

UNITE Makes Progress, Cites Long Way to Go

BY ERIC BOCK

Racism threatens NIH's mission, which seeks "fundamental knowledge about the nature and behavior of living systems, and the application of that knowledge to enhance health, lengthen life and reduce illness and disabilities *with and for all people*," said then-NIH director Dr. Francis Collins.

"Although it's daunting to consider how to fix the damage inflicted by more than 400 years of structural racism and ethnic discrimination in this country, we are committed to implementing improvements with the resources of the world's largest supporter of biomedical research," Collins said on Nov. 17 at the second virtual Town

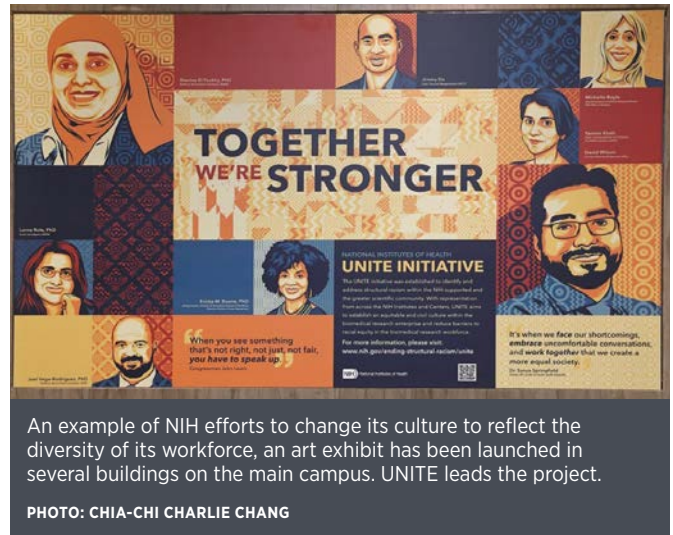
Hall on Achieving Racial and Ethnic Equity at NIH.

He's proud of the work the UNITE Initiative and the anti-racism steering committee (ARSC) have done "to help ensure that our structures and our culture reflect the justice and the equity that all of us deserve." He thanked his colleagues in the Eight Changes for Racial Equity (8CRE) group and to senior Black investigators, "who encouraged NIH leadership to shift mindsets and push equitable change forward."

Recently, NIH rescinded a Notice of Special Interest, which was intended solely to call attention to the presence of a specific funding opportunity announcement and encourage researchers

from underrepresented groups to apply.

While well-intentioned, the notice raised "legal concern under federal law," said NIH principal deputy director and



SEE UNITE, PAGE 4



ALSO THIS ISSUE

- Tabak, Interim Leadership Assume Roles During Transition 3
- Bačkonja Named to New Post at NCCIH 5
- New Scientific Interest Group Focuses on Health of Asian Americans, Pacific Islanders 7
- ORWH Cofosts Conference to Advance Research on Women's Health 9
- Milestones 10
- Santa is Seen 12

'YOU'RE THE MAGICIANS' Collins Thanks Program, Services Staff for Extraordinary Work

BY DANA TALESNIK

Countless behind-the-scenes efforts happen every day to keep NIH churning at maximum capacity. Even with all the challenges throughout the pandemic, a mind-boggling array of activities continued uninterrupted to make sure staff and visitors had needed

SEE GRATITUDE, PAGE 8



'DOUBLE-EDGED SWORD' JHU's Comfort Discusses Ethics of Gene Editing

BY AMBER SNYDER



In 2015, a new cutting-edge gene editing technology was brought to the world's attention. CRISPR (clustered regularly interspaced short palindromic repeats) has enormous potential as a therapeutic tool, but

also awakened fears of "editing humanity" and creating "designer babies." Critics feared it could lead to a new era of eugenics.

Eugenics is a term coined by Francis Galton, who wanted to create a "galaxy of

SEE COMFORT, PAGE 6

9th Town Hall Set for Jan. 27

Acting NIH director Dr. Lawrence Tabak will host the 9th Virtual Town Hall on Thursday, Jan. 27 at 1 p.m. He will brief viewers on the transition, what happens during this time period and what they can expect over the next several months; provide an update on the pandemic; vaccination requirements for non-FTE staff, medical/religious exceptions and return to the physical workplace; and respond to questions from staff. Employees are encouraged to submit questions in advance with the subject line: TOWN HALL QUESTION to CoronavirusStaffQuery@od.nih.gov by noon ET on Wednesday, Jan. 19. Leadership will address as many as time permits. To view the town hall, tune in at videocast.nih.gov.

2021 NIH Director's Awards Announced

An NIH Director's Award is the most prestigious honorary award at NIH to recognize the greatest achievements of all institutes, centers and offices. Each nomination undergoes a rigorous review process that includes each IC director, the NIH awards review committee and a selection by the NIH director for special recognition.

Historically, the in-person NIH Director's Awards ceremony provided an opportunity to showcase stellar service in the areas of research, administration, technical and clerical support, mentorship, clinical care, Commissioned Corps, work/life and well-being and equity, diversity and inclusion.

This time the remarkable accomplishments of 3,000 awardees from the 2020 calendar year are highlighted in a virtual format; to browse the 2021 recipient list and watch messages from key leaders, visit: <https://directorsawards.hr.nih.gov>.

Nominations for the NIH Director's Award are based on accomplishments fulfilled during the last full calendar year (January-December). Nominations can be submitted by any NIH employee familiar with work performed either by an individual or group. Nominations for 2022 awards will open soon and must be entered through the electronic honorary awards and ranking system, e-HARTS.

See <https://directorsawards.hr.nih.gov/guidelines/general/> or email nihawards@od.nih.gov for details about the nomination process.



CSR Marks 75th Anniversary

As part of the commemoration of CSR's 75th anniversary, the center has released a video, *Catalyst of Hope and Health*. Featuring former NIH director



2021 NIAMS InVTRO program interns

NIAMS Training Program Goes Virtual

This past summer, the NIAMS Career Development and Outreach Branch (CDOB) welcomed 15 students from across the country and Puerto Rico to participate in the inaugural NIAMS Intramural Virtual Training Research Opportunities (InVTRO) program.

NIAMS has a long history of hosting a summer research experience. It was canceled in 2020 due to the pandemic, but returned virtually in 2021; students took part from their homes.

"Although this summer was a bit different with it being a virtual experience, it did not change my admiration for the NIH community and the enriching culture of science it provides to its summer interns, even with the Covid-19 restrictions," said Triniti Turner, a returning intern majoring in biology at Virginia Commonwealth University.

InVTRO provided a unique, interactive platform that included live sessions with NIAMS staff and scientists from different laboratories, Intramural Research Program (IRP) facility tours, live video conferences and laboratory meetings, interactive interviews with current trainees and faculty, participation in Grand Rounds and "mock" patient visits, and journal clubs.

Dr. Francis Collins and other leaders such as Drs. Anthony Fauci, Marie Bernard and Michael Lauer, the video describes the role CSR plays in advancing the NIH mission through the review of grant applications for their scientific and technical merit.

CSR director Dr. Noni Byrnes notes in the video that the center strives to ensure that grant applications sent to NIH receive fair, independent, expert and timely scientific reviews, free from inappropriate influences.

The perspectives of several grantees are also featured, including those of Nobel Prize laureate

The program also offered interactive courses in bioinformatics and responsible conduct in research, daily Q&A sessions about NIAMS's IRP portfolio and other learning and networking opportunities.

"NIAMS was able to provide a virtual internship comprised of a diverse range of opportunities that allowed me to further develop analytical skills and taught me how to think critically in a translational research environment," said Ali Khan, who is attending medical school at the George Washington University School of Medicine in 2022.

"This past summer was pivotal in furthering my career and I am so grateful that NIAMS transformed the challenges of a virtual interface into an amazing learning experience," added Adelle Perkelvald, a biology student from Lander College of Arts and Sciences in New York.

InVTRO was led by Dr. Robert Walker, chief of the CDOB, and facilitated by Elizabeth Aliberti and Martyn Green. CDOB plans to continue developing and expanding the program.

For details about CDOB, visit <https://www.niams.nih.gov/labs/walker-lab>.

Dr. Jennifer Doudna, who was part of the team that discovered CRISPR-Cas9 as a tool for making targeted edits to the genome, and Dr. Jason McLellan, whose work on coronavirus spike proteins was critical for development of the Covid-19 vaccine. As emphasized in the video, any good idea can be recognized through the peer review process—regardless of whether it comes from a small institution or a large one, from a high-profile scientist or someone new to a field.

The video is available at <https://bit.ly/3petRYz>.—**Lamont Williams**

Acting Director Tabak Takes Helm During Transition

Dr. Lawrence Tabak assumed the role of acting director on Dec. 20 to lead NIH during this time of transition. Health and Human Services Secretary Xavier Becerra had named Tabak to the role on Dec. 9, as Dr. Francis Collins prepared to step down on Dec. 19.

Tabak served at Collins's side as principal deputy director and deputy ethics counselor of NIH since August 2010.

"I have been intimately involved in the science, policies and operations of the agency and will continue to carry out the important initiatives that Dr. Collins and I have built and fostered together over the past 12 years," Tabak said, in a message accepting his new post. "On behalf of all at NIH, I want to extend my gratitude and appreciation to Dr. Collins for his years of steady leadership and service...He has

done an incredible amount of good and has led NIH through both wonderful times and troubled times. In all instances, he has led with his head and his heart.

"Dr. Collins' singular focus has always been finding the best ways that NIH research can improve health, end suffering and



Acting NIH director Dr. Lawrence Tabak

provide hope for all people. As acting director of NIH, I will try to sustain that legacy."

Tabak previously served as the acting NIH principal deputy director (2009) and prior to that as director of the National Institute



Dr. Tara Schwetz (l), Dr. Courtney Aklin (c) and John Burklow

of Dental and Craniofacial Research from 2000 to 2010. Before joining NIH, he was the senior associate dean for research and professor of dentistry and biochemistry & biophysics in the School of Medicine and Dentistry at the University of Rochester in New York.

FAES Online Workshop Provides QIIME 2 Skills for New Year

FAES will offer a 5-day online workshop on bioinformatics tools for microbiome science, Jan. 31 to Feb. 4. The course will be taught by members of the QIIME 2 Team at the Caporaso Lab at Northern Arizona University. QIIME 2 is a widely used microbiome bioinformatics platform, with users around the world and working across all areas of microbiome research. The workshop is open to the NIH community and members of the public. It will include lectures covering QIIME 2 usage and theory, and interactive work with QIIME 2 to perform microbiome analysis from raw sequence data through publication-quality statistics and visualizations.

The workshop gives participants opportunities to network with other researchers in the field, as well as QIIME 2 developers and other experts. The workshop was first offered in a virtual format in 2020 due to the pandemic; the class filled to capacity within minutes of opening registration, with enrolled participants from at least 25 countries. The workshop consists of pre-recorded and live lectures, live question-and-answer sessions, discussions and interactive tutorials where attendees perform microbiome analyses using QIIME 2.

Registration for the FAES workshop, BIOF089: Microbiome Bioinformatics with QIIME 2, is now open online. Details are available online at education.faes.org.

A former NIH MERIT recipient, Tabak has conducted research on the structure, biosynthesis and function of glycoproteins. He continues work in this area, maintaining an active research laboratory within the NIH intramural program in addition to his administrative duties.

An elected member of the National Academy of Medicine of the National Academies, Tabak received his undergraduate degree from City College of New York, his D.D.S. from Columbia University and a Ph.D. from the University of Buffalo.

Dr. Tara Schwetz will serve as acting NIH principal deputy director during the transition; Dr. Courtney Aklin has stepped in as acting associate deputy director. John Burklow continues as acting chief of staff. **R**



ON THE COVER: Colorized scanning electron micrograph of a cell (teal and green) infected with a variant strain of SARS-CoV-2 virus particles (UK B.1.1.7- purple and pink), isolated from a patient sample. Image captured at the NIAID Integrated Research Facility in Fort Detrick, Md.

CREDIT: NIAID/NIH

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.



National Institutes of Health
Turning Discovery Into Health

UNITE

CONTINUED FROM PAGE 1

UNITE co-chair Dr. Lawrence Tabak. Some researchers thought “that applications from scientists from underrepresented groups would somehow automatically be prioritized for funding.”

Additionally, three components issued the notice, which gave the misimpression that only those institutes “were interested in diversifying the biomedical research workforce,” which, Tabak noted, “is not correct.”

Tabak apologized for the poor communication about the notice. He said NIH will continue to vigorously address the funding gap for Black and African American researchers.

NIH, in coordination with all 27 institutes and centers, issued a new notice on Oct. 25 to confirm everyone’s collective commitment to ensuring a wide range of diverse perspectives are represented in NIH-supported research.

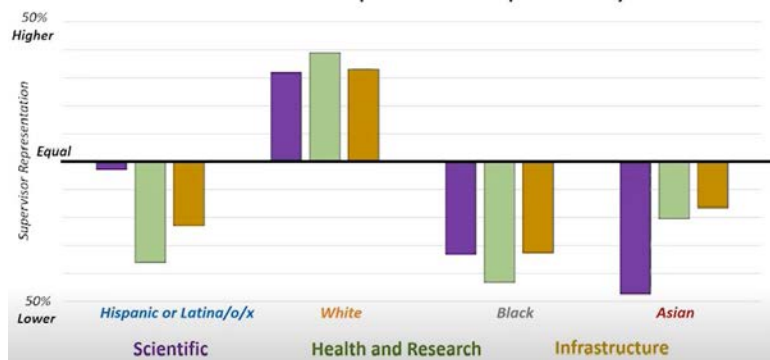
“NIH is committed to doing our best to ensure that we are all listening and talking to each other more effectively,” said Tabak. “We must do better going forward.”

Since launching in late 2020, the UNITE Initiative has worked to create a sense of belonging, promote social accountability and restructure key processes, said Dr. Marie Bernard, NIH’s chief officer for scientific workforce diversity and UNITE co-chair.

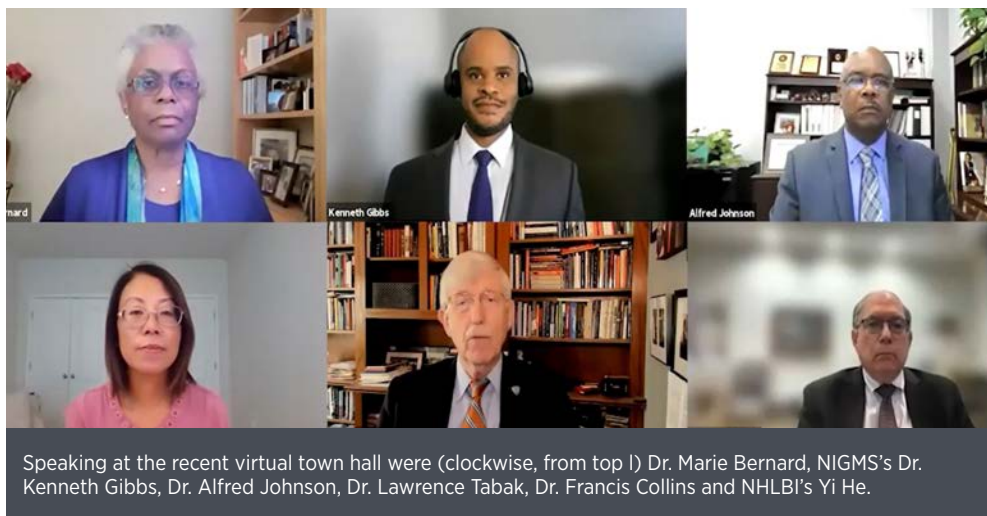
“This, of course, would not be feasible, were it not for the 80-plus volunteers involved with the initiative, and all the others who’ve been supporting it,” she said. “People have been selfless in giving their time and energy to move things forward.”

NIH has taken steps to create a more inclusive biomedical workforce. ARSC was

Racial and Ethnic Makeup Across Supervisory Positions



White employees are represented 30 to 40 percent more in supervisory positions than they are in the workforce, said NIGMS immunologist Dr. Kenneth Gibbs.



Speaking at the recent virtual town hall were (clockwise, from top l) Dr. Marie Bernard, NIGMS’s Dr. Kenneth Gibbs, Dr. Alfred Johnson, Dr. Lawrence Tabak, Dr. Francis Collins and NHLBI’s Yi He.

established to help address racial and ethnic equity across NIH. Bernard noted more than 500 full-time employees, contractors and trainees have volunteered toward the effort.

This past fall, the NIH Common Fund’s Faculty Institutional Recruitment for Sustainable Transformation program announced its first award recipients. It aims to increase the representation of faculty from underrepresented groups in biomedical science. The fund has also developed the Transformative Research to Address Health Disparities and Advance Health Equity initiative, which funds innovative research that prevents, reduces or eliminates health disparities and inequities.

Bernard said NIH updated its anti-harassment website and training modules now address harassment based on “race, nationality, and sexual orientation.” New artwork was installed in NIH buildings to highlight the diversity of staff to promote a sense of inclusivity and belonging.

The Office of Extramural Research has also released data “about our funded investigators by race, ethnicity and disability in addition to the data that was already available by gender and career stage,” Bernard

said. The Office of Equity, Diversity and Inclusion has posted demographic data about NIH’s workforce that includes information about race, ethnicity, sex and disability status.

“We’re working very hard on being as transparent as possible,” she said.

UNITE recommended that

NIH update the policy manual chapter on preventing and addressing harassment and inappropriate conduct to make clear that all types of harassment—not just sexual harassment—are covered. Also, racial discrimination can now be reported through ERA Commons. And IC directors must focus on diversity, equity, inclusion and accessibility as a component of their FY22 Performance Management Appraisal Program.

“NIH is a diverse workplace—46 percent of our staff are what people typically term ‘people of color,’” said NIGMS’s Dr. Kenneth Gibbs, a UNITE member.

The analysis of workforce data does not include demographic information on contractors, even though they make up 42 percent of the workforce.

“Because contractors are not NIH employees, we don’t actually have access to the demographic information that we have for employees,” he said. “We are exploring avenues to collect data on contractors.”

There are hiring disparities at NIH. Gibbs noted that while almost 11 percent of White candidates whose applications were referred to a hiring manager were selected, only 5.6 percent of Black candidates whose applications were referred were selected.

Black, Hispanic and Latina/o/x and Indigenous employees are poorly represented in scientific positions, he explained, even though NIH has invested money to develop a strong and diverse biomedical workforce.

“We have a robust talent pool of well-trained scientists. It’s up to NIH to ensure that we are an environment that can attract and cultivate this diverse group of scientists,” Gibbs said.

As GS levels increase, especially above GS level 10, White staff become better represented at each grade, while Black

staff become more poorly represented. Gibbs noted “a more oscillating pattern for staff from other racial and ethnic groups.” Additionally, White employees are represented 30 to 40 percent greater in supervisory positions than they are in the workforce.

The initiative is thinking about how to create more career and professional development opportunities for staff under GS-11. “Given that this group is more than 60 percent people of color, this is an example of structural change that can enhance opportunity for diverse NIH staff,” he remarked.

Gibbs concluded: “Data are so important because representation and equity are measurable constructs. We want to use these data as a baseline to assess what has come from UNITE efforts.”

NHLBI’s Yi He joined ARSC “to help instill change to ensure that everyone within NIH has the same chances to succeed.”

He said efforts to fight systemic racism will always be met with resistance, meaning the path forward will be hard. Despite that, she is hopeful for a few reasons.

About 37 percent of employees on the committee are White, meaning “quite a few White employees are aware of the issues we face pertaining to racism and are motivated enough to volunteer in making a change,” she said.


He said seeing her fellow members take action is “exhilarating” and “the support we get from NIH leadership is genuine.”

Going forward, UNITE and ARSC will continue to provide guidance and recommendations to leadership, said NIH deputy director for management and UNITE co-chair Dr. Alfred Johnson.

Staff in NIH’s Division of Program Coordination, Planning and Strategic Initiatives are drafting a strategic plan to address diversity, equity, inclusion and accessibility. The plan will acknowledge the changes ICs are making.

In addition, he said experts from outside the agency will consult with IC leadership to help develop racial and ethnic equity plans by April 2022.

“We are eager to work with each of you,” said Johnson. “You all have voices that need to be heard.”

NIH’ers can learn more at: <https://employees.nih.gov/pages/ending-structural-racism/>. To watch the full town hall, visit: <https://videocast.nih.gov/watch=44104>. 



Dr. Miroslav “Misha” Bačkonja

Bačkonja Appointed New Supervisory Physician at NCCIH

Dr. Miroslav “Misha” Bačkonja has been appointed supervisory physician in the Clinical Investigations Branch, NCCIH Division of Intramural Research.

His role will include leading research projects related to assessing pain and its underlying neurobiological mechanisms. This work aims to establish models of deep phenotyping and developing of biomarkers for pain, which will translate into comprehensive profiling of individual patients with pain. Further, he will coordinate the branch’s work and its educational/training efforts.

Bačkonja will also help further establish and expand the new NIH Intramural Research Program, the NIH Pain Research Center (located in the Clinical Center), by establishing novel models of translational pain research and medicine.

After receiving his M.D. from the University of Zagreb School of Medicine in Croatia, Bačkonja completed both neurology residency training and a pain medicine fellowship at the University of Wisconsin-Madison. He became a professor at the UW-Madison School of Medicine and Public Health and its Pain Treatment/Research Center.

Subsequently, he worked for 6 years for contract research organizations to facilitate the development and clinical evaluation of neurotherapeutics, including novel analgesics.

Bačkonja came to NIH from the University of Washington–Seattle, where he practiced academic pain medicine, conducted clinical pain research and led an NIH HEAL Early Phase Pain Investigation Clinical Network (EPPIC-Net) hub research grant award to develop new analgesics to replace opioids.

VOLUNTEERS

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-I or visit <https://go.usa.gov/xejfb>.

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 and learn more about how genetics and environmental factors contribute to cancer development in affected patients. Investigators are recruiting patient volunteers diagnosed with specific RASopathy syndromes. 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>.

People with AUD Needed

People with alcohol use disorder (AUD) have trouble controlling their drinking and cravings for alcohol. Studies have found a relationship between ghrelin, commonly called the hunger hormone, and alcohol cravings for those with AUD. Researchers at NIDA are now testing an investigational drug, GLWL-01, to change the activity level of this hormone and determine whether it can help decrease craving for alcohol. If you are 18-70 years old, have moderate to severe alcohol use and are willing to quit, you may qualify to join. The study includes a 21-day stay at the clinical research unit on the Johns Hopkins Bayview campus in Baltimore. Compensation for participation will be provided at completion. To learn more and see if you qualify, contact the Clinical Center Office of Patient Recruitment at (866) 444-2214 (TTY users, dial 711) or email ccopr@nih.gov and reference NIH study #19-DA-N075. Online: <https://go.usa.gov/xM6CF>.

Comfort

CONTINUED FROM PAGE 1

genius” by allowing only humanity’s brightest and best individuals to reproduce and create his version of an ideal society. This concept has been utilized to justify horrific events and practices, such as the Holocaust and forced sterilizations. In light of new therapies such as CRISPR, though, the debate around eugenics is being revived.

Is it simply a bad idea? Or one that is not necessarily bad, but has just been done badly and for the wrong reasons?

Dr. Nathaniel Comfort of Johns Hopkins University School of Medicine explored this debate and the history of the eugenics movement in a lecture titled “A Galaxy of Genius? The Enduring Dream of Controlling Human Heredity.” The talk was sponsored by the Office of NIH History and Stetten Museum.

Comfort is a professor of the history of medicine, with focus on heredity and human health in the 20th century. He is the author of several books, including 2012’s *The Science of Human Perfection: How Genes Became the Heart of American Medicine*.

Eugenics has a complicated and controversial history. The desire to produce better offspring is ancient; philosophers such as Plato (through his teacher Socrates) reasoned that, if we used selective breeding to produce the best livestock, then the same principle could be applied to humans.

Galton was inspired by his cousin Charles Darwin’s work on the theory of natural selection—so-called “survival of the fittest”—in which the organisms that best adapt to their environment survive, reproduce and pass on their traits to their offspring.

“Social Darwinism,” a term coined by Herbert Spencer, argued that the path to human improvement was through natural selection. Spencer took the concept further, though. His theory was used to justify imperialism, colonialism and racism, and to discourage social reform.

Eugenics caught on quickly in Progressive-era America, supported by a flurry of advances that led Americans to believe that science could solve any problem—including social issues. Eugenic sterilization and marriage laws were passed, supposedly in the interest of bettering humanity.



The Holocaust was perhaps the most extreme example of eugenics put into practice. Comfort has noticed that as the last survivors pass away and the event grows further from collective memory, interest in human selection is starting to creep back in.

Comfort said speculation about molecular

Gene therapy began to be used to treat genetic conditions, but NIH placed a moratorium on it after several patients died in the late '90s and early 2000s. Around the same time, new fears of “designer babies” surfaced when the world’s first cloned sheep, Dolly, was announced.

• • •
It’s possible to “do this right and we need to have conversations to avoid the back side of the double-edged sword.”

—DR. NATHANIEL COMFORT—

• • •

eugenics arose in the 1960s, which posed a new question: what does the “ideal” genome look like?

In 1969, researchers James Shapiro and Jon Beckwith announced that they had isolated and cloned a bacterial gene. They feared the return of government-run eugenics programs (reminiscent of Nazi policies) and called a press conference to discuss the implications of their research. However, it turned out that free enterprise, rather than government, would further “heredity control.”

The explosion of scientific discovery in the last century has shown that our knowledge of genetics and gene editing will continue to advance, Comfort noted. Some can undoubtedly be used for good—such as treating rare genetic diseases—but where is the line between gene therapy and eugenics?

Heredity in Relation to Eugenics, a 1911 book by Charles Davenport, was re-issued in 2008. The original argued for selective breeding to improve the human race, and the re-issue featured commentary from genomics researchers. The general

consensus, Comfort said, was that 21st century knowledge could now fill in the holes in Davenport's dream. This knowledge was the "raw material for a real science of human perfection ... [and we] now have materials to do it right."

Today, personal genome sequencing and precision medicine generate interest in improving our own genomes. The emphasis on personal health over an arbitrary idea of perfecting the human species makes the idea of a new eugenics more palatable. Comfort said there are still some who believe we have a duty to better our offspring, but there is a lot of debate about where therapeutics end and unnecessary selection begins.


Ideally, Comfort said, a partnership between public and private industry, as well as the general public, is the best way to keep everyone accountable.

Coincidentally, the Bespoke Gene Therapy Consortium was announced at about the same time as Comfort's talk. BGTC is a partnership between NIH, FDA, 10 pharmaceutical companies, several nonprofit organizations and the Foundation for the National Institutes of Health. The collaboration "aims to develop platforms and standards that will speed the development and delivery of customized or 'bespoke' gene therapies that could treat the millions of people affected by rare diseases."

Comfort called gene editing a "double-edged sword." There do seem to be benefits to editing genes in the event of harmful genetic conditions, but everyone involved must be held accountable.

His goal, he said, is "to help steer the science in positive directions." He believes that it's possible to "do this right and we need to have conversations to avoid the back side of the double-edged sword.

"Dull the back end while sharpening the front," he concluded.

View the archived lecture at <https://videocast.nih.gov/watch=44029>. 

FOCUSED ON AAPI WELL-BEING

New Scientific Interest Group Holds First Events

Since its establishment in 2021, the NIH Asian American Pacific Islander Health Scientific Interest Group (AAPI-HSIG) has made headway on its goal to advance the NIH mission and improve AAPI health by organizing its first events focused on AAPI well-being.

In 2022, AAPI-HSIG will begin a culturally relevant webinar series focused on AAPI mental health.



Dr. Joel Wong

The first speaker will be Dr. Joel Wong of Indiana University, Bloomington, who will present on Tuesday, Jan. 18 from 11 a.m. to noon ET. He will give a talk titled "AAPI Mental Health: Progress and Prospects." The lecture is open to the public. Register here: <https://bit.ly/3zdbWov>.

In AAPI-HSIG's inaugural seminar last September, NIMHD director Dr. Eliseo Pérez-Stable opened by discussing the importance of data disaggregation and use of interpreters in language-disorder encounters for AAPI.

Dr. Grace Ma of Temple University gave a presentation, "Health Disparities Research: Addressing Multilevel Social Determinants of Health in Asian American and Pacific Islander Populations." She discussed AAPI heterogeneity, model minority health invisibility in scientific research and multilevel approaches to population health equity.

Ma also touched on hepatitis B, diabetes and cancer as priority health concerns for AAPIs. She also highlighted the less-apparent ways Covid-19 has affected AAPI health. Several needs in clinical research and clinical trials involving AAPI groups were discussed during Q&As, including the improvement of AAPI recruitment to increase statistical power, enhancing culturally sensitive mental health research efforts and boosting data disaggregation through separation of Pacific Islanders, Native Hawaiians and Asian Americans when collecting clinical data.

Last November, Dr. Mindy DeRouen of the University of California, San Francisco, presented "Incidence of Lung Cancer Among Never-Smoking Asian American, Native Hawaiian and Pacific Islander Females." DeRouen's talk highlighted the first study to show increased burden of lung cancer among most subgroups of AANHPI females who have never smoked.

Findings from this study show that pneumonia, tuberculosis and residing in neighborhoods with limited English proficiency may confer increased lung cancer risk. DeRouen explained how these results can inform screening practices, further targeted research in this area and public health priorities.



Dr. Grace Ma (l) and Dr. Mindy DeRouen

Several other factors were discussed during Q&As: education level, immigration status and family history. The webinar was the starting point for AAPI-HSIG to stimulate research important to identify risk factors (e.g., genetic susceptibility, environmental and lifestyle factors) for precise prevention.

Comparing molecular figures or mutation characteristics across different diverse AANHPI and non-AANHPI ethnic groups can inform cancer etiology, subtype identification and precision treatment development. It is important to investigate ethnic differences in genetic predisposition that impact cancer outcomes and treatment response.

The interest group hopes to have more crucial discussions during the annual AAPH Health Research Symposium in May during AAPI Heritage Month. Find AAPI-HSIG's vision at <https://oir.nih.gov/sigs/AAPI-HSIG>. The group published the first issue of its bi-monthly newsletter last November.

AAPI-HSIG's ongoing initiatives also include conducting an analysis of NIH funding of AAPI health research, developing AANHPI health-related MeSH terms and planning the annual symposium tentatively set for May 4.—**Dan Xi, Catherine Yu, Karen Qi**

Gratitude

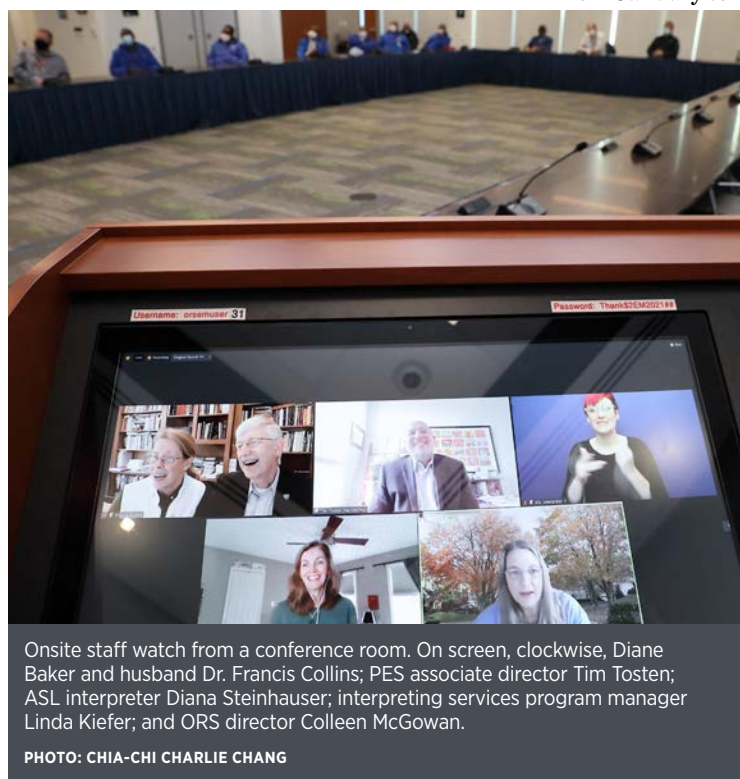
CONTINUED FROM PAGE 1

resources—from producing safety signage to managing mail; providing daycare to shuttling patients; engineering videocasts to processing foreign scientists' visas—all to keep NIH's mission moving.

On Nov. 15, then-NIH director Dr. Francis Collins thanked staff from ORS's Program and Employee Services Cluster in one of the final stops of his gratitude tour.

"You are all unsung heroes," Collins said to the more than 100 ORS employees on the Zoom and others on site, spaced along a conference table and in the Bldg. 10 cafeteria. "You provide services to NIH employees, contractors, patients and visitors that are really essential for our day-to-day work, and also help people with their work-life balance, which has been challenged a bit here these past 2 years."

Acknowledging all of this work that occurred under difficult circumstances and praising these employees for rising



Onsite staff watch from a conference room. On screen, clockwise, Diane Baker and husband Dr. Francis Collins; PES associate director Tim Tosten; ASL interpreter Diana Steinhauser; interpreting services program manager Linda Kiefer; and ORS director Colleen McGowan.

PHOTO: CHIA-CHI CHARLIE CHANG

to the challenge, he said, "Maybe some people think it's just magic. Well, you're the magicians.

"Maybe you didn't think anybody was noticing, but oh boy have we been noticing." And the statistics are impressive.

- Since the start of the pandemic, shuttles



have transported more than 145,000 patients and visitors

- Over the last 16 months, more than 8,000 patients used the Clinical Center's valet parking
 - More than 200 fitness classes became virtual and had more than 15,000 views
- From January to October 2021:

- Staff processed more than 1.4 million pieces of incoming mail and dispatched more than 2.9 million pieces of outgoing mail

- More than 600,000 hours of childcare were provided at the 3 NIH-sponsored childcare centers

- Medical Arts produced more than 3,000 Covid-related posters, flyers, floor signs and digital graphics; designed hundreds of materials and artwork—including murals for campus and the NIH-Walter

Reed tunnel; won 6 competitive scientific journal cover illustrations

When the pandemic first hit, there was an immediate need for posters and other visuals to display safety measures and guide patients, visitors and staff. Graphic designer India Taylor of the Medical Arts Branch led

the effort to produce and update Covid safety signs throughout NIH buildings, which often required quick turn-around. In those early days, when most NIH'ers transitioned to full-time telework, Taylor said her production team came to the office.

"Just a few signs were provided to accommodate what we thought would be 3 weeks of working from home," Taylor recounted.

"However, as things morphed into a much larger initiative, we went back daily to support messaging efforts for needs such as campus entry, building entry, car-line testing and social distancing."

Meanwhile, ORS played a critical role working with the Centers for Information Technology to support broadcasts of virtual and live meetings, conference and town halls. The pandemic has more than tripled the Events Management Branch's multimedia workload.

"It's been nonstop for us," said ORS broadcast engineer Mike Burnham. His group broadcast 720 virtual events in 2020 and more than 900 in 2021, while managing 1,100 live events—from NIAID director Dr. Anthony Fauci's studio sessions to frontline workers receiving their first Moderna vaccines in Masur Auditorium.

One of the busiest days, Burnham recalled, was preparing for former HHS Secretary Alex Azar's visit, which involved numerous last-minute script changes. "With the help of [our audio-visual] engineers, we got the script floated, lit the studio with all the flags in the background. It was flawless," he said. "We do all of this so the NIH stays on top of its game."

It was also no small feat for staff from the Division of Mail Management Services to handle all the mail during the pandemic.



These NIH'ers worked on site every day to sort, process and deliver—or in many cases store—incoming mail and meter and dispatch outgoing mail.

"The epidemic brought us new physical and safety challenges to our mail center," said Jaime Flores, the division's contract project manager. "We created split shifts for field personnel to ensure social distancing and utilized PPE in order to process mail correctly, but safely."

The Division of International Services (DIS) also had to juggle ongoing challenges. On Mar. 16, 2020, "We had to send out messages to our incoming foreign national trainees letting them know the State Department was closing consulates and embassies for non-emergency appointments," said Meg Richmond, a DIS immigration policy analyst.

Since then, she said, "we have responded to over 16 executive orders related to immigration and international travel to find ways to get the world's best and brightest scientists to NIH." This included welcoming nearly 1,000 new visiting scientists to NIH and assisting more than 200 current trainees in obtaining extensions.

Parents found some relief a few months into the pandemic, when many childcare centers began resuming operations—including NIH's three childcare centers, under the Division of Amenities and Transportation Services' Child and Family Program.

"We reopened our center in late June 2020 to a flood of very grateful visiting fellows, trainees and NIH employees," said Anne Schmitz, director of NIH's largest Child Development Center on Executive Blvd. Parents could count on quality care for their toddlers while trying to conduct research.

During the pandemic, the food service program found innovative solutions for providing food options for the NIH community, such as introducing Eatify, an app that enables meal pre-orders by phone. Still other staff helped ensure accessibility for deaf and

hard-of-hearing employees. Linda Kiefer discussed managing the largest interpreting services program in the federal government.

"Pre-pandemic annual usage increases were about 2 percent. But usage spiked 18 percent last year, when most of us were working from home," she said. "The surge was overwhelming."

ORWH, ACRWH Host Conference

NIH's Office of Research on Women's Health and the advisory committee on research on women's health (ACRWH) recently cohosted "Advancing NIH Research on the Health of Women: A 2021 Conference" in response to a congressional request to address efforts related to women's health research. Key topics identified by Congress included clinical practices related to rising maternal morbidity and mortality (MMM) rates; increasing rates of chronic debilitating conditions in women; and stagnant cervical cancer survival rates.

MMM is a public health crisis in the United States, with an estimated 6 in 10 maternal deaths being preventable. In 2011–2015, the U.S. had nearly twice the live birth maternal mortality rate as peer nations. This rise in maternal mortality has been even more pronounced among women of color, including Black, American Indian/Alaska Native and Hispanic women. These racial and ethnic inequities stem, in large part, from structural racism, implicit bias and racially biased policies and practices, with neither educational attainment nor higher socioeconomic status mitigating the elevated risks.

Rates of chronic debilitating conditions, such as chronic obstructive pulmonary disease, affecting women in the U.S. are on the rise, and chronic diseases are more common in women than men. However, understanding of the impact of sex and gender influences on the outcomes of individuals with chronic diseases remains limited.

Current challenges include a lack of research on rare diseases more prevalent in women and the lower specificity, sensitivity and efficacy of diagnostic tests for women. Also, disparities exist among underserved racial and ethnic groups. For example, Black women are 20 percent more likely to die from heart disease than White women.

In the U.S., there are approximately 12,000 new cases of cervical cancer per year. Despite increased prevention efforts through human

Early on, her team procured clear masks for sign language interpreters and introduced a new virtual service enabling deaf and hard-of-hearing employees to telework with their interpreters.

Several presenters took a moment to thank Collins—who was within weeks of stepping down as NIH director. They praised his compassion, humor, honesty and leadership.

"Dr. Collins, we certainly are going to miss your strong and steady leadership," said Kiefer. "But what I will miss most are the heartfelt songs of hope and gratitude that you sang to reassure all of us that the work we do matters." **R**

papillomavirus vaccination and cervical cancer screening, the incidence of and mortality rate from cervical cancer have remained stable over the past two decades.

Significant racial and ethnic disparities related to cervical cancer persist. For example, in the U.S., Black and Hispanic women are diagnosed more frequently than women of other races and ethnicities and are less likely to survive.

Several suggestions emerged from participants:

- Investigators can expand implementation research to ensure that the effective, evidence-based practices and preventive interventions that have already been developed—notably for MMM and cervical cancer—benefit all women in all clinical settings.
- Research and clinical communities can integrate diversity, equity and inclusion concerns into all aspects of the medical enterprise to account for implicit biases and health disparities associated with race, ethnicity, geographical location, socioeconomic status, age, sex, gender and other demographic factors as well as the intersection of these factors. Equity science must inform all aspects of the research process—from the development of funding opportunities, to study design, to recruitment practices, to data collection and analysis, to reporting—for everyone to benefit equitably from investment in medical discovery.
- Funding agencies can realign priorities better to address the diverse populations in the U.S. and abroad, to support a broader and more diverse group of universities and research institutions and to enhance research on understudied diseases and on the health problems of women and individuals from underrepresented populations.

ORWH will collect specific recommendations from the conference in a forthcoming report.

Watch a recording of the conference at <https://videocast.nih.gov/watch=42584>.

'NIH Legend' Gorden Retires

BY LISA YUAN

NIDDK director emeritus and senior investigator Dr. Phillip Gorden has retired after 55 years of service to NIH.



Dr. Phillip Gorden

"I cannot imagine another institution besides NIH which could have given me such a depth of opportunities," he said.

Described as "a legend at NIH" by NIH deputy director for intramural research Dr. Michael Gottesman, Gorden touched nearly

every facet of NIDDK. As a physician-scientist, he contributed to seminal discoveries in endocrinology, including advances in insulin biology and diabetes. As NIDDK director (1986-1999), he launched multiple practice-changing clinical trials. As a colleague and mentor, he leaves an immeasurable impact, not only because of his exceptional scientific acumen, but also because of his exceptional humanity.

"Phil's rare combination of deep medical knowledge, compassion, humility and personal warmth characterized his lengthy service to NIDDK, NIH and the nation," said former NIDDK director Dr. Allen Spiegel, now dean emeritus of Albert Einstein College of Medicine.

Early NIH work

An officer in the Public Health Service, Gorden joined NIH in 1966 as a senior investigator at NIDDK's precursor institute and became clinical director in 1974. He contributed to many scientific breakthroughs, including describing the mechanism of insulin, identifying the insulin receptor and its role in diabetes; discovering the proinsulin molecule, which led to the production of biosynthetic insulin; developing the first medical treatment for ectopic ACTH syndrome, a disease characterized by excess levels of cortisol; and conducting the first radiation therapy for the growth-hormone disorder, acromegaly.

Gorden was responsible for bringing NIDDK science from the lab to the clinic and back again. By treating patients with rare forms of insulin resistance, he was able to observe how hormones worked in people, in addition to under a microscope.

"He established the importance of bedside to the bench and back to the bedside that is a unique feature of the NIH intramural program," said Gottesman.

Gorden's patient-centered approach to scientific discovery was a hallmark of his work. NIDDK scientific director Dr. Michael Krause said Gorden is

"emblematic of the best NIH has to offer humanity, shifting paradigms and our understanding of human biology with a patient-centric focus on effectively treating disease."

NIDDK's Dr. Rebecca Brown, a longtime colleague of Gorden's, concurred. "His science always started and ended with patient questions," she said. "He has the ability to cut through reams of data with to-the-point questions about the relevance of the science to human disease."

From Clinical Researcher to NIDDK Director and Back Again

In 1976, Gorden took a sabbatical at the University of Geneva to further his research on hormone receptors. He returned to NIH in 1978, and after several leadership positions in NIDDK's Diabetes



Branch, became NIDDK's seventh director in 1986.

As institute director, Gorden oversaw the launch of

several landmark, multi-center clinical trials that helped shape diabetes treatment and management, including the Diabetes Complications and Control Trial, Modification of Diet in Renal Disease study and Diabetes Prevention Program.

clinical research in NIDDK's Diabetes, Obesity, and Endocrine Branch, where he's been a section chief since 2005. His work on severe forms of insulin resistance led to breakthroughs in treating lipodystrophy, a rare disease characterized by loss of fatty tissue. Based on clinical trials led by Gorden and his team, the Food and Drug Administration approved leptin for generalized lipodystrophy in 2014.

"The persistent efforts Gorden and his colleagues took to get FDA approval for leptin replacement therapy to treat certain forms of lipodystrophy are a perfect example of his career-long ability to bring research from bench to the bedside resulting in a positive impact on human health around the globe," said Krause.

Impact as Mentor, Colleague

Gorden's indelible impact is also evident in the sentiments shared by the many people whose careers he's touched over the decades.

"I have known Phil Gorden since my time as a fellow at NIH 50 years ago," said Dr. C. Ronald Kahn, chief academic officer of Joslin Diabetes Center. "He is truly a great translational scientist and a unique individual, whose humanism and support for his colleagues and trainees has been foundational for literally hundreds of physician-scientists who have gone on to make their own important marks on the field."

Dr. Jeffrey S. Flier, Gorden's fellow in the 1970s who later became dean of Harvard Medical School, said, "Gorden was a critical mentor in every phase of my career: a master clinician who put



"Phil's rare combination of deep medical knowledge, compassion, humility and personal warmth characterized his lengthy service to NIDDK, NIH and the nation."

-FORMER NIDDK DIRECTOR DR. ALLEN SPIEGEL



Under his leadership, NIDDK also funded the establishment of several, multi-site research centers across its mission areas, including kidney and urologic diseases, cystic fibrosis and obesity and nutrition.

After 13 years, Gorden returned full time to

patient welfare first, a translational scientist at the leading edge of metabolic science and an inspiring institutional leader."

Dr. Elif Oral, a University of Michigan professor who trained with Gorden (1996-2002), said his wisdom still guides her work today.



At left, Gorden and actress Mary Tyler Moore testify before Congress in 1991 about diabetes research. At right, Gorden and NIDDK director Dr. Griffin Rodgers celebrate NIDDK's 60th anniversary in 2010.

"These days, when I need to talk to a trainee, I always ask myself what Dr. Gorden would say," she said. "He provided the kind of mentorship that is above and beyond what any trainee can anticipate."

Gorden has published more than 400 papers, lectured frequently around the world and received many distinguished awards—including this year's Endocrine Society

lifetime achievement award. Yet, when asked which career accomplishment makes him most proud, he focuses not on his individual successes, but on the collaborative efforts he values so deeply.

"In each position I have held, I tried to make sure NIDDK was a 'we' institute rather than an 'I' institute," he replied. "The sense of camaraderie and cooperation is very important to the 'genes' of an institute."

In retirement, Gorden looks forward to spending quality time with his beloved wife of 62 years, Vivian, their 2 sons and their wives, and 3 grandchildren.

"Phil will be truly missed as one of NIH's most conscientious and accomplished leaders and scientists," said NIDDK director Dr. Griffin Rodgers. "He instilled compassion, integrity and wisdom into everything he did—whether treating patients, conducting groundbreaking research or leading one of NIH's largest institutes. He set an example that few might match, but to which we can all aspire. I'm privileged to call him my mentor, colleague and friend—and we all wish him the best in retirement."

To learn more about Gorden's career in his own words, watch this 2019 recording <https://www.youtube.com/watch?app=desktop&v=Bv-r7JaOOTk>.

CSR's Cooper Retires After 20+ Years

BY LAMONT WILLIAMS

Dr. Cathleen Cooper retired in September after more than 20 years at the Center for Scientific Review. For 9 of those years, she served as director of CSR's Division of Receipt and Referral (DRR), which receives all NIH grant applications (approximately 85,000 per year) and handles their assignment to funding institutes and centers and



Dr. Cathleen Cooper

to a locus of review, whether at CSR or at another IC.

"The efficiencies and additional improvements she installed within the systems and processes of the DRR have had a substantial, NIH-wide impact and have contributed significantly to NIH's mission," said CSR director Dr. Noni Byrnes.

Cooper also once served as CSR acting deputy director for a year and a half. One of her accomplishments includes leading development of the Assignment Request Form to automate capture of investigator preferences regarding review of their applications.

In collaboration with the CSR Division of Planning,

Analysis and Information Management, Cooper led development of the Assisted Referral Tool to help investigators and staff identify appropriate study sections for application review.

Cooper earned her Ph.D. from the University of Southern California in pathology and completed a postdoctoral fellowship in molecular immunology at Columbia University. Before joining CSR, she was an assistant professor in the department of cell biology and the Cancer Center at the University of Massachusetts Medical School. Her research focused on the molecular regulation of early events in the development of hematopoietic stem cells.

Having served in several CSR positions, including as a scientific review officer in the Immunology Integrated Review Group (IRG) and as chief of the oncology-basic translational IRG, Cooper remained at CSR for the full course of her NIH career.

"Peer review is where the rubber hits the road," she said, noting that she loved the "engineering aspect" of improving the efficiency and efficacy of the process of referring applications to specific study sections for review.

"Cathie leaves a strong legacy of excellence at NIH," said Byrnes. "Despite her work occurring quietly in the background for all those years, her efforts will benefit NIH and its grantees for the foreseeable future. She is a shining example of how everyone's role at NIH matters and can make a big difference."

Cooper intends to spend her time engaging in charity work, particularly in the area of food and housing insecurity. She also plans to travel, to dive in Fiji and other beautiful places around the world, and do home renovations—an activity in which she is very "hands-on," having remodeled a downstairs powder room herself.

Retired NHLBI Public Health Expert Roccella Is Mourned

Dr. Edward Roccella, formerly a leading public health expert in hypertension and cardiovascular disease at NHLBI, died on Nov. 18 at age 77.

Born in Paterson, N.J., in 1944, Roccella received his bachelor of science degree from East Tennessee State University. He continued his education at the University of Michigan, where he earned master of public health and doctor of philosophy degrees in health education and health behavior.

Roccella began his professional career as director of continuing education at the University of Pittsburgh Regional Medical Program and as an instructor in community medicine. Subsequently, he became an assistant professor at the University of Michigan Medical School and School of Public Health.



Roccella in a 1982 NIH Record photo

In 1978, he began a 29-year career at the National Heart, Lung and Blood Institute as coordinator of the National High Blood Pressure Education Program. In this position, he directed public, patient and professional activities, which have been cited to improve the nation's hypertension profile


and contributed to the nation's large decline in cardiovascular disease. He led U.S. scientific exchange delegations regarding prevention and treatment of hypertension in Brazil, Germany, Egypt and Jordan. He retired in 2007.

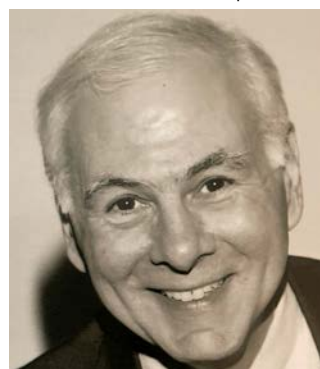
"He remained very active even after retirement as an author and member of various medical/public health advisory boards," said Dr. Philip Wang, director of the NIH Graduate Partnerships Program in the Office of Intramural Training and Education. "Ed was a beloved friend, mentor and family member."

Roccella was past president of the Society for Public Health Education and a founding advisory committee member and board member for the Consortium for Southeast Healthcare Quality for two decades.

Over his career, he authored 110 publications in scientific journals and textbooks and received numerous honors, including the NIH Director's Award, the University of Michigan John Romani Prize for lifetime achievement in public health administration, the American Society of Hypertension Presidents Award, the International Society of Hypertension in Blacks Presidential Award, the 2008 Frank Lautenberg Award and the World Hypertension League Claude Lenfant MD Excellence Award for Population Hypertension Control.

In retirement, Roccella enjoyed traveling extensively with his wife, with special fondness for Rome and Sicily, the tulips of Holland and seeing the beauty of the United States from the road. He was an award-winning home winemaker, and according to acquaintances, always brought bushels of oysters for Christmas Day and could be found sitting around a table with family and friends celebrating life with a delicious meal and conversation.

Roccella was predeceased by his son Andrew Michael Roccella in 2004. Roccella's survivors include his wife of 55 years, Eileen Marie Roccella; sister Anna Redmond and brother-in-law John; brother Vincent Roccella and sister-in-law Charlotte; sister-in-law Nancy Zavada; and many nieces and nephews. 



Dr. Edward Roccella



Santa Visits Inn on Harley

PHOTOS: THE CHILDREN'S INN

Santa Claus and his motor officer "elves" returned to the NIH Children's Inn during the Montgomery County Police Department's annual Santa Ride on Dec. 8.

Santa began his journey in Germantown, Md., where he traded in his sleigh and reindeer for a Harley-Davidson motorcycle for the trip. Before arriving at the Inn, Santa and his elves made several stops along Rockville Pike, where they collected toys and other gifts from local businesses and organizations to drop off at the inn.

Once they arrived on campus, Santa and his elves were greeted by grateful young patients and their families. NIH's acapella group, Nerds in Harmony, performed, and Santa gave a speech and took socially distanced photos.



Clockwise from top: One of Santa's motor officer "elves" shows off his motorcycle; Santa meets an Inn resident; Earlier, the motor officer "elves" stopped at Rockville Town Square's outdoor ice skating rink; NIH's acapella group, Nerds in Harmony, perform during Santa's visit; Santa and "elves" began their journey at the Montgomery County Police Department's 5th District station in Germantown.

