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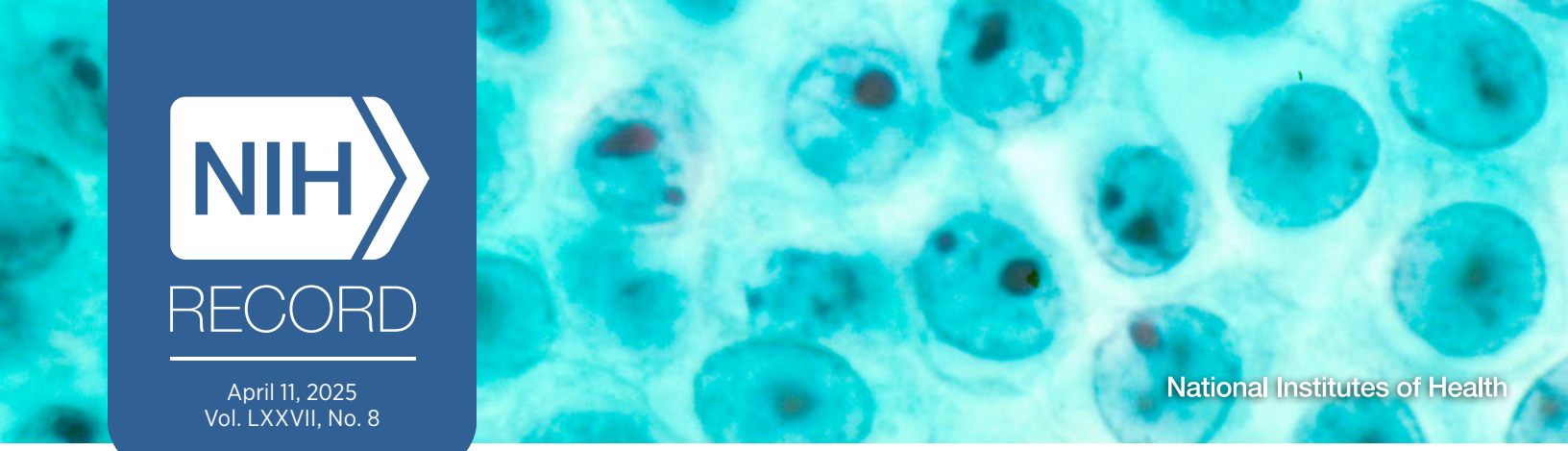


Jaffe Recounts Contributions to Lymphoma Research

BY ERIC BOCK

The microscope is not an obsolete tool in the laboratory, said Dr. Elaine Jaffe, during a recent G. Burroughs Mider Lecture in the NIH Clinical Center's Lipsett Amphitheater.

"Today, we have other tools to diagnose disease, but the microscope still plays an important role in disease discovery," said Jaffe, NIH Distinguished Investigator in the National Cancer Institute's (NCI) Laboratory of Pathology. There, she conducts pioneering studies related to the classification of malignant lymphomas.

More than a century ago, the German scientist Dr. Rudolf Virchow, now known as the "father of surgical pathology," first described lymphoma under a microscope.

Microscopy has since played an important role in the clinical diagnosis and understanding of the pathogenesis of cancer, Jaffe said. Pathologists view tissue samples under a microscope and create a report with information about the cancer type, including the tumor grade,

Dr. Elaine Jaffe

SEE **JAFFE**, PAGE 4

Bhattacharya Begins Tenure as 18th NIH Director

Dr. Jayanta Bhattacharya

PHOTO: CHIA-CHI CHARLIE CHANG

Dr. Jayanta "Jay" Bhattacharya took office on April 1 as the 18th director of the National Institutes of Health (NIH). President Donald Trump nominated Bhattacharya for the position in November 2024 and the U.S. Senate confirmed him on March 25.

SEE **DIRECTOR**, PAGE 6

NIH Clinical Center Acting CEO Pius Aiyelawo greets HHS Deputy Assistant Secretary Dr. Marcus Plescia, who visited NIH in March.

ALSO THIS ISSUE

ANSWERING THE CALL

NIH Blood Bank: The Lifeblood of the Clinical Center

BY AMBER SNYDER

Dr. Kamille West-Mitchell

Every day, patients at the NIH Clinical Center require blood transfusions. Thanks to the NIH Blood Bank, this need is fulfilled in-house by generous donors.

Most hospitals get blood from outside suppliers such as the Red Cross, so hospital-based blood banks are increasingly rare.

Only 3% of eligible people in the U.S. are blood donors, said Dr. Kamille West-Mitchell, chief of the Blood Services Section in the Clinical Center's Department of Transfusion Medicine. "Somebody has to answer the call."

At NIH, those responders are a combination of NIH'ers, the local community and family members of patients undergoing treatment at the Clinical Center (CC). There are two donation sites: the first floor of the CC and, off campus, at the NIH Donor Center on Fisher's Lane. Whole blood donations are the most common form of donation, but the Blood Bank also accepts double red cell apheresis, platelets and AB plasma.

Each year, CC patients receive a total of about 7,000 units of blood products, most commonly to treat cancer and blood disorders, and for major surgeries.

Types of Blood Donation

Whole blood is the complete mixture of all cell types (red blood cells, white blood

SEE **BLOOD BANK**, PAGE 5

NIH Office of Behavioral, Social Sciences Research to Host 30th Anniversary Director's Webinar

Apr. 30

This year, the NIH Office of Behavioral and Social Sciences Research (OBSSR) is celebrating 30 years of advancing research to improve health outcomes.

Dr. Michael Platt

OBSSR will launch this celebration with a Director's Webinar featuring Dr. Michael Platt on April 30, 11:00 a.m. - 12:00 p.m. ET. In his talk, "The Neural Code Supporting Multidimensional Social Relationships," Platt will explore how primates navigate the social relationships that structure daily life and shape survival, health and wellbeing.

To register for the webinar, see: obssr.od.nih.gov/30yearswebinarPlatt.

This webinar is part of a year-long series of OBSSR 30th anniversary events. Stay connected: visit obssr.od.nih.gov/30years and subscribe to OBSSR email updates for the latest information.

A Biomedical Challenge 'DEBUT' for Undergraduate Students

NIH has launched the 2025 Design by Biomedical Undergraduate Teams (DEBUT) Challenge, which tasks undergraduate student teams with developing new technologies to address unmet needs in health care. The challenge features 15 monetary prizes.

NIH's National Institute of Biomedical Imaging and Bioengineering (NIBIB) and the nonprofit VentureWell invite student engineers to participate.

Multiple NIH institutes are sponsoring this challenge. Topics range from technologies for low-resource settings and rehabilitative technologies for people with physical disabilities to cancer and HIV/AIDS prevention and care. Submissions must be received by June 18. Winners will be announced in August.

Get the details at https://go.nih.gov/SfhZLyp.

NIH Clinical Center Appoints Aiyelawo Acting CEO

The NIH Clinical Center has appointed Pius Aiyelawo, MPA and fellow of the American College of Health Care Executives (FACHE) as acting CEO. Aiyelawo takes on the role following the retirement of Dr. James Gilman and brings a wealth of leadership experience from his time as Clinical Center chief operating officer and his 27-year career as a U.S. Naval officer.

Pius Aiyelawo

Since joining the Clinical Center in 2018, Aiyelawo has played a key role in transforming the hospital into a high-reliability organization by enhancing safety and quality of care. He's been a driving force behind workplace safety initiatives, partnerships with local and national healthcare organizations, and the ongoing Surgery, Radiology, and Laboratory Medicine expansion project.

Aiyelawo's leadership is defined by loyalty, respect and dedication to service—values he has carried from his distinguished Navy career to his executive role at NIH.

Unsung Power Hero: Illuminating Our Spaces

As many NIH'ers began returning to the Bethesda campus full time in recent weeks, NIH maintenance crews have been working overtime to make repairs and adjustments to lighting, cooling, heating and plumbing.

Robert Hoes, an elecrician with NIH's Office of Research Facilities, is one of those unsung heroes troubleshooting and fixing wiring, lighting and other electrical issues. Hoes, who has worked at NIH for 33 years and counting, has done electrical work in just about every building on campus over the years.

Service with a smile: Robert Hoes restores the lights in a Bldg. 31 suite.

Know Before You Go: Registering NIH Visitors

As of March 31, any non-U.S. visitor who has not completed the VisitNIH pre-registration process, or has not been approved, will not be granted access to the Bethesda campus and other select NIH locations.

The recommended timeline for non-U.S. visitors is to complete pre-registration at least 30 days in advance, but no more than 60 days in advance, of their visit. For U.S. citizens, pre-registration is encouraged but not required.

For more information about the pre-registration process, please see: go.nih.gov/Y6g6moa.

NIH Investigator Examines How Stressors Affect Heart Health

BY AMBER SNYDER

Dr. Allana T. Forde is driven by a clear philosophy.

"The word 'can't' is not a part of my vocabulary," said Forde, a researcher at NIH's National Institute on Minority Health and Health Disparities (NIMHD).

Dr. Allana Forde

The daughter of immigrants from Guyana, she was encouraged to pursue higher education. She set out to be a physician, but instead found herself drawn to a career in public health. She received her M.P.H. in epidemiology from George Washington University and her Ph.D. in epidemiology from Columbia University. She is now a Stadtman Tenure-Track Investigator in the Division of Intramural Research at NIMHD.

Forde and Dr. Ana Diez Roux reunited recently at a WALS lecture.

Forde's research examines how stressors contribute to cardiovascular disease (CVD) and its risk factors. Her interest stems partly from the health disparities she witnessed during her time spent in the Caribbean conducting research for her NIH Fogarty International Center fellowship. Another motivation for her CVD research hit much closer to home: her father passed away from CVD complications while she was in her master's program.

> *"There will always be hurdles, but you can overcome anything if you believe you can."*
>
> -DR. ALLANA FORDE

"These health outcomes are preventable," she said. "If we can identify the contributing factors, we can intervene."

Another important facet of Forde's work is the example she sets for the next generation of researchers.

"I was fortunate to have amazing mentors, and I continue to apply the same mentorship philosophies to my own mentees," she said.

She is extremely proud of her mentees' success and grateful for the opportunity to be a part of their journey. "There will always be hurdles," she reminds her mentees, "but you can overcome anything if you believe you can"—hearkening back to her own motto.

Forde recently experienced a full-circle moment when her mentor from her postdoctoral studies, Dr. Ana Diez Roux, visited NIH to present on the social determinants of health at the NIH Director's Wednesday Afternoon Lecture Series (WALS). R

Social Factors Help Explain Worse Cardiovascular Health in Rural Areas

An NIH-funded research team uncovered higher rates of heart disease and worse heart health affecting adults living in rural communities compared to urban areas and factors that likely drive these differences. More than 60 million U.S. adults live in rural communities, and heart disease remains the nation's leading cause of death.

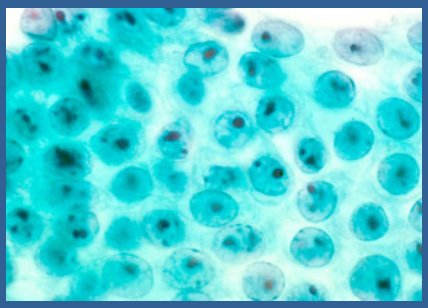
The researchers found adults living in rural areas were more likely to have heart disease, high blood pressure, high cholesterol, obesity and diabetes. Across all age groups, the differences in high blood pressure, obesity and diabetes were largest among adults ages 20–39 living in rural areas.

Investigators reviewed data from more than 27,000 adults who participated in the 2022 National Health Interview Survey to understand geographical differences in rates of heart disease and risk factors for conditions that affect the heart and blood vessels, such as high blood pressure, diabetes and obesity.

They found that factors such as levels of income and education, having enough food to eat and owning a home helped explain the higher rates of people in rural areas who had high blood pressure, diabetes and heart disease. Prior research has also shown how difficult circumstances, such as living in poverty, can affect cardiovascular health, including increased inflammation in the body.

Identifying factors driving the higher burden of heart disease and risk factors in rural regions remains a critical research priority.

Insights from this study could inform public health efforts and policies to support and improve the cardiovascular health of people — especially younger adults — living in rural areas.



ON THE COVER: *Reactive human stomach cells that are non-malignant*

IMAGE: DR. LANCE LIOTTA LABORATORY

The NIH Record

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

Assistant Editors:
Eric Bock • *Eric.Bock@nih.gov*
Amber Snyder • *Amber.Snyder@nih.gov*

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National Institutes of Health
Turning Discovery Into Health

Jaffe

CONTINUED FROM PAGE 1

lymph node status, margin status and stage.

Lymphoma occurs when white blood cells called lymphocytes grow and form tumors in the lymph system, which is part of the body's immune system. The lymph system is made up of tissues and organs that help protect the body from infection and disease. There are two types of lymphocytes: T cells and B cells.

More than 75 subtypes of the disease exist. Treatment depends on the type or subtype of lymphoma, and the distinction between Hodgkin lymphoma and "non-Hodgkin" lymphoma is less relevant today

When Jaffe first started her career, pathologists had been using the Rappaport system of lymphoma classification, "a primitive approach" based on the size of a cell. It was developed before the discovery of T cells and B cells.

"When I first started at NCI as a resident in 1970, the stars were aligned for the revolution of lymphoma diagnosis," she said.

Researchers at NIH were advancing the treatment of leukemia and lymphoma, gaining new insights in immunology and developing tools and techniques to characterize immune cells.

In 1974, Jaffe and her colleagues discovered that a common type of lymphoma—at the time called "nodular lymphoma"—originated in B cells and was derived from the lymphoid follicle, a key component of the B-cell immune system Their findings were published in the *New England Journal of Medicine* and that paper became a citation classic. This disease is now recognized as *follicular lymphoma.*

Her early research helped to replace descriptive classifications with those based on the latest findings in immunology and molecular biology. This approach also informed the development of today's cancer therapies.

Over the next 20 years, technical advances enabled pathologists to study the nature of tumor cells in routine biopsy samples, helping to define the subtypes of lymphoma that looked different under the microscope as distinct disease entities.

In 1994, an international consortium of 19 pathologists developed the REAL classification, which "represented a new paradigm" in the classification of lymphoid neoplasms.

"Individual diseases were defined based on a constellation of clinical and laboratory features," she said, including the appearance and structure of tumors, immunophenotype, genetic features and clinical presentation.

The REAL classification served as a model for defining all of the neoplasms derived from the hematopoietic system—lymphoid, myeloid and histiocytic tumors. It became the international standard for diagnosis on a worldwide basis.

"We fulfilled the 'Holy Grail' of lymphoma classification," Jaffe explained. "We built a biomedical information network to promote disease discovery and pathogenic insights, provided a framework for precision medicine, facilitated clinical trials and improved the standard of diagnosis and treatment."

Today, Jaffe and her colleagues continue to study lymphomas, both under the microscope, and with modern immunological and genomic tools. In one study, they discovered the earliest form of follicular lymphoma in biopsy tissue, termed "in situ follicular lymphoma." The tumor cells have a translocation in the *BCL2* gene, but do not have the subsequent hits that lead to clinically significant disease. This work provided insight into how these tumors arise and how they evolve over time.

Her laboratory also identified lineage plasticity in lymphoma. This was an unexpected discovery, in which B-cells can transform into histiocytes during the course of disease. Lineage plasticity can be a significant driver of cancer progression and drug resistance.

Finally, researchers in her lab observed overlap between Hodgkin and non-Hodgkin lymphomas, termed grey zone lymphoma, further indicating the plasticity of B-cells and the varied forms that evolve during lymphomagenesis.

★★★

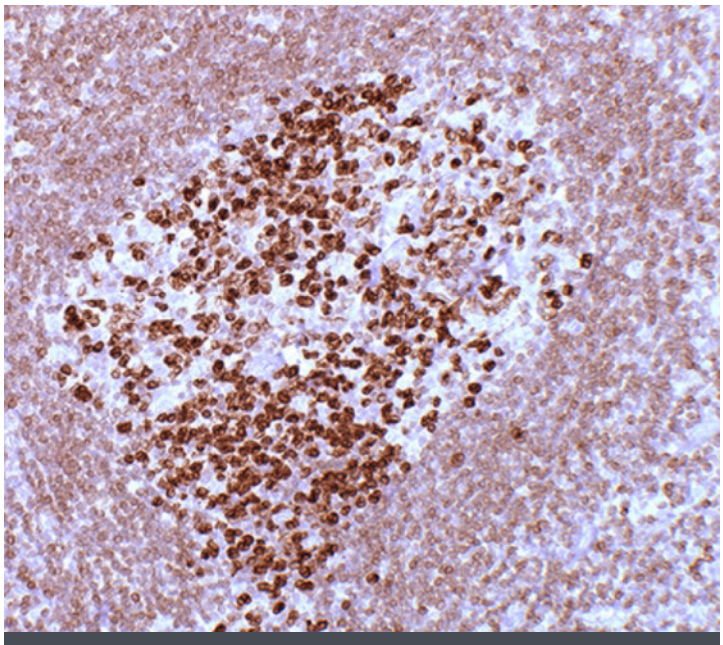
"We built a biomedical information network to promote disease discovery and pathogenic insights."

~DR. ELAINE JAFFE

★★★

The microscope is still a tool for disease discovery, Jaffe concluded. Many unique types and subtypes of lymphomas were first observed using the traditional light microscope employed in the daily care of patients. Such astute observations are often key to scientific discoveries regarding the origin and development of these diseases—taking us from the Bedside to the Bench.

The Mider Lecture was established in 1968 in honor of the first NIH director of laboratories and clinics and is presented annually by an NIH intramural scientist to recognize outstanding contributions to biomedical research. R



Microscopic image of in situ follicular lymphoma shows lymphocytes strongly expressing BCL2 confined to a germinal center.

Blood Bank

CONTINUED FROM PAGE 1

cells and platelets) suspended in plasma, the liquid portion of blood. A single whole-blood donation is 500 mL, which equates to one unit of blood. Whole blood can be separated into its components in the lab, so that one donation can help multiple patients. Red blood cells are refrigerated and can be stored for over a month, while other blood components such as platelets only last for five days after donation. Apheresis, the method through which specific components of blood are extracted, involves collecting the blood by a needle in one arm, passing through a machine that extracts the desired cell type and returning the rest to the donor via a needle in the same arm or their other arm.

Platelets, which are crucially important to prevent life-threatening bleeding, are collected via apheresis at the Fisher's Lane location, and are always in critical need because of their short shelf life. Double red cell apheresis is a donation that allows the donor to give two units of red blood cells during a single donation. People who have the AB blood type are universal plasma donors and can give plasma to any other person, regardless of their blood type. Apheresis is also used to extract plasma.

Meeting the Need

The Blood Bank maintains certain target levels for each blood and donation type, said West-Mitchell. O positive and A positive are the most common blood types, for example, so they may also be the most in demand. Acute shortages, which may occur during a patient surgery, are announced over the CC's PA system. Blood drives are a great way to engage your institute or group to donate and can be arranged in coordination with the NIH blood bank team.

Blood Bank phlebotomists and nurses typically see about 20 whole-blood donors and 10 apheresis donors each day.

West-Mitchell stressed the importance of accepting donors from all backgrounds. The blood donor population tends to be older, for example, and may be more likely to have chronic health conditions that can make donating riskier for them. Ancestry is another factor that can influence a donor's likelihood at being a good match for a patient. African American donors, for example, are most likely to be a good match for patients with sickle cell anemia, an inherited blood disorder that disproportionately affects that population.

Giving Hope

West-Mitchell is fascinated by the interplay of genetics with transfusion medicine. As a medical student in Jamaica, she chose to specialize in transfusion medicine because the field combines "the very human side of lab medicine and the lab side of clinical medicine."

She came to the NIH Blood Bank 12 years ago for a fellowship and has remained as a member of the clinical faculty for the last 10 years. Her job can be very heartwarming, she said, because of the generosity of blood donors.

Granulocyte donations, for example, benefit patients with weakened immune systems by giving them extra white blood cells. The donation process requires multiple visits with no compensation, but donors nonetheless go out of their way to provide life-saving granulocytes to complete strangers.

"This is from a stranger who doesn't know my son," the mother of a pediatric oncology patient once remarked to West-Mitchell, as her child received a life-saving transfusion. "Everyone in the room was brought to tears," West-Mitchell recalled.

Every Donation Counts

To raise awareness about the ongoing need for donations, the Blood Bank recognizes various donor events throughout the year, such as World Blood Donor Day on June 14th. Donor milestones are another way to honor regular, repeat donors. Marty Zimelis, for example, "Mr. 300," has surpassed his 300th platelet donation. A small number of donors have even reached 400 donations.

West-Mitchell (r), after one of her birthday donations, poses with her friend Sarah Pogue, a clinical research nurse.

These milestones are commendable, but, as West-Mitchell said, "We celebrate all donors." Every donation makes a difference. "If every eligible person donated once on their birthday, we would never need to collect more blood," she said. She donates blood on her birthday, in addition to another donation each year.

As the unofficial slogan of the Blood Bank says, giving blood also gives hope—both of life-saving value to the patients at the Clinical Center.

To learn more about the NIH Blood Bank, visit https://www.cc.nih.gov/bloodbank. R

Donor milestones are always cause for celebration at the Blood Bank. Above, Marty Zimelis (c), proudly displays plaque commemorating his 300th platelet donation.

Director

CONTINUED FROM PAGE 1

As director, Bhattacharya will oversee the nation's medical research agency. He will play an instrumental role in shaping NIH's activities and outlook and ensuring they align with the President's Make America Healthy Again Commission.

> *"Novel biomedical discoveries that enhance health and lengthen life are more vital than ever to our country's future."*
>
> -DR. JAY BHATTACHARYA

"Chronic diseases such as cancer, heart disease, diabetes and obesity continue to cause poor health outcomes in every community across the United States. Novel biomedical discoveries that enhance health and lengthen life are more vital than ever to our country's future," said Bhattacharya. "As NIH director, I will build on the agency's long and illustrious history of supporting breakthroughs in biology and medicine by fostering gold-standard research and innovation to address the chronic disease crisis."

A renowned doctor, researcher and health economist, Bhattacharya previously held a tenured professorship in the medical school at Stanford University in California. His research has focused on population aging and chronic disease, particularly on the health and well-being of vulnerable populations. During the Covid-19 pandemic, Bhattacharya co-authored the Great Barrington Declaration, which called for opening schools and lifting lockdowns while better protecting older populations who were most vulnerable to the disease.

Encouraging different perspectives will be central to Bhattacharya's approach to leading NIH as part of his larger mission to restore public trust in science. Alongside HHS Secretary Robert F. Kennedy, Jr., he will champion innovative, cutting-edge research that fuels near-term solutions for patients while balancing investments in basic science.

Bhattacharya earned his bachelor's and master's degrees in economics from Stanford University. He then completed medical school and earned a Ph.D. in economics at Stanford. He replaces Dr. Matthew J. Memoli, who had served as acting NIH director since Jan. 22.

NIH Remembers Alzheimer's Researcher Buckholtz

Dr. Neil Buckholtz

Former NIH researcher Dr. Neil S. Buckholtz passed away on March 24 after a brief illness.

A fervent advocate for "open science," one of his most lasting legacies is the Alzheimer's Disease Neuroimaging Initiative (ADNI), a massive data-sharing effort based on the idea that public research institutions and private pharmaceutical companies collaborate, rather than compete, to advance progress.

ADNI was the first large-scale study that made all data available to the scientific community at large. It inspired many research breakthroughs and created a norm for sharing scientific data funded by the public.

"Neil played a critical role in the ADNI, a truly groundbreaking initiative, that pulled together multiple pharma companies with NIA [National Institute on Aging] and other NIH partners," said NIA Director Dr. Richard Hodes. "It is widely recognized as innovative as a public-private partnership and for its insistence on making all data immediately available to the research community. These are practices that we now take for granted, but the work led by Neil 20 years ago established the pathway."

Buckholtz's long career as a scientific researcher began at the Medical University of South Carolina in 1971. He began working at the National Institute of Mental Health in 1983. Buckholtz rose to the position of director, Division of Neuroscience, at NIA, where he led all NIH-supported research on Alzheimer's and other dementias until his retirement in 2015.

He is survived by Marjorie, his wife of nearly 60 years, four children and five grandchildren.

As a career civil servant and veteran of the Public Health Service, Buckholtz was devoted to the public good and honored to work on behalf of the American people. He remained active in the field of Alzheimer's research until his death.

VOLUNTEERS

SCD Study Seeks Participants

Your participation can contribute to advancing knowledge and improving care for individuals with sickle cell disease (SCD). The study aims to enhance the understanding of SCD and its associated complications by investigating the relationship between the disease and specific variations of certain genes. If you have SCD, your participation in this study is highly valuable.

By participating, you will undergo an evaluation and receive recommendations from a team experienced in the treatment and management of SCD. To inquire about participating in the study, please contact the NIH Office of Patient Recruitment at 866-444-8810 or ccopr@nih.gov. Refer to the NIH study number #04-H-0161. You can also find more information about the study at the following link: https://go.nih.gov/6ddLFWJ.

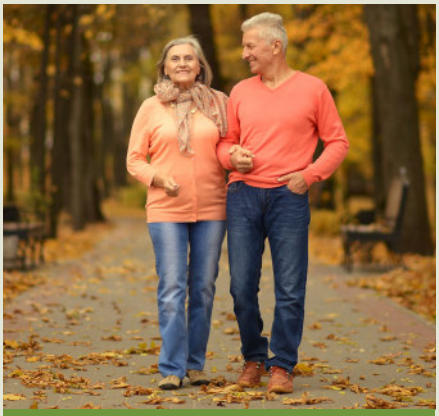
Volunteers Needed for Endometrial Cancer Study

Researchers from NIH's National Cancer Institute are currently looking for patients with HER2-expressing endometrial cancer, a type of cancer in the uterus.

The purpose of the research study is to test two investigational study drugs—a vaccine that targets HER2 (AdHER2DC) that is made out of the patient's own blood cells and an additional investigational drug that is suggested to help the immune cells destroy tumor cells (N-803). Both of these drugs will be combined with two FDA-approved cancer treatment drugs that are used for patients with endometrial cancer.

Research procedures will be provided at no cost, and travel assistance may also be provided. If you're interested, please contact 866-444-8810 or ccopr@nih.gov and refer to the study number #001557-C. To learn more, visit https://go.nih.gov/NEJnMuT.

Study Shows Daily Physical Activity, Even at Light Intensities, May Lower Cancer Risk



More walking, at any pace, in your daily routine may lower cancer risk.

PHOTO: RUSLAN HUZAU / SHUTTERSTOCK

In a prospective cohort study of more than 85,000 adults in the United Kingdom, researchers at NIH and the University of Oxford found that individuals who engaged in light- and moderate-to-vigorous-intensity daily physical activity had a lower risk of cancer than individuals who were more sedentary. The findings, published in *British Journal of Sports Medicine,* are among the first to evaluate a reduced cancer risk associated with light intensity activities such as doing errands and performing household chores.

Most previous studies showing a correlation had relied on self-reported questionnaires, which may not accurately capture the intensity of different activities. Earlier studies that used objective measures were focused on higher-intensity physical activity.

In the new study, led by researchers from NIH's National Cancer Institute, participants in the UK Biobank study (median age of 63) wore wrist accelerometers that tracked total daily activity, activity intensity and daily step count for one week. The researchers then looked at the relationship between the daily averages and incidence of 13 cancer types, including breast and colorectal cancer, previously associated with physical activity.

After a mean follow-up of 5.8 years, 2,633 participants had been diagnosed with one of the 13 cancer types. Individuals with the highest total amount of daily physical activity had a 26% lower risk of developing cancer than individuals who had the lowest amount of daily physical activity. The researchers also explored the impact of replacing daily sedentary time with light- and moderate-to-vigorous-intensity physical activity and found that this shift was associated with a reduced risk of cancer. The associations between physical activity and cancer risk remained even after researchers adjusted for demographic factors, lifestyle factors, body mass index (BMI) and other health conditions.

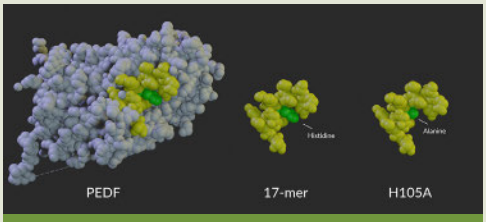
Higher daily step count, but not the pace of the steps (step intensity), was also associated with a lower risk of cancer. Compared with cancer risk in those taking 5,000 steps per day, cancer risk was 11% lower for those taking 7,000 steps per day and 16% lower for those taking 9,000 steps per day. Beyond 9,000 steps, the risk reduction plateaued. The researchers suggested that less physically active individuals may lower their cancer risk by incorporating more walking, at any pace, into their daily routine.

NIH Researchers Develop Eye Drops that Slow Vision Loss in Animals

NIH researchers have developed a treatment with the potential to slow the progression of human degenerative eye diseases. They developed eye drops that extend vision in animal models with inherited diseases that lead to progressive vision loss in humans, known as retinitis pigmentosa.

The eye drops contain a small fragment derived from a protein in the eye, known as pigment epithelium-derived factor (PEDF). PEDF helps preserve cells in the eye's retina. A report on the study is published in *Communications Medicine.*

All degenerative retinal diseases have cellular stress in common. While the source of the stress may vary—dozens of mutations and gene variants have been linked to retinitis pigmentosa and other disorders—high levels of cellular stress cause retinal cells to gradually lose function and die. Progressive loss of photoreceptor cells leads to vision loss and eventually blindness.



Model of PEDF protein alongside the 17-mer and H105A peptides. **IMAGE: NEI**

Previous research revealed the natural protein PEDF can help retinal cells stave off the effects of cellular stress. However, the full PEDF protein is too large to pass through the outer eye tissues to reach the retina. Instead, researchers developed a series of short peptides derived from a region of PEDF that supports cell viability. These small peptides can move through eye tissues to bind with PEDF receptor proteins on the surface of the retina.

In this new study, a research team created two peptide eye drop formulations. The first peptide candidate, called "17-mer," contains 17 amino acids found in the active region of PEDF. A second peptide, H105A, is similar but binds more strongly to the PEDF receptor.

When administered once daily to young mice with retinitis pigmentosa-like disease, H105A slowed photoreceptor degeneration and vision loss. Once cell loss begins, most photoreceptors die in a week. When given peptide eye drops through that one-week period, mice retained up to 75% of photoreceptors and continued to have strong retinal responses to light.

A variety of gene-specific therapies are under development for many types of retinitis pigmentosa. These PEDF-derived peptide eye drops could help preserve cells while waiting for these gene therapies.

NIH-Funded Study Identifies Potential New Stroke Treatment

In a preclinical study, rodents treated with uric acid showed improved long-term outcomes after acute ischemic stroke. The findings suggest the treatment may work as an add-on therapy to standard stroke treatments in humans. The NIH-funded study was published in *Stroke.*

Researchers used a well-established rodent model of stroke that closely simulates stroke in humans. They administered intravenous uric acid or saline control and monitored animals' recovery over one month. Behavioral and neurological assessments, including MRI scans, were used to evaluate the treatment's effects.

Mice treated with uric acid had better sensorimotor function—the primary outcome measure—30 days after stroke. More animals in the uric acid group also survived their stroke compared to control animals. However, some secondary outcome measures, such as brain damage, were not reduced.

The research teams used equal numbers of male and female animals and studied older, young, and obese mice, as well as rats with hypertension. Uric acid was efficacious across all groups, suggesting the treatment could potentially perform well in human trials, including in people with stroke comorbidities.

Ischemic stroke, a leading cause of disability and death in the U.S., occurs when a blood clot or other blockage in an artery cuts off blood supply to the brain. Strokes are treated with medications or surgery to break up clots and restore blood flow to affected brain areas. But not all people fully recover. Using additional treatments that protect brain tissue from damage, either immediately before or during clot removal, could boost the effects of standard treatments and greatly improve recovery in patients.

NIH News In Health Celebrates 20 Years of Practical Health Tips

BY ERIC BOCK

This April, *NIH News in Health* is celebrating its 20th anniversary.

Since its debut in 2005, the monthly newsletter has provided consumers with practical health information and tips based on NIH-funded research.

"For the past two decades, we're proud to have been able to share the results of NIH research with our readers in an easy-to-read style so they can apply our findings to improve their health," said Dr. Harrison Wein, the newsletter's founding editor.

Over the years, its following has continued to grow. Today, the newsletter has more than 500,000 email subscriptions and 42,000 print requests each month. *News in Health* also gets distributed to various community spaces including libraries, health centers and doctor's offices. Since the stories are not copyrighted, outside news outlets often reprint the articles in their own publications.

News in Health editors have always emphasized accuracy. Stories undergo multiple levels of review before publication. Researchers interviewed for each story have a chance to read and comment on draft articles to make sure they're correct. NIH health and science experts also review each story before it's published.

"When I first came to NIH, I thought it was strange that most of the online health information was split across NIH's institutes and centers' websites," said Wein. "*News in Health* bridges the gaps between the institutes and centers."

Many institutes and centers (ICs) work on the same diseases or conditions, but they approach their research from different scientific perspectives. While this makes sense from a scientific point of view, communicating public health information effectively requires a more unified approach.

"If you're interested in sharing the latest information on disease prevention, for instance, you need to bring together many different types of research," he said.

The unique design has been a hallmark since the start. The newsletter features whimsical illustrations and pastel colors. Its original designer thought this approach would stand out in a doctor's office or library rack alongside general interest magazines.

At first, Wein and Vicki Contie, *News in Health's* first managing editor, would mail out issues themselves. As subscriptions grew, it became difficult for them to handle the distribution, and they moved to a different model.

News in Health couldn't have published for 20 years without support of the ICs, noted Wein. Every cover story includes perspectives from three or four intramural or extramural scientists and clinicians. The ICs propose ideas and help find experts to include.

If you have story ideas to share with the *News in Health* team, please send them to nihnewsinhealth@od.nih.gov.

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