether the compounds he is screening can activate or inhibit any of the other DARs aside from D3R. King employs these cells in an assay that generates a measurable chemiluminescent signal upon DAR activation.

Compounds that act as agonists at the DARs will increase the signal, and compounds that act as antagonists will decrease a signal induced by an agonist, such as dopamine.

In addition to his lab work, King attends lectures in the Clinical Center to broaden his knowledge and experience interdisciplinary perspectives. Reflecting on his expectations versus the reality of working at NIH, King expressed awe at the vastness and scale of the institution.

"I think the biggest shock was how big it is," he said. The wealth of resources available and the interdisciplinary nature of the work have exceeded his initial expectations.

Looking to the future, King has ambitious plans. He is currently applying to M.D.-Ph.D. programs, which he hopes will enable him to bridge the gap between bench science and clinical practice. **R**



Viewed from the MLP-14 garage on Aug. 3, construction of the Clinical Center's surgery, radiology and laboratory medicine wing is well underway.

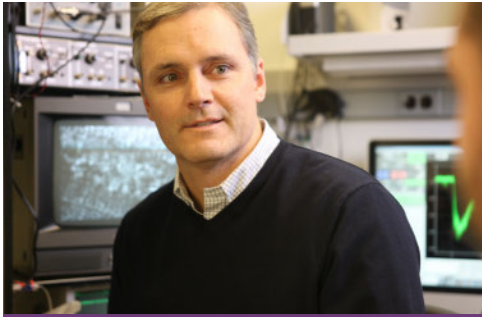
PHOTO: ERIC BOCK

New CC Wing Construction Starts

Construction for the Clinical Center's surgery, radiology and laboratory medicine (SRLM) wing has begun. Scheduled to open in 2029, the 547,290-square-foot wing will house three departments—perioperative medicine, radiology and imaging sciences, and laboratory medicine—and National Cancer Institute and National Heart, Lung and Blood Institute labs and patient service areas.

For the next five or six years, Center Drive from the gate at Old Georgetown Road to the front of the Northwest Child Care Center and Convent Drive north of the MLP-9 garage entrance will be closed.

For more information about additional parking and traffic changes associated with the SRLM and other construction on the main campus, visit <https://traffic.nih.gov/Pages/default.aspx>.



Dr. Jeffrey S. Diamond

Diamond Named NINDS Scientific Director

Neuroscientist Dr. Jeffrey S. Diamond was recently named scientific director at the National Institute of Neurological Disorders and Stroke (NINDS). A senior investigator in NINDS's synaptic physiology section, he has served as the institute's acting scientific director since August 2022.

"I am confident that Dr. Diamond will provide leadership that will build on our Intramural Research Program's incredible strengths and continue NINDS efforts to create a vibrant, productive research community that is a welcoming and fulfilling workplace and training environment for all," said NINDS Director Dr. Walter Koroshetz.

Diamond received his undergraduate degree from Duke University and his Ph.D. from the University of California, San Francisco, where he studied excitatory synaptic transmission in the retina.

During a postdoctoral fellowship at the Vollum Institute—an independent research institute located on the campus of Oregon Health and Science University—he investigated the effects of glutamate transporters on excitatory synaptic transmission in the hippocampus. Diamond joined NINDS as an investigator in 1999 and was promoted to senior investigator in 2007.

As scientific director, he will oversee NINDS's Intramural Research Program (IRP), which consists of 48 labs and approximately 1,100 employees at NIH. IRP scientists conduct research on basic, translational and clinical neuroscience in areas such as synaptic transmission, movement disorders, structural neurobiology, biophysics, neurodegeneration, neural circuits, neuropharmacology, neurodevelopment, stroke, brain imaging, neurogenetics and neuroimmunology.

"This past year as acting scientific director has exposed me to many of the responsibilities, challenges and exciting opportunities that come with the position," said Diamond. "I look forward to learning much more and serving our intramural community going forward."

Diamond's laboratory seeks to understand how neural circuits receive, compute, encode and transmit information. His research focuses on how synapses, neurons and small circuits perform computational tasks required for visual information processing in the mammalian retina.

Throughout his career, he has earned many awards and honors, including the Presidential Early-Career Award in Science and Engineering. He follows Dr. Lorna Role, who served as NINDS scientific director until May 2021.—Shannon E. Garnett

Medical Research Advocate, Lawmaker Weicker Is Mourned

The only person for whom two NIH buildings have been named, Lowell P. Weicker, Jr., died June 28 at age 92. The former governor of Connecticut who had also served as a U.S. representative and senator was best known in the biomedical research community for championing scientific investigations into understanding HIV/AIDS in the early 1980s and backing up his stance by advocating in Congress for additional resources.

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"At that time, the leadership on Capitol Hill was desperately needed and Lowell provided it."

—DR. ANTHONY FAUCI

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"Buildings come and buildings go, but reputations—and sometimes, solidly built historic buildings—actually endure; this one does. So for all these reasons, the pairing of the Lowell P. Weicker personality and impact on history with Bldg. 4 is a very good fit," said then-NIH Director Dr. Francis Collins in May 2015, when Bldg. 4 was rededicated in Weicker's name. In 1991, Dr. Bernadine Healy, NIH director at the time, had named



Medical research champion Lowell P. Weicker flanked in 2015 by grateful NIH friends Dr. Anthony Fauci (l) and Dr. Francis Collins

Bldg. 36 in honor of the Republican senator; that structure later gave way to the newly constructed neuroscience research center on campus, leading NIH to dedicate one of its original edifices as the new Weicker Bldg.

"My wish for this building is that generations bring their skills, their talents together in the interest of life," Weicker said at the ceremony.

Weicker was one of the first senators to hold congressional hearings on AIDS and led the call in the Senate for funding to address the disease. When he served as chair of the Senate Labor-HHS appropriations subcommittee, NIH's budget grew from \$4.3 billion to \$6.7 billion—56 percent—in just 5 years.

"Very few politicians were courageous enough to support the scientific and public health measures necessary to address a newly recognized disease that affected mostly the disenfranchised," said Dr. Anthony Fauci, former director of the National Institute of Allergy and Infectious Diseases, at the Bldg. 4 ceremony. "Sen. Weicker was one of the few and the brave. At that time, the leadership on Capitol Hill was desperately needed and Lowell provided it.

"Lowell has been truly a unique, visionary leader and a loyal friend to NIH." **R**



Weicker backed up his support for HIV/AIDS research by advocating in Congress for more funding.

Powerlifting Club Boosts Feds Feed Families Effort

The NIH Powerlifting Club, a group sponsored by the Recreation and Welfare Association, hosted a Lift-A-Thon on Aug. 11 outside its Bldg. 53 gym. Proceeds from the fundraiser benefited Feds Feed Families, the annual effort to provide food for communities in need.

Powerlifting is the traditional back squat, bench press and deadlift. Weightlifting typically includes clean and jerk, power clean and power snatch.

“It’s less well known in America, but weightlifting is featured as an Olympic sport and typically requires more explosive movement and technique, while powerlifting is more raw power movements,” explained NCI’s Jarod Lowe, Powerlifting Club president.

The lift-a-thon featured 10 contestants attempting a single lift for each of three traditional weightlifting exercises—squat, bench press and deadlift—with a goal of lifting as much weight as possible.

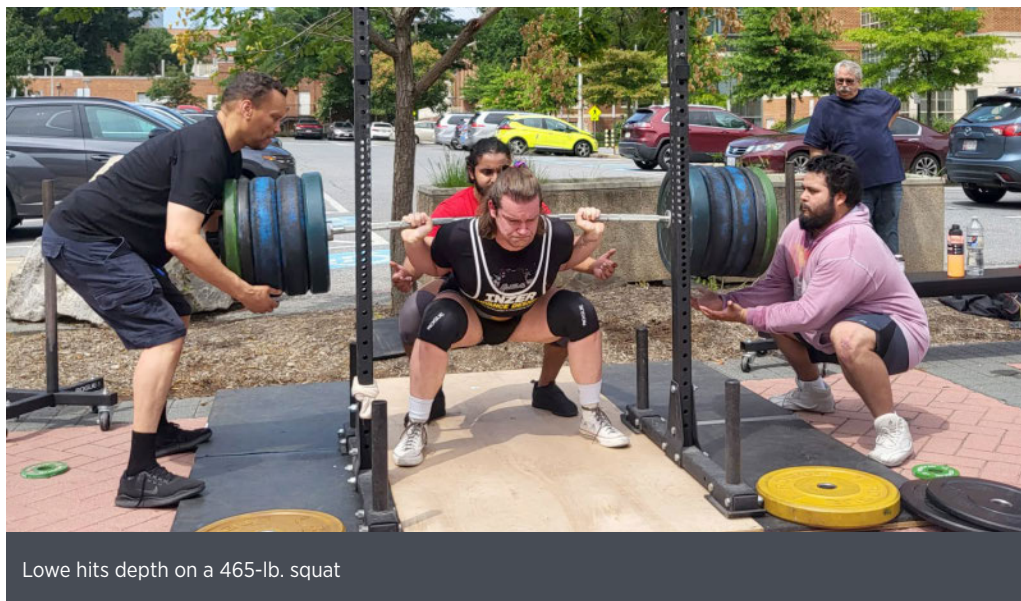
Competitors had three attempts for each lift and a judge was on hand to ensure proper form. At least two spotters were nearby to help with contestant recovery or failed lifts.

The event raised around \$700.

For more information about the club, visit <https://sites.google.com/site/nihweightliftingclub/> or email Wtliftingclub@gmail.com.



Above, Mike Sipes (c) and Jarod Lowe (r), both of NCI, review competition rules. Below, Samarjeet Prasad of NHLBI deadlifts 315 lbs.



Lowe hits depth on a 465-lb. squat



Above, postbac Rana Tora of NIDDK deadlifts 225 lbs. Below, Jessica Hong of NCI reaches the bottom of a 140-lb. squat.



At left, Jack Marshall of NINDS holds a 365-lb. deadlift. At right, Laurie Sipes, announcer and scorekeeper, shows the final numbers for the competition.

