National Institutes of Health

Task Force Aims to Identify **Best Weight-Loss Strategies**

Vol. LXIX, No. 22

BY ERIC BOCK

It's not just how much, but also what and even when we eat that might affect our health and well-being, according to NIDDK deputy director Dr. Gregory Germino, who spoke recently at the NIH Obesity Research Task Force Seminar Series in Lister Hill Auditorium, Bldg. 38A.

"Questions remain as to what types of diets work best for weight loss and weight maintenance," he explained during welcoming remarks.

Obesity has reached "pandemic dimensions worldwide," warned Dr. Estefanía A. Toledo of the University of Navarra's



NIDDK's Dr. Kevin Hall moderates obesity talk.

department of preventive medicine and public health, By 2030, almost 60 percent of the world's population will be overweight or obese.

Toledo said the Mediterranean diet might be a helpful tool to combat obesity. It's a plant-based diet that limits processed foods, red meats and dairy products. Observational studies have concluded that those who followed the diet maintained

or lost weight and lowered their risk for cardiovascular disease, the leading cause of death in the world.

Right now, she and her colleagues are following participants ages 55-75 who are overweight or obese. They were randomly assigned to intervention and control groups. The intervention group is following a calorie-restricted Mediterranean diet supplemented with olive oil and nuts, plus an exercise and behavioral counseling program. The control group is following a Mediterranean diet supplemented with extra virgin olive oil and nuts. The findings will be published by 2022.

A decade ago, Dr. Christopher Gardner, director of nutrition studies at the Stanford Prevention Research Center and a professor of medicine at Stanford University, conducted a study of 311 overweight and obese women. Each woman was assigned to 1 of 4 diets. He found there wasn't much difference

SEE **OBESITY**, PAGE 6

Time to show some love, NIH. See story, p. 12.

ALSO THIS ISSUE

Briefs	
Nobel Laureate Roderick MacKinnon Opens WALS Season3	
Sharpless Takes Reins as NCI Director5	
Digest7	
Partnership To Speed Cancer Therapies9	
Feedback10	
Milestones	
Seen 12	

Experts Weigh In on World Health Issues

BY DANA TALESNIK

The problems are not new. Some of the same culprits continue to threaten health around the world, from poverty to pollution.



Some issues, such as maternal health and HIV/AIDS, are benefiting from increased global attention. But such infectious diseases as drug-resistant tuberculosis present new challenges.

In fact, there are several emerging infectious diseases

globally every year, a trend that's expected to continue due to rapid population growth

or resurging

ENDLESS POSSIBILITIES

NSF Director Describes Potential of Biotech Innovations

BY DANA TALESNIK

When doing such everyday tasks as searching the web or using a touch screen or navigating with GPS, we almost forget what life was like before these revolutionary technologies existed. We've come to rely on these inventions, each of which originated with a novel



idea and a National Science Foundation grant to develop it.

Wong To Give Sayer Lecture, Nov. 17

Dr. Wai T. Wong, a National Eye Institute investigator in the unit on neuron-glia interactions in retinal disease, will give the 10th Sayer Vision Research Lecture on Friday, Nov. 17 at 2 p.m. in Lipsett Amphitheater, Bldg. 10.



Dr. Wai T. Wong

His presentation,
"Microglia in the
Retina: Roles in
Health, Aging
and Disease," will
describe efforts to
understand how
chronic neuroinflammation contributes
to diseases of the
retina, the light sensitive tissue at the
back of the eve.

Wong and his colleagues focus

specifically on microglia, resident immune cells in the retina and other parts of the central nervous system. They study the general function of microglia, how the cells interact with other retinal cells and their role in aging and retinal diseases such as age-related macular degeneration and diabetic retinopathy.

Recent discoveries from the lab indicate that microglia are actively involved in keeping the retina healthy. A decline of these functions during aging and disease is believed to contribute to retinal cell degeneration. Understanding microglia and their contribution to neuroinflammation may help identify novel approaches for treating retinal diseases.

The Sayer Vision Research Lecture Series features prominent scientists conducting vision-related research. It is cohosted by NEI and the Foundation for the National Institutes of Health.

Know Someone Looking for a Position in Child Care?

The newest child care center on campus, Northwest Child Care Center (NWCCC), is now open and providing care for children between the ages of 6 weeks and 6 years. The child care provider, Rockville Day Care Association (RDCA), is seeking reliable, friendly and energetic staff (teachers, aides and cooks) to work and grow with their organization. RDCA has been providing early childhood and school age child care services throughout Montgomery County since 1969.

To apply for a position at the NWCCC, call RDCA at (301) 762-7420 or send an email to Maureen. Bartkow@rockvilledaycare.org. For more information about RDCA, visit https://rockvilledaycare.org/.

For information about NIH Child and Family Programs, visit https://www.childfamilycare.ors.nih.gov.



Congressional Black Caucus Visits NIH

Eight members of the Congressional Black Caucus spent the afternoon of Sept. 25 meeting with NIH leadership and taking tours of an NCI molecular imaging lab, an NHLBI sickle cell lab and speaking with post-baccalaureate and graduate student trainees. In the photo above are (seated, from I) Rep. Robin Kelly (D-IL), Rep. Sanford Bishop (D-GA), Rep. Barbara Lee (D-CA), Rep. Bobby L. Rush (D-IL), Rep. G.K. Butterfield (D-NC). Standing are (from I) Dr. Hannah Valantine, chief officer for scientific workforce diversity; NIMHD director Dr. Eliseo Pérez-Stable; NIDDK director Dr. Griffin Rodgers; Rep. Terri A. Sewell (D-AL); NIH director Dr. Francis Collins; Rep. Alcee Hastings (D-FL); NHLBI director Dr. Gary Gibbons; NICHD director Dr. Diana Bianchi; NIH principal deputy director Dr. Lawrence Tabak; and Rep. Sheila Jackson Lee (D-TX). Below, caucus members pose with trainees (kneeling, from I) Akanni Clark, NINDS graduate student; Ashley Pitt, NIDDK graduate student; postbac Ramon Jauregui of NEI; and Nia Byrd of OD.

PHOTOS: MARLEEN VAN DEN NESTE



NIH Community College Day 2017

The NIH Office of Intramural Training & Education announces NIH Community College Day 2017. The event will provide community college students and faculty an opportunity to visit the campus and learn about careers and training opportunities in biomedical and health care fields. The all-day event will take place on Tuesday, Nov. 21 from 8 a.m. to 4 p.m. at Natcher Conference Center. To register and for more information visit www.training.nih.gov.

NIH Library Offers Writing, Editing Webinar

The NIH Library is offering a "Tips for the Path to Publishing Success" webinar on Wednesday, Nov. 8, 2-3 p.m. Guest presenters Dr. Philippa J. Benson, managing editor, *Science Advances*, and Dr. Brooke LaFlamme, chief editor, *Communications Biology*, will discuss writing, editing and publishing issues from a journal editor's perspective. To register, visit https://nih.webex.com/nih/k2/j.php?MTID=t3cf-900705c65bdb2ff619ea44c79a00a. For more information, contact Cindy Clark at Cindy.Clark@nih.gov.

Nobel Laureate MacKinnon Opens New WALS Season

Ion channels are gnarly, complicated, formidable things—you wouldn't want to be alone with one in a dark room.

Full of arms, loops and ribbons
that can tighten into a cage or open
in welcome, they govern each beat
of the heart, in addition to being
indispensable in myriad ways to all
life forms as they channel sodium,
potassium and calcium ions across cell membranes so that muscles can twitch, blood can
flow and neurons can carry messages.

There may be no better guide to their abstruse world than Dr. Roderick MacKinnon, who shared the Nobel Prize in chemistry in 2003 with Dr. Peter Agre "for discoveries concerning channels in cell membranes." MacKinnon gave the opening talk Sept. 27 in the 2017-2018 Wednesday Afternoon Lecture Series.

MacKinnon, who is John D. Rockefeller Jr. professor at Rockefeller University and a Howard Hughes Medical Institute investigator, divulges in his Nobel Prize biographical essay that he is slightly built and once pursued gymnastics in high school. He is also courageous—he set aside his M.D. to pursue what at the time seemed an impossible



MacKinnon accepts lecture plaque from NIH

deputy director for intramural research Dr.

Michael Gottesman.

PHOTOS: DALE LEWIS

Nobel laureate Dr. Roderick MacKinnon kicks off WALS season at NIH.

challenge: determining the structure of the potassium ion channel, which he achieved in 1998 at age 42.

Relentlessly curious since childhood—his dad once chided him for being "a compendium of useless information" (which only served to acquaint him with a new word, compendium)—MacKinnon has pursued basic research ever since a few years after graduating from Tufts University Medical School in 1982.

On a Masur Auditorium stage lit primarily so the audience could see the person at the lectern, MacKinnon roved restlessly to the stage lip, going in and out of darkness to bring back insights from decades of work.

"I consider myself a parasite of great technological methods that others have made," he began. "It's great to be in a world where we can pursue science with so much at our hands."

Ion channels are part welcome mat, part sentry, operating in a binary fashion similar to the computer, ones and zeroes, on and off.

There are at least 80 potassium ion channels in humans, MacKinnon noted. "Different channels have evolved to sense different environmental forces."

These forces can be chemical, mechanical and electrical.

"They are a very broad and diverse family," he said. All share a selectivity filter, which makes them kin.

MacKinnon mentioned that he gets insights while paddling with friends. Visit some of the channels he has explored at https://videocast.nih.gov/summary. asp?Live=26429&bhcp=1.

The full WALS series may be previewed at https://oir.nih.gov/wals.—Rich McManus \blacksquare



Pérez-Stable Addresses Black Caucus

Dr. Eliseo Pérez-Stable (r), director of the National Institute on Minority Health and Health Disparities, served on a panel titled "African-American Participation in Clinical Trials: Challenging the Gold Standard" during the 47th Congressional Black Caucus Foundation's annual legislative conference on Sept. 20. Moderated by former U.S. Rep. Dr. Donna M. Christensen, the panel included Dr. Edwin Chapman Sr., Dr. Andrea Phillips and Harriet A. Washington. Dr. David Satcher (I), 16th U.S. surgeon general, gave the keynote address.



ON THE COVER: Ixodes Scapularis tick, adult and nymphal forms, used by NIAID's Rocky Mountain Laboratories to study transmission of flaviviruses

IMAGE: NIAID

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 editor or phone (301) 496-2125.

Editor: Rich McManus *Rich.McManus@nih.gov*

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

Staff Writers:

Eric Bock • *Eric.Bock@nih.gov*Dana Talesnik • *Dana.Talesnik@nih.gov*

Subscribe via email: listserv@list.nih.gov

Follow: http://nihrecord.nih.gov/







The NIH Record is recyclable as mixed paper.



Córdova

CONTINUED FROM PAGE 1

Today, NSF-funded scientists continue to work across disciplines and partner with other federal agencies, including NIH, and the private sector to design new technologies, with exciting prospects for biomedical research, said NSF director Dr. France Anne-Dominic Córdova. She spoke at NLM's Lindberg & King Lecture Series recently in Lister Hill Auditorium, Bldg. 38A.

"Every day, the NSF and NIH prove the importance of federal funding in research," said Córdova. Through a longstanding partnership, NSF and NIH are sharing data, ideas and technology, collaborating on a range of neuroscience initiatives and such programs as NSF-NIH Smart and Connected Health, which supports cutting-edge research in areas including sensor technology, machine learning and cognitive modeling.

Through small business grants to fund start-ups and I-Corps, a public-private network of scientists and entrepreneurs, NSF and NIH are fostering innovations in tissue engineering, including touch-sensitive prosthetics and bioengineered organs for transplant. And the groundbreaking CRISPR-Cas9 gene editor, funded jointly by NSF and NIH, holds the potential to combat and prevent genetic disorders and infectious diseases.

"The results of our shared commitment to basic research have brought us to a time of unprecedented capacity for innovation," said Córdova.

NSF funding has launched such life-saving diagnostic tools as magnetic resonance imaging. More recently, advances in soft robotics produced a flexible polymer-based material that can be used to make artificial muscle, a life-changing invention for those with disabilities. And more discoveries are on the horizon.

NSF recently unveiled its 10 Big Ideas for future investment that span the sciences, from astrophysics to Earth science to life sciences. One of them, "Harnessing the Data Revolution," seeks to further enable data-driven discovery by integrating growing volumes of data with advances in data mining and machine learning, data cyberinfrastructure and new approaches to education and learning for a

21st-century workforce.

"Bioinformatics has substantially increased in importance to medicine," said Córdova. "Combining the science of medicine and the collection and mining of relevant data with the intuition of the best doctors, we've revolutionized what medicine can accomplish."

Advances in machine learning are helping researchers better understand, diagnose and personalize medical treatments. Scientists at the University of Illinois recently used the NSF-supported Blue Waters supercomputer to model and analyze atomic-level detail of the HIV capsid, including how it functions, with implications for defeating the virus.

"Intelligence systems can change medicine, but algorithms are unlikely to completely replace humans," said Córdova. "Physicians and scientists will have to learn to work in collaboration with intelligence systems."

The "Future of Work at the Human-Technology Frontier," another NSF Big Idea, is already having an effect. For example, by integrating human and machine intelligence, researchers have been able to reduce pathology errors that in turn could lead to more precise prognoses. A recent study in lymph node biopsies found an 85 percent reduction in error when combining the machine's results with those of a human

pathologist in detecting breast cancer.

"Using machine learning to process the volumes of big data and the latest information will aid in diagnostics and prognosis accuracy," said Córdova, "and this will allow doctors to focus on quality time with patients."

Another NSF Big Idea is "Growing Convergence Research," or pulling together different disciplines in new and emergent ways to stimulate innovation. When astronomers and cancer researchers faced a common problem in scrutinizing images, NSF-funded scientists from both disciplines collaborated on software that helps radiologists pinpoint calcifications to detect breast cancer. Thus digital mammography was born. In another convergent innovation, NSF-funded economist Dr. Alvin Roth came up with a matching-markets model to pair transplant patients with potential kidney donors.

"When convergence truly works, seemingly unrelated disciplines make unconventional partners come together to produce new applications," said Córdova.

And who knows where the next breakthrough will come from?

"How we do research is just as important as what we research," said Córdova, "and we must work together to strengthen and diversify the composition of the science and engineering workforce that will depend upon



Córdova says, "Tomorrow's scientists and physicians will count on our discoveries to cross the next frontiers of science."

PHOTOS: CHIA-CHI CHARLIE CHANG



our future innovations."

That's the thinking behind NSF's Big Idea called INCLUDES (Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering & Science). By placing attention on approaches that foster broadened participation in training and STEM education, NSF hopes to encourage scientists of all ages and backgrounds to enter and stay in the field.

"Having fresh ideas and original processes and investing in state-of-the-art facilities, tools and software will go a long way toward the health research breakthroughs that we're all eagerly seeking," said Córdova. "Tomorrow's scientists and physicians will count on our discoveries to cross the next frontiers of science."

The Lindberg & King Lecture Series is cosponsored by NLM, Friends of the NLM and the American Medical Informatics Association.

Getting To 'Know the Science' of Health

Do you ever feel unsure how to interpret study findings in a scientific journal? Do the glowing claims for a dietary supplement appear too good to be true? And what's the real deal with that "miracle cure" being touted by a TV doctor?



Help is here, in the form of a new initiative with a set of resources from NCCIH called "Know the Science." They are designed to help consumers better understand complex scientific concepts, topics, news stories,

etc., relating to health research, so they can more readily evaluate them and make well-informed health decisions. While complementary approaches are occasionally highlighted, the materials apply across all areas of health.

Interactive modules, quizzes, infographics and videos are featured (with more on the way), as well as links to other NIH science literacy resources. Sample NCCIH topics include making sense of health research, interpreting health news stories and explaining why calling something "natural" does not necessarily mean it is "safer" or "better."

Staff at the center and a team from its advisory council developed the resources after researching science literacy gaps and consulting both NIH and external experts. Visit https://nccih.nih.gov/health/know-science.

15TH DIRECTOR

Sharpless Takes Reins as NCI Director

Dr. Norman E. "Ned" Sharpless was sworn in on Oct. 17 as the 15th director of the National Cancer Institute.

Though new to federal government, Sharpless has connected with NCI in many ways throughout his career. His NIH-funded research has focused on studying the relationship between aging and cancer and his clinical work included caring for patients with leukemia. Most recently, he served as director of the UNC Lineberger Comprehensive Cancer Center, an NCI-designated cancer center in Chapel Hill, N.C., where he was also Wellcome distinguished professor in cancer research.



Dr. Ned Sharpless speaks to NCI staff at the annual NCI Director's Awards and Appreciation Ceremony.

"Dr. Sharpless is an outstanding scientist, clinician and administrator and we are very fortunate to have him join the NIH leadership team," NIH director Dr. Francis Collins wrote in a message to NIH staff. "His insight, influence and partnership will be critical for advancing cancer research at a time of unprecedented rapid progress."

The day after taking the oath of office, Sharpless surprised staff at the NCI Director's Awards and Appreciation Ceremony—a fitting first public appearance for the new director.

"I feel like I kind of already have won an award, which is that I get this great job," he told the audience. "The talent, passion, commitment and care of patients—NCI is an extraordinary organization."

Dr. Doug Lowy, who had been serving as NCI acting director since Dr. Harold Varmus stepped down in March 2015, warmly welcomed Sharpless at the staff ceremony. Lowy will continue to serve as deputy director for NCI.

"I feel very fortunate to have Doug's help in taking on this new endeavor," Sharpless said. "I am pleased that I can continue to look to him for his support and wisdom as he continues in his role of deputy director."

A native of Greensboro, N.C., Sharpless earned his undergraduate degree in mathematics (with distinction) at the University of North Carolina, Chapel Hill, and his medical degree (with honors and distinction) from UNC School of Medicine. He completed his residency training at Massachusetts

General Hospital and his clinical and research fellowship in hematology and oncology at Dana-Farber/Partners Cancer Care in Boston. He returned to Chapel Hill to accept a UNC Lineberger faculty appointment in 2002.

As a practicing oncologist at the N.C. Cancer Hospital, Sharpless specialized in the care of patients with hematologic cancers. He is the author of more than 150 original scientific papers, reviews, and book chapters and is an inventor on 10 patents.

Sharpless is a member of the American Society for Clinical NIH)

NATIONAL CANCER INSTITUTE

NIH

NATIONAL CANCER INSTITUTE

NIL

ONAL CERT
TUTE

Dr. Doug Lowy and Sharpless shake hands at the NCI ceremony on Oct. 18.

Investigation and the Association of American Physicians. He also cofounded two clinical-stage biotechnology companies: G1 Therapeutics and HealthSpan Diagnostics.

Obesity

CONTINUED FROM PAGE 1

between groups. On average, the differences in weight loss among the women in the different diet groups was just a few pounds after 12 months.

"However, what I thought was one of the most interesting observations from this study was that there was a 30-kilogram range of response to the same diet, for all four diet groups," he explained. Some lost 25 kilograms while others gained 5 kilograms.

Gardner set out to determine from a new study which diet is best for whom. He hypothesized that certain genetic traits and how a person's body responds to the hormone insulin would predict whether he or she would be more likely to succeed following particular diets.

In the new and recently completed study, he asked 609 people to cut back to 20 grams of fat or carbs each day. After 8 weeks, the participants could eat more carbs or fat if they felt they wouldn't be able to maintain their current level long-term, but were advised to keep the carbs and fat "as low as you can, but be able to look us in the eye and say 'I think I've reached the point where I can do this forever."

Although he never asked them to cut calories, on average, the participants reported consuming 500 fewer calories each day and lost 6,500 pounds combined. At the end of the study, his hypothesis wasn't proven; neither the genotype pattern nor the insulin factors that were the primary hypotheses for effect modification were supported. However, the study participants did achieve the same very wide range of weight-loss responses to the healthy low-fat and the healthy low-carb diets, Gardner said, and the study has a rich trove of other possible variables to examine to help explain the massive variability with success.

One of the anecdotal factors the study team

observed was that many of the most successful participants noted the approach to dieting taught in the intervention—focusing on choosing quality foods over convenience—"changed their relationship to food," which may be the topic of Gardner's next study.

Traditional dieting in which food intake is restricted every day might not be the best weight-

loss strategy for everyone, said Dr. Victoria Catenacci, associate professor of medicine at the University of Colorado Anschutz Medical Campus. She thinks the best approach is one that a person can stick to over time.

For some, that might be intermittent fasting, where a person eats every other day. Fast days can be total (meaning no food intake) or partial (meaning a person consumes only 500 calories).

"The food intake is unrestricted on non-fast days, though healthy portion sizes and food choices should be encouraged," she said.

Preliminary evidence suggests the diet is safe and tolerable, she said, producing, on average, 3 to 8 percent weight loss, improved body composition and no weight regain. Recently, Catenacci received NIH funding to conduct a 1-year, randomized study that will compare traditional dieting to intermittent fasting.

The time of day a person eats might cause health problems, said Dr. Frank Scheer, associate professor of medicine at Harvard Medical School and director of the Medical Chronobiology Program at Brigham and Women's Hospital. Those who eat later in the day have less success losing weight compared



At left, Dr. Estefanía A. Toledo of the University of Navarra makes a point. At right are Dr. Frank Scheer of Harvard and Dr. Victoria Catenacci of the University of Colorado.





NIDDK's Dr. Gregory Germino (I) and Dr. Christopher Gardner of Stanford were among panelists.

PHOTOS: LISA HELFERT

to those who eat earlier.

The human body has a circadian rhythm, a physiological pattern that follows a 24-hour cycle. He explained that virtually every cell has the ability to generate these rhythms. A single fat cell in a petri dish, for example, has the molecular machinery to generate a 24-hour rhythm.

Studies have shown that the misalignment of a person's sleep-wake cycle with its circadian rhythm influences glucose tolerance. The sleep aid melatonin can also affect glucose tolerance.

The misalignment also adversely affects inflammatory markers, blood pressure and the production of leptin, a hormone that controls the feeling of hunger. These findings might explain why people who work nights are at greater risk for obesity, diabetes and cardiovascular disease.

"We suggest some caution having meals close to melatonin intake or close to bed time." Scheer said.

Studies attempting to determine the best diet "are flawed in certain aspects," cautioned NIDDK senior investigator Dr. Kevin Hall. Many studies rely on participants to self-report what they eat to investigators. However, self-reported diet measurements are often inaccurate. Furthermore, adherence to diets in free-living subjects is often "abysmal," even when all food is supplied to participants.

Hall believes researchers need to develop and validate objective measures of diet, such as biomarkers. Development of such methods requires that researchers know what people are actually eating over periods of weeks to months. Such studies will require facilities to house 20-50 study participants and precisely control and measure their food intake.



Healthy Lifestyle Lowers Heart Attack, Stroke Risk After Gestational Diabetes

Women who have had gestational diabetes may be able to reduce or even eliminate their risk for cardiovascular disease by following a healthy lifestyle in the years after giving birth, according to a study by researchers at NIH.

The researchers analyzed data from the Nurses' Health Study following health habits and medical history of more than 90,000 women from before pregnancy through middle age and the early senior years.

The study confirms the links between gestational diabetes and cardiovascular disease found by other studies. It also provides some of the strongest evidence to date that cardiovascular disease after gestational diabetes isn't inevitable for women who adopt a healthy diet, maintain a healthy weight, exercise moderately and do not smoke.

The study was led by Dr. Cuilin Zhang of NICHD's Division of Intramural Population Health Research and colleagues. It appeared in *JAMA Internal Medicine*.

Gestational diabetes is a type of diabetes—or high blood sugar—that occurs only during pregnancy. Although it often disappears after birth, many women who had the condition later develop type 2 diabetes, usually by middle age. Some studies have shown women who had gestational diabetes are also at risk for cardiovascular disease, such as high blood pressure, high blood cholesterol, hardening of the arteries, heart attack and stroke.

In the current study, the researchers found that women who failed to adopt a healthy lifestyle in the wake of gestational diabetes had a 43 percent higher risk for cardiovascular disease, particularly heart attack and stroke.

New Regions of the Human Genome Linked to Skin Color Variation in Some African Populations

In the first study of its kind, an international team of genomics researchers has identified new regions of the human genome that are associated with skin color variation in some African populations, opening new avenues for research on skin diseases and cancer in all populations.

The findings may help researchers determine if humans with certain DNA sequences are more or less susceptible to DNA damage caused by ultraviolet radiation (UVR) or respond to cellular stress differently. NIH researchers contributed to this effort, led by Dr. Sarah Tishkoff at the

University of Pennsylvania. The findings were published Oct. 12 in *Science*.

Studying human skin pigmentation helps researchers understand how the cells that produce skin pigment—melanocytes—and genes work together to protect skin from the damaging effects of UVR. Because equatorial regions receive approximately two times more UVR than more temperate regions, darker pigmentation in people from these regions is thought to reduce skin damage and cancer. In contrast, lighter pigmentation of people in northern countries may increase the production of vitamin D3 needed to prevent rickets, a softening and weakening of bones in children, usually due to inadequate vitamin D.

Researchers studying genes that contribute to skin color for the last hundred years have focused on analyzing differences among European populations. This study of ethnically diverse populations in Ethiopia, Tanzania and Botswana has shed light on regions of the genome not previously associated with skin color.

"This is transformative research because it provides new pathways for studying pigmentation and pigment cell diseases," said Dr. William Pavan, co-author of the study and senior investigator in NHGRI's Genetic Disease Research Branch.

"The paper also provides a foundation for others to investigate the DNA loci and associated genes that play roles in skin cancer susceptibility and the effects of UV radiation."



A volunteer receives an injection in the PREVAIL Ebola vaccine clinical trial in Liberia. PHOTO: PREVAIL

Experimental Ebola Vaccines Elicit Year-Long Immune Response

Results from a large randomized, placebo-controlled clinical trial in Liberia show that two candidate Ebola vaccines pose no major safety concerns and can elicit immune responses by 1 month after initial vaccination that last for at least 1 year. The findings, published in the Oct.

12 issue of the *New England Journal of Medicine*, are based on a study of 1,500 adults that began during the West Africa Ebola outbreak.

The trial is being conducted by a U.S.-Liberia clinical research collaboration known as the Partnership for Research on Ebola Virus in Liberia (PREVAIL) established in 2014. It is sponsored by NIAID and involves scientists and clinicians from Liberia and the United States.

"This clinical trial has yielded valuable information that is essential for the continued development of these two Ebola vaccine candidates and also demonstrates that well-designed, ethically sound clinical research can be conducted during an epidemic," said NIAID director Dr. Anthony Fauci. "A safe and effective vaccine would be a critically important addition to classical public health measures in controlling inevitable future Ebola outbreaks."

Ovarian Reserve Tests Fail to Predict Fertility, Study Suggests

Tests that estimate ovarian reserve, or the number of a woman's remaining eggs, before menopause, do not appear to predict short-term chances of conception, according to an NIH-funded study of women with no history of infertility. The study appeared in the *Journal of the American Medical Association*.

"Women are born with a set number of eggs that gradually declines through the reproductive years," said Dr. Esther Eisenberg of NICHD's Fertility and Infertility Branch, which funded the study. "This study suggests that testing for biomarkers of ovarian reserve does not predict the chances for conception in older women still of reproductive age."

As a woman ages and her egg supply declines, cells in the ovary secrete lower amounts of inhibin B and anti-Müllerian hormone, substances considered to be indicators of ovarian reserve. The ovaries also produce higher amounts of follicle stimulating hormone (FSH) in the days before ovulation.

Although there is little research to support their use, tests for anti-Müllerian hormone are routinely offered in many fertility clinics on the assumption that women with a lower ovarian reserve would be less likely to respond to treatment. Moreover, home fertility tests of urinary FSH are commercially available.

"Our study suggests that younger women with biomarker levels indicating lower ovarian reserve should not become anxious that they won't be able to have a baby," said Dr. Anne Steiner, first author of the study and professor of reproductive endocrinology and infertility at the University of North Carolina at Chapel Hill.









Speakers at the event included (from I) Drs. Ana Langer, Julie Pulerwitz, Christine Sizemore and Eliot Sorel. PHOTOS: ANDREW PROPP

World Health

CONTINUED FROM PAGE 1

and wildlife encroachment, said Dr. Thomas Quinn, associate director of international research at NIAID. He framed the day's discussion at the recent NIH global health interest group symposium in Natcher Bldg.

From infectious to noncommunicable diseases (NCDs), from maternal health to mental health, panelists concurred on the need for more targeted research and a greater focus on prevention, earlier intervention and comprehensive care.

Beyond the significant human toll of infectious diseases, the financial impact is staggering, well into the billions for a single pandemic. In projections to 2060, said Quinn, "If we don't change the way we're operating and those drivers continue, we will cumulatively be spending over \$3.5 trillion in response to epidemics or in lost revenue."

Around the world, an estimated 10 million new tuberculosis cases are reported annually. As many as one-third of the world's population may be infected. People with latent TB may not have symptoms but may develop active TB, a risk that's much higher if their immune system is compromised by HIV, malnutrition or diabetes.

"One of the problems is how to identify who is at highest risk [of progressing to disease]," said Dr. Christine Sizemore, chief, TB, leprosy and other mycobacterial diseases section, NIAID. Current global health programs tend to track and treat those with active infections without addressing those with latent TB, she said, which does not accurately capture the

prevalence.

Drug-resistant TB is on the rise, with more than a half-million new cases annually. Treatment regimens are lengthy, complex and expensive, often having serious side effects and sometimes leading to lifelong disability, said Sizemore.

The TB vaccine given to babies in TB-endemic countries does not protect adults and developing a new vaccine will take time, she added. "To really impact global health, it's important to conduct clinical trials in affected populations. These clinical trials require collaborations and the goodwill of countries where TB is endemic to be successful."

Meanwhile, in the effort to curb HIV/AIDS globally, a major challenge is identifying and reaching the most vulnerable populations. A successful strategy that's changing the face of HIV/AIDS is implementation science—getting reliable, practical research data quickly so it can inform programs and policy, said Dr. Julie Pulerwitz, director of the HIV & AIDS Program at the Population Council. The process involves engaging policymakers early and addressing the how-to questions such as how to make treatments more widely available, how to reach overlooked and vulnerable populations and how to overcome societal stigma.

One project, under the aegis of PEPFAR, the President's Emergency Plan for AIDS Relief, focuses on adolescent girls and young women, who are among the vulnerable populations traditionally left behind. Every week in sub-Saharan Africa, girls and young women are still

acquiring HIV at alarming rates. DREAMS (Determined Resilient Empowered AIDS-Free Mentored and Safe Women) provides evidence-based health interventions and skills-based programs in literacy, violence reduction and economic empowerment.

A recent Population Council survey among young women ages 15-24 in Kenya revealed a high rate of physical and sexual violence from both intimate and non-intimate partners, and that 98 percent of these women did not seek counseling or other health services following the experience. Pulerwitz said this type of data helps guide improved services going forward.

"Share results early," urged Pulerwitz.
"It's so important to report out early [even if it's just preliminary data]...programs and these young women need help right now and they want this input right now."

Maternal mortality has decreased significantly in recent decades but remains especially high in developing countries among the most vulnerable women—the poorest who lack access to health services.

"The death of a woman during pregnancy is completely unacceptable because we have the ability to prevent most of [these deaths]," said Dr. Ana Langer, director of the maternal health task force at Harvard. "It's not only a public health or a clinical issue, but also a human rights issue because everyone should have access to the resources that are available."

In some cases, women are getting too little care, too late. But in industrialized countries as well as in urban areas of developing countries, many women get too much,

too soon, said Langer, getting overmedicated during a normal pregnancy or having unnecessary risky procedures. C-sections, for example, can save lives but often are performed more often than necessary around the world and can lead to complications for mother and child, she said.

"Health begins in the perinatal period, with lifelong consequences," said Dr. Eliot Sorel, professor of global health and psychiatry at George Washington University. He developed Total Health, a model that integrates mental health with primary care and public health, with more emphasis on detection and prevention.

"Health is the complete state of physical, mental and social well-being," said Sorel. "Regrettably, this triad often is being attended to in a...siloed, fragmented fashion that is costly and unsustainable."

His research focuses on the connection among depression, cardiovascular disease and diabetes. Statistics show that the severely mentally ill who have a chronic disease such as diabetes tend to die 25 years earlier than the general population. Because mental health conditions and other noncommunicable diseases often occur together, he said, they need to be addressed collectively.

And we need to intervene earlier. More than half of all mental disorders exist by age 14 and three-quarters are present by age 24, he said. Working with officials in the UN, World Health Organization and other agencies, Sorel said he's encouraged to see growing global attention to mental illness across NCDs.

Tackling infectious diseases and tending to maternal health, mental health and other global health challenges will require an ongoing commitment to narrowing equity gaps, improving quality of care and strengthening health systems. By engaging governments, multilateral organizations and the private sector, along with discoveries from our brightest scientists, there's great potential to make a lasting global health improvement, the panel concluded.

Partnership To Speed Cancer Therapies

On Oct. 12, NIH and 11 biopharmaceutical companies launched the Partnership for Accelerating Cancer Therapies (PACT), a 5-year public-private research collaboration totaling \$215 million as part of the Cancer Moonshot. On hand at the announcement at the National Press Club were (from I) NCI acting director Dr. Doug Lowy, patient Melinda Bachini and NIH director Dr. Francis Collins. PACT will initially focus on efforts to identify, develop and validate robust biomarkers—standardized biological markers of disease and treatment response—to advance new immunotherapy treatments that harness the immune system to attack cancer. The partnership will be managed by the Foundation for the National Institutes of Health, with the Food and Drug Administration serving in an advisory role.

PHOTO: ANDREW PROPP

Dec. 5-6

Returned Peace Corps Volunteers Host Learning Event at NIH

Recently, the NIH Returned Peace Corps Volunteers (RPCV) group organized an on-campus event to offer interested NIH'ers an opportunity to learn more about service in the Peace Corps. NIH RPCV panelists were joined by a Peace Corps recruiter for a presentation and panel discussion. Attendees gained a better understanding of how the Peace Corps could shape careers in global health, medicine and the sciences while exploring after-service benefits such as education rewards and non-competitive eligibility for federal positions.

"It was a pleasant surprise to see just how many transferable skills I gained in the Peace Corps that I now use here at NIH," said panelist Jessica Corley (Belize, '14-'16).

Panel questions ranged from "What [were] your village, diet and projects like?" and "Is there an age limit?" to "What was your biggest challenge?" and "Would you do it again?"

The panelists gave a variety of intriguing responses and stories to help paint a picture of their experience for the audience. For answers to these questions and more, check out https://www.peacecorps.gov/faqs/.

If you are a returned Peace Corps volunteer and are interested in joining the RPCV at NIH, email the listserv RPCVS_AT_NIH@ LIST.NIH.GOV.



NIH RPCV panelists (from I) Stephanie N. Smith (Namibia, '95-'98), Anne Smogur-Saldivar (Jordan, '10-'12), Jessica Corley (Belize, '14-'16) and Hannah M. Savage (Zambia, '12-'14) were joined by Peace Corps recruiter Keely Hayes (r) for a presentation and panel discussion.

PHOTO: COLLEEN DUNDAS

Workshop on Obesity Prevention Set

NIH is hosting the Pathways to Prevention Workshop: Methods for Evaluating Natural Experiments in Obesity Dec. 5-6 at Natcher Conference Center.

It is designed for obesity researchers, practitioners and others in related fields who are interested in obesity prevention and control and in natural experiment research. During the workshop, an independent panel and attendees will have the opportunity to listen to presentations by experts in the field of obesity research and to participate in open discussion sessions.

The event is free and open to the public. To register to attend or watch live via NIH Videocast, visit https://prevention.nih.gov/P2P-obesity-reg.

Sponsors include the Office of Disease Prevention, NCI, NHLBI and NIDDK.

MILESTONES

Have a question about some aspect of working at NIH? You can post anonymous queries at https://nihrecord.nih.gov/ (click on the Feedback tab) and we'll try to provide answers.

Feedback: Ever since the implementation of a No Turn on Red Light sign on Old Georgetown Rd. and Center Dr., the time to exit campus has greatly increased, particularly at times of heavy traffic. I have noticed over the past few months that cars trying to exit either north or south at that intersection have to wait through several light cycles because cars heading north on Old Georgetown Rd. completely block the exit.

Isn't there something the county can do to help facilitate the flow of traffic out of the NIH campus? Perhaps the light cycle needs to be longer or better synchronized with the light at OGR and Cedar? Is there someone at the NIH who can help with this situation?



This is not a photo of the gridlock caused by vehicles attempting to leave campus at the busy NIH intersection, but it could be. NIH and the State Highway Administration are on the case.

MAGE: ISTOCK

Response from the Office of Research

Facilities: NIH has been in regular contact with the Montgomery County department of transportation and the Maryland State Highway Administration regarding traffic flow and signage issues along Old Georgetown Rd.

During the week beginning Oct. 8, the county implemented traffic light adjustments in the surrounding area in an attempt to resolve some of the backups, particularly for employees trying to exit the campus from Old Georgetown Rd. and Center Dr. during the afternoon peak traffic period.

NIH is also working with SHA to further evaluate the traffic signals and No Turn on Red signs along Old Georgetown Rd. to improve safety and traffic flow for pedestrians, cyclists and vehicles.

Khalsa Retires After 30 Years Of Service to NIDA

Dr. Jag Khalsa, chief of the Medical Consequences of Drug Abuse and Co-occurring Infections Branch in the Division of Therapeutics and Medical Consequences, has retired after 30 years at the National Institute on Drug Abuse.



Dr. Jag K<u>halsa</u>

During his tenure, he collaborated with many scientists at NIDA and developed several highly important programs of clinical research including maternal drug abuse and fetal consequences, adolescent drug abuse and, finally, medical consequences, which have included nearly all biochemical and physiological systems impacted by substance abuse and co-occurring infections such as HIV, HCV, STIS, TB and others.

Prior to joining NIDA, Khalsa worked on drug development at SmithKline, environmental toxicology at Stanford Research Institute, mining safety at the National Institute of Occupational Safety and Health, and in food additives and drug safety at the Food and Drug Administration. He has published in pharmacology, toxicology, epidemiology and medical journals and has served on the editorial

boards of the Journal of Addiction Medicine, HIV/ AIDS-Research and Palliative Care, Frontiers of Neuroscience and Clinical Infectious Diseases.

Khalsa holds bachelor's degrees in chemistry and pharmacy, a master's degree in pharmacology and pharmacognosy, and a Ph.D. in neuropharmacology. When asked what he will miss most about NIDA, he said, "Working on its mission to find evidence-based prevention/treatment interventions for people with substance use disorders with comorbidity that includes co-occurring infections, as well as outstanding collegiality among its scientists and staff. It is one of the best research institutes at NIH, which, in the words of its former director Dr. [Elias] Zerhouni, is the crown jewel of the United States."

Ognibene Ends Long NIH Career

Dr. Frederick
Ognibene, Clinical
Center deputy director
for education and
strategic partnerships
and director, Office
of Clinical Research
Training and Medical
Education (OCRTME),
retired Sept. 29 after
35 years of service.



Dr. Frederick Ognibene

He came to NIH in 1982 as a clinical fellow in critical care medicine, becoming a senior investigator in the CC's critical care medicine department.

Ognibene then served as director of the Critical

NHLBI Staff Recognized for Efforts Against COPD

Four members of the NHLBI Division of Lung Diseases were presented with the John W. Walsh Award at the COPDIOUSA conference in Chicago recently.

The inaugural award was established by the COPD Conferences (UK and USA) to recognize individuals who have made outstanding contributions to research on chronic obstructive pulmonary disease (COPD).

NHLBI awardees Dr. Thomas Croxton, Dr. James Kiley, Dr. Lisa Postow and Dr. Antonello Punturieri were commended for work over many years that has advanced the understanding, diagnosis and treatment of COPD. The award was presented by Dr. Stephen Rennard, a professor of pulmonary and critical care medicine at the University of Nebraska.

"We are grateful to NHLBI's Division of Lung Diseases for its efforts in affirming the critical importance of the partnership between the scientific, clinical and patient community," said Dr. Byron Thomashow, chairman of the board of the COPD Foundation.

The award was named for John W. Walsh, a patient advocate who founded the COPD Foundation in 2004. He passed away in March 2017. The biennial COPD10USA conference is designed to foster communication and interaction among people with COPD, researchers and health care providers.



Dr. Stephen Rennard (I) presents the 2017 John W. Walsh Award to Dr. Antonello Punturieri.

Care Medicine Fellowship Training Program and co-chaired the NIH graduate medical education committee for clinical fellows in accredited training programs until May 2003, when he was appointed director of the newly established OCRTME in the Clinical Center.

In 2009, he was appointed CC deputy director for educational affairs and strategic partnerships. His accomplishments include multiple NIH Director's Awards and being elected to the Association of American Physicians in 2010. He is also co-author with Dr. John I. Gallin of the textbook, *Principles and Practice of Clinical Research*, published by Elsevier and currently in its third edition.

A native of the Buffalo area, Ognibene holds an M.D. from Cornell University Medical College and a B.A. in biology *magna cum laude* from the University of Rochester. An avid art collector, he will reside in Washington, D.C., post-retirement.



NINR director Dr. Patricia Grady (third from I) welcomes new council members (from I) Dr. Audwin Fletcher, Dr. Sheila Sullivan, Dr. Shirley Moore, Dr. Yvette Conley and Dr. JoEllen Wilbur. Not pictured is Dr. Karen Meneses.

PHOTO: CHIA-CHI CHARLIE CHANG

New Members Join NINR Advisory Council

NINR director Dr. Patricia Grady recently welcomed six new members to the National Advisory Council for Nursing Research.

Dr. Yvette Conley is a professor and vice chair for research at the University of Pittsburgh School of Nursing. Her research focuses on using "omics" approaches to understand the biological underpinnings of patient recovery and symptom development after traumatic brain injury, stroke and within the context of treatment for chronic conditions.

Dr. Audwin Fletcher is a tenured professor at the University of Mississippi Medical Center School of Nursing. His research interests include childhood obesity, men's health, chronic illnesses and the African-American community's access to care.

Dr. Karen Meneses is professor and associate dean for research at the University of Alabama at Birmingham School of Nursing and co-leader of the Cancer Control and Population Sciences Program at UAB's Comprehensive Cancer Center. Her research focuses on dissemination of self-management interventions to improve quality of life among

underserved (older, rural, younger and Latina) breast cancer survivors.

Dr. Shirley M. Moore is the Edward J. and Louise Mellen professor of nursing and associate dean for research at the Frances Payne Bolton School of Nursing, Case Western Reserve University. Her research focuses on designing and testing interventions to reduce cardiovascular disease risk factors.

Dr. Sheila Sullivan is director of research, evidence-based practice and analytics for the Veterans Affairs Central Office of Nursing Services. Her research focuses on aging veterans in recuperative care.

Dr. JoEllen Wilbur is professor and endowed Independence Foundation chair in nursing and associate dean for research at Rush University College of Nursing. Her work has focused on midlife women's physical activity and cardiovascular and psychological health.

Alumnus Hyatt Mourned

Dr. Asher A. Hyatt, whose name was often considered to be synonymous with peer review, died on Aug. 27 at the age of 87. He was a native of London who continued to live in Bethesda during the retirement years that followed his 31 years of

service in the Division of Research Grants.

Hyatt, who received his University of London Ph.D. in organic chemistry, provided leadership and guidance to 20 peer review study sections in the basic sciences. When he retired in 1997, he was chief of the chemistry and related sciences review section.



Dr. Asher A. Hyatt

Many DRG leaders who followed him have described the profound positive impact of his mentoring and of his unswerving commitment to excellence, fairness and integrity. His pursuit of these objectives led him to serve with distinction on NIH-wide policy and procedure committees.

Hyatt was a strong advocate for the NIH peer review process who presented many talks about it in this country and in others. He was a recipient of the NIH Merit Award in 1980, the NIH Director's Award for leadership skills in 1983, and three Public Health Service special achievement and recognition awards.

During retirement, Hyatt continued to have a keen interest in public policy and the sciences. He was very interested in seeing enhanced research about the chemistry of belief.

He is survived by a son, Anthony Hyatt of Bethesda; a daughter, Victoria Hyatt Cahn of Carmel, Ind., and two grandchildren, Sophia and Aaron Cahn of Carmel.

Healthy Volunteers Needed

NIAID researchers seek healthy volunteers, 18-50 years old, for an investigational vaccine study targeting respiratory syncytial virus (RSV). Compensation is provided. For more information, call 1-866-833-5433 (TTY 1-866-411-1010). Email vaccines@nih.gov or visit http://bit.ly/2nOkOvY.

Volunteers with Leukemia Needed

NHLBI researchers need volunteers with CLL (chronic lymphocytic leukemia) or small lymphocytic lymphoma (SLL) for a new investigational treatment study. Researchers are adding pembrolizumab (an immunotherapy agent) to standard treatment. If you have received treatment for CLL and progressed or have high-risk genetic changes, such as deletion 17p, TP53 mutation, NOTCH1 mutation or complex cytogenics, you may be interested in participating. To learn more, call the Office of Patient Recruitment at 1-866-444-2214 (TTY 1-866-411-1010). Read more online at https://go.usa.gov/xRFmE. Refer to study 17-H-0118.

Flu Vaccine Study Recruits Healthy Vols

Vaccine Research Center researchers seek healthy volunteers, 18-70 years old, for an investigational influenza vaccine study. Scientists are testing new vaccines to determine if they are safe and effective in preventing the flu. Compensation is provided. For more information, call 1-866-833-5433 or email vaccines@nih.gov. Read more at https://go.usa.gov/xNH7U. Refer to study VRC316.

Asthma Research Seeks Participants Ages 18+

Individuals 18 years or older with asthma are sought to participate in a 1- to 2-day research study in the Cardiovascular and Pulmonary Branch at the National Institutes of Health. A thorough medical evaluation and monetary compensation will be provided. If interested, call (301) 402-1553.

Have Hepatitis B?

Do you have chronic hepatitis B? Researchers are testing whether taking an oral antiviral and peg-interferon injection together is safe and better controls the hepatitis B virus as compared to taking only one of the medications. Study-related tests, procedures and medication are at no cost. For more information, contact the Office of Patient Recruitment, 1-866-444-2214 (TTY 1-866-411-1010). Read about the study at http://go.usa.gov/x9nSt. Refer to 15-DK-0082.



At the 2017 CFC kickoff are (from I) Dr. Lawrence Tabak, NIH principal deputy director; Special Olympians who are also NIH'ers Meredith Beck and Eli Lewis; Project SEARCH grad and musician James Garcia of OD; NINDS director Dr. Walter Koroshetz; Project SEARCH grad Gabby Nugent, who works at NIH as a supply clerk; and guest speaker Dr. Timothy Shriver of Special Olympics.

PHOTOS BY CHIA-CHI CHARLIE CHANG

At CFC Kickoff, Shriver Asks NIH to 'Show Some Love'

BY JESSICA CORLEY

The spirit of charity was in the air on Sept. 27 as NIH celebrated the start of the annual Combined Federal Campaign with a rally in front of Bldg. 1. NINDS, lead institute for this year's effort, planned the event to encourage NIH employees to embrace the theme, "Show Some Love."

More than 400 attendees gathered in unseasonable heat to learn more about some of the charities that benefit from the campaign, sample treats from local food trucks and hear from guest speaker Dr. Timothy Shriver.

Shriver, who leads the international board of directors of Special Olympics, challenged the crowd: "What would it look like if our country, right now, chose the theme of show some love? What's more important, right now, than figuring out how to marshal our strongest energies to build stronger connections, stronger communal strength, stronger love?"

NINDS director Dr. Walter Koroshetz explained that contributors to the CFC can donate any amount and may choose from more than 10,000 charities. NIH employees can easily donate to the campaign by visiting cfc.nih.gov.

"It is our call to action, inspiring each of us to support the causes and organizations we care most passionately about," Koroshetz said.

Shriver introduced three Special Olympians who are NIH employees: Meredith Beck, an office automation clerk, and Eli Lewis and Gabby Nugent, both supply clerks. All three spoke about the importance of the organization.

"Special Olympics is one of my favorite things," said Lewis with a smile. Nugent mentioned looking forward to an upcoming tennis tournament in



Shriver stresses the importance of working together, especially in times of need.

Baltimore; Beck recalled a favorite memory when her swim team won a gold medal.

One of the organizations supported by CFC contributions is SEEC (Seeking Equality, Empowerment, and Community), dedicated to supporting people with developmental disabilities in Montgomery County. NIH partners with SEEC to offer internships for its successful transition program, Project SEARCH; Beck, Lewis and Nugent are graduates.

Project SEARCH Program Director Steve Blanks said he wishes everyone who gives during the CFC could understand the value of their contribution—Project SEARCH interns are given the chance to prove they are capable individuals and an integral part of their community. "Anyone here at NIH can provide that opportunity," he noted.

Twenty-eight charities attended the kickoff, including several that support the mission of NINDS to reduce neurological disorders. Representatives from the Epilepsy Foundation, the ALS Association, the Parkinson Foundation of the National Capital Area and the Stroke Comeback Center were on hand to explain to employees how donations can help such organizations.

"Our goal today is to spread awareness," said Matt

Salomon, community outreach coordinator of the ALS Association. He said contributions directly fund clinical care services for individuals with ALS as well as research, which he hopes will result in an effective therapy for the debilitating disorder.

Koroshetz said coordinators and keyworkers from each of the institutes and centers will work hard to ensure NIH meets or exceeds its fundraising goal of \$2.2 million. New this year was having coordinators represent each institute at designated tables. Coordinator enthusiasm for the CFC was apparent in their bright clothing, whimsical décor and treats.

Center for Scientific Review coordinator Beverly Cleveland is an extramural support assistant and a breast cancer survivor. She and her family received resources from organizations funded in part by CFC contributions when they needed it most. She hopes her story will inspire others to give.

"You just don't know how close to home your help gets," Cleveland said.

The event was brought to a conclusion by James Garcia, a Project SEARCH graduate who works in the Office of the Director, as he sang the classic What a Wonderful World by Louis Armstrong. Raucous applause and a standing ovation indicated what event organizers hoped to be true: NIH is ready to show some love.

Nov. 15

America Recycles Day

America Recycles Day (ARD) is Wednesday, Nov. 15. The Division of Environmental Protection will partner with the ORS Division of Logistics Services, sustainable lab practices working group, green team leads council and sustainability partners to host information and recycling activities Monday, Nov. 13 through Friday, Nov. 17.

ARD is a nationwide endeavor to celebrate recycling efforts, increase recycling awareness and promote recycling initiatives. Stop by an information table from 11 a.m. to 2 p.m. on Nov. 15 to take the NIH Recycling Pledge and pick up recycling information at the following cafeteria locations: Bldgs. 10 (B1 and 2nd floor), 31, 35, 38 and 45.

Containers will be located in the lobbies of Bldgs. 1, 10 South, 13, 31A, 35, 38A, 40, 45 and 50 to collect non-accountable items (e.g., electronics, floppy disks, CDs, cords, microwaves, coffee makers, monitor stands, metal staplers, hole punchers) from the beginning of ARD week until Friday at 2 p.m.

The Shady Grove, Baltimore and Research Triangle Park campuses will also host activities. For more information, email Jaqie McGauley (jacquelyn.mcgauley@nih.gov) or Tierra Robinson (tierra.robinson-morgan@nih.gov). Updated information will also be posted at https://nems.nih.gov/Pages/default.aspx.