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CC NEWS

Clinical Center News

May/June 2025

Nurses Week: Courage to Soar



(L-R) Mary Banaszynski, OP12, Bertha Declet-Arroyo, 7SWN

By: Dr. Barbara JordanChief Nurse Officer, Clinical Center

The Clinical Center Nursing Department's Wellness, Recognition and Retention Committee has chosen the theme "Courage to Soar" for the 2025 Nurses Week which was celebrated May 5—12 at the CC. While this is the theme for Nurses Week, it is fitting for all who work at the Clinical Center. Every day we strive for excellence in our clinical care, research activities, customer service and the creation of a positive practice environment. We have the conviction to try new things and take risks to improve our practice and the services we provide. Our courage to soar was manifested in achieving Magnet with Distinction™ designation on our first try! This achievement demonstrates to the world that the Clinical Center excels in patient safety and quality outcomes and interprofessional collaboration. Our nurses are integral to the success of the Clinical Center's mission and the Magnet with

Distinction™ accreditation. They practice in the overall specialty of clinical research nursing. This means they not only have to be clinically proficient to expert, but they must be knowledgeable of the research protocols in which their patients participate. Clinical research nurses are dedicated professionals who work in a variety of clinical specialties in addition to clinical research. Many of our nurses hold board certification in their specialty, which demonstrates their expertise and knowledge in that field. Our Operating Room (OR) led by Myra Henley, MSN, RN, CSSM, CNOR, Nurse Manager, has held the designation of CNOR® Strong for the past five years. This means that greater than 50 percent of the OR nurses hold the CNOR certification which is their specialty. This achievement was recognized by the Magnet appraisers in one of the 10 exemplars the Clinical Center received. This is one of many examples of excellence displayed by our Clinical Center nurses.

National Honors for Outpatient Experience

Two NIH Clinical Center outpatient services have received national recognition for providing outstanding patient experience.

Press Ganey presented its December 2024 HX Pinnacle of Excellence Award for Patient Experience to the Clinical Center's Blood Services Section and Radiation Oncology units.

The award, based on patient surveys administered by the health care survey provider, recognizes health care enterprises that have sustained "consistently high levels of excellence" over three years. To be recognized, award winners must rank in the top four nationally.

Patient surveys are an "important patient safety and quality indicator" and are required for Joint Commission accreditation and Magnet designation, Natascha Pointer, a management analyst in the Clinical Center's Office of the Chief Executive Officer, said.

All Clinical Center patients are invited to complete an optional 20-question survey upon discharge or following an outpatient visit. The data, which are reported publicly, allow hospital staff to hear directly from patients, Pointer said.

"Patient experience is central to high quality care, patient safety and robust clinical research," said Dr. David M. Lang, chief of the NIH Clinical Center Office of Patient Safety and Clinical Quality. "This award validates and demonstrates our patient safety culture."

Lang notes that Clinical Center patients come to NIH to participate

Celebrating Clinical Center Volunteers

April marked National Volunteer Month, but the volunteers who help patients at America's research hospital are celebrated year-round.

"We have approximately 80 volunteers right now, and we're still growing," said volunteer coordinator Marcus Means, a Clinical Center program analyst.

Ranging from recent college graduates to retirees, hospital volunteers assist patients in departments throughout the hospital, including Admissions, Phlebotomy, Radiology, the OR, Recreational Therapy, the Patient Library and Safra Lodge.

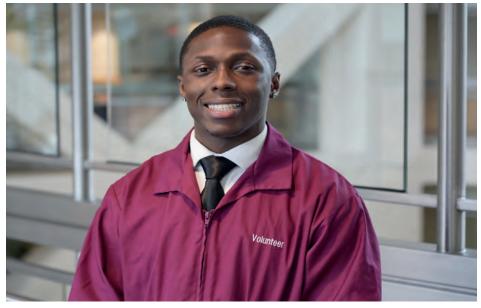
Recent Howard University graduate Langston Locke works four-hour shifts in the Clinical Center's Department of Laboratory Medicine Phlebotomy Service. Among other duties, Locke registers patients, checks that their patient ID matches what's on file and ensures that required paperwork is properly completed before appointments.

Locke hopes to attend an MD-PhD program in the future and says the benefits of volunteering at the Clinical Center are many. Top of the list: gaining first-hand experience interacting with patients while serving others, a longstanding value.

Elizabeth Price joined the Clinical Center nursing staff in 1971, retired in 2013 and began volunteering at the clinical research hospital a year later. The University of Pennsylvania graduate works in Admissions every Wednesday, where she greets patients, escorts them to appointments and is always available to chat and offer a kind word.

The spry 79-year-old says she enjoys the opportunity to assist first-time visitors to NIH and visit with former patients and colleagues. The gratitude patients express is "priceless," Price said, adding that she is inspired by a Biblical passage from Paul's Epistle to the Galatians: While we have time, let us do good.

"I've grown to appreciate that more than ever during these past few years [as] a volunteer," she said.



NIH Clinical Center Volunteer Langston Locke



80 volunteers... and we're still growing



— Marcus Means

Means says volunteers are a forcemultiplier for Clinical Center staff. "The hospital wouldn't work without them," he said, noting that volunteers undergo a rigorous vetting process.

"We want to make sure that our volunteers are able to sustain the highest level of customer service, because people love coming to NIH," he said. "Because NIH helps so many people, we don't want our volunteers to have a negative impact on the mission of NIH."

—Sean Markey



NIH Clinical Center Volunteer Mary Beth Price

Celebrating Success: NIH CC Re-validates HIMSS Analytics EMRAM Stage 7

The NIH Clinical Center has officially achieved the HIMSS Analytics Electronic Medical Record Adoption Mode (EMRAM) Stage 7 re-validation. Stage 7 is the highest level of EMRAM.

The HIMSS EMRAM assesses an organization's ability to use the Electronic Medical Record to support clinicians and patients.

"Achieving revalidation at EMRAM Stage 7 for the NIH Clinical Center is a huge milestone. It strengthens our health informatics foundation to advance clinical research, improve patient safety and streamline care like never before," said Patricia Coffey, Chief, Health Information Division.

The NIH CC first received the HIMSS EMRAM Stage 7 rating in 2015 and must re-validate every three years to maintain the rating. Earning a Stage 7 status means that an organization has established strong data-driven capabilities and is using technology in a useful and meaningful way.



Electronic Medical Record Adoption Mode Stage 7 team

Dr. Bhattacharya Becomes 18th NIH Director



Dr. Jayanta "Jay" Bhattacharya officially assumed office as the 18th Director of the National Institutes of Health on April 1. Nominated by President Donald Trump in November 2024, Bhattacharya was confirmed by the U.S. Senate on March 25.

As NIH Director, Bhattacharya will lead the agency in shaping its programs and strategic direction. He will also play a key role in aligning the NIH's efforts with the goals of the President's Make America Healthy Again Commission.

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.

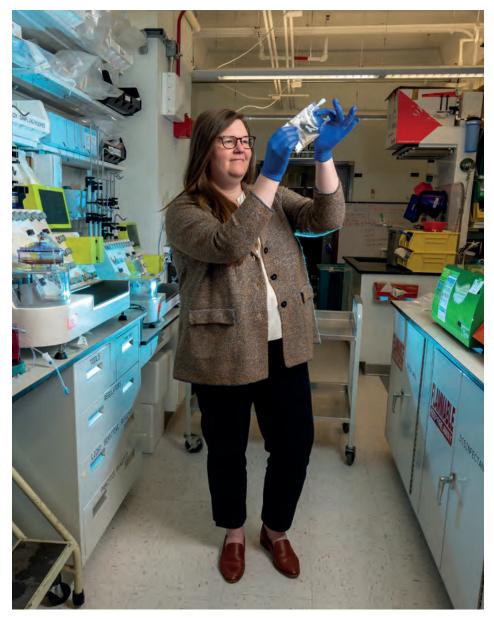
What I Do Hannah W. Song

Portraits of NIH Clinical Center staff and the work that inspires them

Hannah W. Song, PhD Center for Cellular Engineering Biologist

I have a PhD in chemical and biological engineering. My job title is biologist in product development in the Center for Cellular Engineering at the NIH Clinical Center. We make novel cell therapies for new medical treatments. If an investigator has a new therapy and it involves editing genes or engineering cells outside the body, then they can partner with us.

My task is to design the process of making that new therapy. One example is CAR T cell immunotherapy, which leverages a patient's immune system to fight cancer. We take a patient's T cells from a blood sample in the lab. We isolate those cells and put in a gene to better target the cancer. Then we reinfuse those cells into the patient, sending the T cells to destroy the cancer cells. Figuring out



the actual process to engineer those T cells isn't easy. How do we put the gene in there? How do we activate them? What's the best process to handle those cells? A cell therapy, it's alive. Every step of the process really matters. You can't isolate them into powder form like a traditional drug and put them into a pill.

In my own research, I study how certain tools that we use may affect cells in unexpected ways. Recently, we found that the oxygen level T cells are exposed to in the lab seems to play a role in how effective they will be inside the body.

I love working with cells. Their ability to sense and respond to their microenvironment and to perform very fine-tuned functions is just incredible. When I learned about cell therapy in my postdoc, that's when I first understood that this is the field that I wanted to be in.

What's amazing about the NIH is the number of researchers who are working on groundbreaking therapies. It's incredible, these world experts who are translating first in human studies. My colleagues and I get to help make that a reality. I love coming to work every day and collaborating with all the amazing scientists here. They are full of new ideas and never give up on finding a cure. The science is now there to be able to edit cells and provide curative therapies. Instead of treating the symptoms, we can actually cure the disease.

-Interview and photo: Sean Markey

Trash Talk

Almost 600 tons of waste recycled in 2024

Following the 55th anniversary of Earth Day, which fell on April 22 this year, it's a good time to reflect on the impact the Clinical Center has in reducing waste.

The hospital has participated in a recycling program for almost 20 years, which now includes paper, cans, glass, certain plastics, toner cartridges, compost, animal bedding, scrap metal and pipette tip racks.

Accordingly, the Clinical Center has recycled almost 600 tons of material in 2024. All waste that is not recycled or composted is incinerated at a waste-to-energy facility, meaning little to no trash goes to the landfill from NIH.

Recycling at the NIH is administered by the Division of Environmental

Protection which is a part of the Office of Research Facilities (ORF).

ORF estimates that each person at NIH disposes of 2.4 pounds of trash per day while recycling 1.7 pounds of materials.

In addition to operational waste, the NIH generates an estimated 120,000 pounds of food scraps every year. Food scraps are any unconsumed food that is discarded and can include grains, eggshells, coffee grounds, peels and expired or spoiled food items.

The B1 cafeteria in Building 10 recycles food scraps and redirected almost 11 tons of food waste into the composting program last year. The food scraps and contaminant-free animal bedding go through a process called anaerobic digestion,

where organic materials are broken down naturally by microorganisms. Because it is a fermentation process, there is no burning and there are no emissions.

The composted food scraps can have a positive impact by producing biogas, soil improvers (materials that improve the fertility and structure of soil) and fertilizers and by reducing greenhouse gases.

With more NIH staff returning to the office full time, reminding people of their impact can go a long way.

With a little effort, hospital staff can make sure we place the appropriate waste into recycling bins instead of the trash can.

—Donovan Kuehn



How to Recycle

Food Scraps

Food waste compost bins are available near the B1 cafeteria exits.

Toner Cartridges

These can be placed in "Toner/ Ink Jet Cartridge" bins. Printer and copier toner cartridges are transported to Virginia, where they are sorted, boxed and distributed for remanufacturing. For every usable cartridge that is recycled, a \$1 donation is made to an NIH charity: the Children's Inn at NIH, Special Love for Children With Cancer—Camp Fantastic or the Friends of the Clinical Center.

Pipette Tip Racks

These can be placed in "Pipette" recycling bins. Recycled pipettes are sent to a processor to be melted into black pellets which are made into flowerpots.

Animal Bedding

Uncontaminated animal bedding made of pine shavings, corn cobs, hardwood, wood pulp from plants, bedding bags and animal feed is also composted. The food and animal bedding is shipped off-site and goes through a composting process where microbes decompose and generate heat which eliminates pathogens. The final product is nutrient rich and is used in farming,

landscaping and gardening.

Regular Paper Documents

These can be placed in recycling bins marked for "Paper". Recycling bins are available throughout the hospital. Cardboard should be flattened and placed next to paper recycling bins.

Confidential Documents

Any confidential documents, items that have personally identifiable information (PII) or other information that should remain secure should be disposed of in grey shred boxes to protect confidentiality and maintain privacy.

For more information on recycling visit https://nems.nih.gov/environmental-programs/Pages/Recycling.aspx or contact ESI at 301-402-6349 or Mansi Mehta at mansi.mehta@nih.gov

Dr. Theo Heller on Novel Liver-Gut Axis, Chronic Liver Disease Research

The renowned NIDDK scientist, physician and educator gives Grand Rounds Distinguished Clinical Research Scholar and Educator in Residence Lecture



(L-R) Dr. Tom Burklow, Dr. Theo Heller, Dr. Christopher Koh, Dr. Colleen Hadigan

Chronic liver disease extracts an extraordinary toll on the health and lives of Americans and the global population. In the U.S. alone, 4.5 million people have been diagnosed with the disease, one of the top 10 causes of death in the country.

There are an estimated 100 million people in North America living with liver disease, most of them undiagnosed.

Yet compared to other chronic diseases, such as cancer, diabetes and heart disease, liver disease garners far less attention. But to those who study the disease and seek treatments and cures, "it's OK be a child of a lesser god," says Dr. Theo Heller.

The internationally renowned scientist, physician and educator shared that sentiment while presenting the Distinguished Clinical Research Scholar and Educator in Residence Lecture during NIH Clinical Center Grand Rounds on April 9.

Heller is a senior investigator and chief of the Translational Hepatology

Section of the Liver Diseases Branch at the National Institute of Diabetes and Digestive and Kidney Disease, who has advanced the understanding of chronic liver disease progression and portal hypertension.

In a talk entitled "When the Symphony Becomes Discordant," Heller spoke broadly about disease models and the importance of asking the right questions, thinking far outside the box and laying down new roads of inquiry.

He described the challenge of understanding chronic liver disease and the complex interplay of its associated four horsemen: its cause or trigger, inflammation, fibrosis and the effects of cirrhosis and portal hypertension.

"Four things happening in the same liver at the same time. How do we sort that out? How do we think about that?" Heller posed.

Turning to his own research, Heller presented a precis of a multidisciplinary study of patients with Hepatitis C-related liver disease. The goal of Heller and his collaborators was to explore the portal vein, which provides a direct, albeit rarely studied, view into the messages and functional connections the liver receives from the gut.

Using an extraordinary battery of tools, Heller and his team analyzed 29 patients with and without cirrhosis, examining factors such as inflammation, immune response, the microbiome and metabolism. The patients all had hepatitis C, which was treated and cleared.

Among the team's key findings: liver transcriptome and metabolome analysis showed significant differences between patients with and without cirrhosis, even after their hepatitis C was cleared. The changes were centered around metabolic pathways, particularly in mitochondria and peroxisomes, cellular structures that function as energy production, cellular detoxification and recycling centers.

Heller go to pg. 7

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Heller continued

The researchers went on to examine pathways in the gut bacteria, the gut microbiome, that were most dramatically altered and correlated them with disease markers, or indicators. The team found that the top driver of these changes was the bacteria bacteroides vulgatus, a microbe found in the human gut.

Harmless under normal circumstances, bacteroides vulgatus breaks down complex carbohydrates known as glycans in the mucus lining of the intestines when they are deprived of a plant-rich diet.

"By thinning out the intestinal mucin, it can become a pathobiont [or harmful microbe] with implications for gut barrier dysfunction and inflammation," Heller said.

Overall, researchers found that such microbiome-liver interactions persisted even in the absence of the initial hepatitis C trigger, suggesting they play a fundamental role in liver disease progression.

Dr. Heller said his colleagues plan to extend this approach to study an incurable liver disease known as primary sclerosing cholangitis across the disease spectrum. The goal, he said, is to identify early biomarkers and druggable targets related to the gut-liver axis that could help diagnose and treat liver disease before they progress to end-stage cirrhosis.

Heller opened his talk with an homage to medicine, research and the NIH Clinical Center. "It's a privilege to practice medicine and to be part of medicine and science in general," he said. "To be in this building is even more of a privilege."

Heller expressed his compassion for patients and his appreciation for the colleagues who make the Clinical Center "so magical."

He noted that approaches

common in medicine today, such as the use of chemotherapy, statins, immunotherapy and antimicrobial prophylaxis, were once high-risk research undertakings pioneered at the Clinical Center.

Turning to liver diseases, Heller noted the many discoveries and treatments associated with hepatitis A, B, C, D, and E—all of them led by Clinical Center researchers.

"Go back to the beginning of recorded history," Heller said. "You'll find hepatitis outbreaks written about in papyrus in ancient Egypt. You find hepatitis B in mummies."

"These are scourges, plagues that have affected humans since the beginning of time." Now there are treatments and cures, Heller said, thanks to "this building."

-Sean Markey

NIH Debuts New Campus Visitor Requirements

What to know about the "VisitNIH" pre-registration online visitor portal

NIH debuted a new visitor preregistration process on Jan. 30 for Bethesda Main Campus visitors. All non-U.S. person visitors must now be invited by an NIH host or requestor and must pre-register via the new VisitNIH online pre-registration portal.

The change is the result of a Health and Human Services (HHS) national security policy requirement for HHS facilities first published in 2011 and updated in 2022.

NIH staff are encouraged to initiate pre-registration requests and invite non-U.S. person visitors 30 days in advance.

"This 30-day lead time allows for proper review and permits us to communicate with visitors on any discrepancies in advance of their visit," Colleen A. McGowan, MHA, director of the NIH Office of Research Services, said. "U.S. person visitors are also encouraged to pre-register to avoid wait times at the gate."

As of April 28, non-U.S. person

visitors will also require an escort while inside NIH facilities. Non-U.S. person patients and caregivers visiting the NIH Clinical Center, Children's Inn, and Safra Lodge are not required to be escorted while inside or transitioning between those locations. However, they must be escorted to and from those locations when arriving and leaving NIH.

Additional Pre-Registration Details

Non-U.S. visitors must be sponsored by an NIH host who is a U.S. person. Hosts must initiate the preregistration process using the VisitNIH portal after completing a 20-minute online training on the HHS Learning Management System.

A U.S. person is someone who has U.S. citizenship or lawful permanent resident status, such as a green card.

Clinical Center patients and clinical trial participants and up to two caregivers who need to visit the hospital frequently can complete the VisitNIH pre-registration once for a duration of up to six months. The visit request in the portal must reflect the full six-month period.

Clinical Center patients, clinical trial participants and other visitors who already have NIH badges do need not complete VisitNIH pre-registration until their current badges expire.

Applicability to Other NIH Facilities

The new visitor requirements also apply to NIH facilities at 5601 Fishers Lane, the Biomedical Research Center at Baltimore Bayview, Rocky Mountain Laboratories, the NIH Animal Center and Shady Grove facilities and will eventually expand to all NIH locations.

"As we begin this new implementation phase, your feedback will be essential," McGowan said. Visitors should contact their NIH hosts if they have any questions.

-Sean Markey

Nurses from p. 1

I am very proud to have the privilege to work at the Clinical Center and serve our patients, their loved ones and our staff. I have been a nurse for some time and this career has provided many growth opportunities. I have worked in many settings throughout my career. I chose to work in academic medical centers, in a Magnet hospital and, finally, in a clinical research center. I stay at the Clinical Center because of our mission, the patients and the fabulous people who work here. I hope you had an enjoyable Nurses Week and do have the "Courage to Soar!"



(L-R) Tiana Martin, Amy Wilkins, B2 SW Radiation Oncology

Press Ganey from p. 1



in clinical research trials because they have rare or difficult to treat medical conditions. "They come seeking hope," he said. "They come at their most vulnerable time. This award tells us that our staff are dedicated and focused on our patients."

John Sanchez, an apheresis nurse in the Blood Services Section Dowling Clinic, is one of those front-line staff. Clinical Center Blood Services Section He says focusing on patients is at the forefront of daily team huddles and service-wide staff meetings.

Sanchez says an outstanding patient experience is the product of teamwork across the entire Blood Services Section, from its physicians, clinical managers, and nursing staff to its quality assurance team, administrative assistants, and

housekeeping staff.

"All these people create a good environment for patient care," he said. "What better way to be recognized for what we do [than] through the lens of our patients?"

—Sean Markey

Clinical Center News

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Thoughts? Let us Know! ccpressgroup@cc.nih.gov

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