Clinical Center

More than 70 clinical fellows were invited to network with graduate medical education training program directors, other NIH staff, institute and center scientific and clinical directors, and NIH leadership at a reception in the Clinical Center on July 27.

NIH attracts diverse talent from medical schools and academic institutions across the United States, offering the opportunity to train at the CC’s 240-bed facility, the world’s largest hospital dedicated to clinical research. NIH clinical fellows collaborate with world-renowned physicians to conduct cutting-edge investigational protocols. Eighteen medical specialty or subspecialty training programs accredited by the Accreditation Council for Graduate Medical Education are available on campus, as well as numerous one-of-a-kind translational medicine fellowship training programs within the 27 NIH institutes and centers.

Dr. Robert Lembo, executive director of graduate medical education in the CC Office of Clinical Research Training and Medical Education, said the reception aims to welcome newcomers to the NIH team. “Individuals are coming to the NIH because they know that the value added to their training is in the area of research training and research methodology,” Lembo said. “They have opportunities to have support in conducting their own research projects, and they have the ability then to have a portfolio to take with them, should they decide to leave the NIH, that allows them to be highly competitive relative to academic positions.”

Dr. Jacqueline Mays, a new clinical fellow at the National Institute for Dental and Craniofacial Research who will be providing care to patients in the CC, attended the reception and said it was a great opportunity to talk with senior fellows, as well as NIH leadership.

“Being a clinical fellow is brand new to me,” said Mays. “I am just sort of getting my feet wet and figuring out how the wide world of clinical research works.”

For more information on graduate medical education at NIH, visit the OCRTME website, clinicalcenter.nih.gov/training.

New NIH fellows receive warm reception

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Patients rock out with U2 and NIH Director Dr. Francis Collins

Three young Clinical Center patients rocked out with NIH Director Dr. Francis S. Collins at the U2 concert in Baltimore on June 22. U2 guitarist and vocalist David Howell Evans, known better as The Edge, invited the group on stage before the concert for a few practice guitar licks and photo ops.

The rock star had visited Collins last October to talk about cancer research. When the U2360° tour came to the area, the NIH director, himself an avid guitarist, invited patients Lauren Weller, 26; Nachiketa Bhatnagar, 17; and Andrew Windland, 12, to the concert.

“The whole show was about more than just the music,” said Weller. “You could tell they cared about important issues. It was very personal.”

Indeed, The Edge has a personal connection to health issues—he sits on the Angiogenesis Foundation board, and his daughter, Sian, is a cancer survivor.

The NIH group spent about an hour pre-concert with The Edge, chatting and generally just hanging out. He also hand-delivered souvenir sunglasses from U2 lead singer Bono.

“It was pretty cool,” concluded Bhatnagar.

CC Nutrition Department’s 19th class of dietetic interns graduate

The Clinical Center Nutrition Department celebrated the graduation of the 19th dietetic internship class on July 1.

Graduates, their families and friends, and Nutrition Department staff gathered for a celebratory luncheon and ceremony to honor the achievement of the four graduates—Emily Brown, Katrina Butner, Emily Cook, and Valerie Darcey.

LCDR Merel Kozlosky, program director, commended the interns on their accomplishments throughout the 45-week program. “Our four interns this year are so very accomplished, and I know they will go far in their careers,” she said.
Sibling Day acknowledges important role of support system

Brothers and sisters share a certain connection and protective spirit that bonds them in a unique way. When one is suffering from a serious illness, the others also suffer from feelings of helplessness and from the challenge to the family unit. The NIH realizes that pediatric patient siblings are an important population, both in the care of a sick child and in their own right, and has devoted a day to celebrating and supporting these “super sibs.”

“It’s been very clear over the years that the pain the brother or sister experiences is pretty invisible compared to what they witness going on in the family, which is why we have created one day a year where siblings can be recognized for their role in the family,” said Dr. Lori Wiener, head of the National Cancer Institute’s Pediatric Psychosocial Support and Research Program and a founder of The Children’s Inn at NIH.

Sibling Day is a collaboration between Wiener’s program, the Clinical Center Rehabilitation Medicine Department Recreation Therapy Section, and The Children’s Inn. These groups support siblings of pediatric patients year-round through ongoing programs and events but unite for one day that is focused just on the siblings.

The annual event started off on July 19 at The Inn with some icebreakers. The kids answered questions like “What do you want to be when you grow up?” and “If you could have any super power, which would you pick?” More than one child said that he or she would choose the power to cure.

“It’s kind of a hard thing to go through for her, and it’s kind of a hard thing to go through for us,” said Eric Downey, 18, from Massachusetts of one of his sister’s illness.

The 13 Sibling Day participants visited NIH Medical Arts where they learned about patient photography and took photos in front of a green screen—then printed as them posing with the Hollywood sign or Justin Beiber, among other options. They dressed as medical technologists and learned about laboratory tests in the CC Department of Laboratory Medicine.

Each was given the chance to try out the mock scanner to feel what it is like for their sibling to get an MRI and suited up for a trip to the operating room to learn about procedures and work on a dummy patient.

CC Recreation Therapy Section chief Donna Gregory, Wiener, and pediatric oncology fellow Dr. Sima Zadeh led therapeutic events in the afternoon where siblings could share their fears and hopes about their brothers and sisters’ conditions and treatments, and what the experience is like for them. CC art therapist Tosha Davis helped the children make worry dolls out of fabric and yarn.

Sibling Day concluded with an awards ceremony at The Inn where each sibling was presented with a certificate commemorating their participation and role as a “Super Sib, Super Star.” Parents, patients, and staff gathered to applaud this vital role in the family system.

Arthur Knopfmacher, who has attended Sibling Day three times over the last four years, said, “It’s really fun. I suggest if people are sick, come here. This building is fun.”

CC chosen as 2011 Employer of the Year

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achieved career goals; workforce professionals who have made a significant contribution to the employment of people with disabilities; and transition teachers, employers, public policy champions, and community service providers who advocate and expand skills training and employment opportunities for people with disabilities or other barriers to employment.
Registration for pharmacology course open
The Principles of Clinical Pharmacology course, sponsored by the Clinical Center, will begin in Lipsett Amphitheater on September 1. The course will be held Thursdays from 6:30 pm to approximately 7:45 pm and will run through April 26, 2012. The registration deadline is August 31.

“Many medical schools don’t offer formal courses in clinical pharmacology,” said Dr. John I. Gallin, CC director. “This course covers what researchers need to know concerning the clinical pharmacologic aspects of drug development and use.”

Topics such as pharmacokinetics, drug metabolism and transport, assessment of drug effects, drug therapy in special populations, and drug discovery and development are taught. “We have assembled an outstanding faculty for this course, drawing from the scientific staff at the NIH, the FDA, the pharmaceutical industry, and many prestigious academic institutions in the United States,” said course director Dr. Juan Lertora, CC director of clinical pharmacology, and member of the Office of Clinical Research Training and Medical Education.

Since the course was first offered 14 years ago, it has expanded beyond the CC to include a number of off-site partners. Last year 757 students from 23 long-distance sites registered for the course, in addition to the 444 enrollees at the NIH. This was a record number of registrants.

“We have been very pleased with the great interest generated by this course,” added Dr. Frederick P. Ognibene, deputy director for educational affairs and strategic partnerships at the CC and director of the OCRTME.

Registration is open to all interested individuals without charge, unless the course is being taken for graduate credit. This course may be taken for graduate credit through The Foundation for Advanced Education in the Sciences, Inc. (FAES) as PHAR 500 I and PHAR 500 II. Contact the FAES directly at 301-496-7976 before August 20.

For more information, including online registration, visit clinicalcenter.nih.gov/training/training/principles.html or call 301-496-9425.

Prosthetic heart valve exhibit opens
The past and present united July 11 at the opening of the new “Innovation & Invention: NIH and Prosthetic Heart Valves” exhibit in the Clinical Center’s south lobby.

Current and former researchers, patients, leadership, and staff gathered to tell their stories of early open-heart surgery and amazing survivals, and how NIH played a critical role in revolutionizing cardiac care.

“This exhibit describes the birth of a field that has transformed medical practice throughout the world and people’s lives,” said Dr. Susan B. Shurin, acting director of the National Heart, Lung, and Blood Institute. “This is built upon a strong bedrock of biomedical science ... bolstered by spectacular engineering.”

The exhibit was produced by the Office of NIH History’s DeWitt Stetten, Jr., Museum of Medical Research, in collaboration with the FDA’s Office of History.

For many visitors, the exhibit will serve as a lesson in history. For Walter T. (formerly “Little Tommy”) Lingenfelter, it is a walk down memory lane. In 1958, when Lingenfelter was 10, NIH surgeon Dr. Andrew “Glenn” Morrow repaired two damaged heart valves and sewed up a partition in Lingenfelter’s heart. Lingenfelter’s parents were told that he might live to age 18. Nevertheless, the repairs to his heart held until 2006, when Lingenfelter received a second heart surgery that he said he hopes keeps him going another 50 years.

“They told my parents that if I made it to age 18 that would be good, because all of this was pretty much brand new. When they went in, I was a bit more messed up than they had thought,” Lingenfelter said. “Of course, they never told me how they felt. But I know how I felt, and I wasn’t going to celebrate yet. I was going to do the best that I could and do what they told me. And now I’m 63, and I’m still moving.”

Future Office on NIH History projects include a documentary film on prosthetic heart valves and a web-based version of the exhibit.

“Most people think of the museum as a bone yard for old technologies. Our true mission is to be a reliquary for honored traditions and memories. We think of this as social and cultural history, looking at the community of NIH,” said Hank Grasso, exhibition content developer at the Dewitt Stetten, Jr., Museum of Medical Research. “The things that we find fascinating are the things that are never in the records ... the interesting happenstances, the surprises, the disappointments. Those kinds of things fill in the gaps and tell the real story.”
Rapidly diagnosing disease is an enormous advantage offered by the Molecular Diagnostics Service at the Clinical Center. And it all starts with a strand of DNA.

There are no petri dishes growing cells in their labs. Instead, the team uses sophisticated processes and equipment to test samples of blood, fluid, or tissue. Using a method called polymerase chain reaction (PCR), they selectively amplify and replicate DNA, looking for a virus, bacteria, fungus, or other disease-causing organism.

“So if you are looking to see if someone has some kind of viral infection, you determine that there is a particular region in their DNA that is unique to just that pathogen,” explains Gary Fahle, director of the Molecular Diagnostics Service in the CC Department of Laboratory Medicine. “Then you focus on just that piece of DNA, and you amplify it billions of times in a small tube in your reaction. Once you have created so many copies of that DNA, it is then relatively easy to detect if it is there.”

The benefit to CC researchers and patients is rapid diagnosis, a complement to the many services offered by the Department of Laboratory Medicine.

“Some people get very confused and think it is very complicated—PCR and amplifying DNA. It seems like something that is a very complex concept, but it’s really not. It’s really an elegantly simple thing to do,” Fahle said.

PCR is not a new scientific technique, though traditionally it is most often used in research. At the CC, PCR is used throughout the research process, from the bench to the bedside.

“It has always been a research tool and what we are doing in the Clinical Center is taking that research technology and bringing it into the clinical lab,” said Fahle.

Fahle said the patient population of the CC is one aspect that makes the use of molecular diagnostics so important. Compared to other research hospitals, the CC’s patients tend to have more illnesses, rare diseases, and compromised immune systems. This means that the molecular diagnostics team runs a high volume of tests and also develops new tests, known as assays, for conditions that may be less common in the United States, such as malaria.

PCR also makes it possible to crack the tough cases, such as non-cultivatable or slow-growing microorganisms.

Fahle said this ability was extremely valuable in one case where a patient’s lung biopsy showed visible signs of fungus on the smear, yet the tissue sample was not growing the fungus. The PCR test was able to isolate and replicate the specific DNA strand, and identify the pathogen.

Yet Fahle said it isn’t all about the technology. The key is the staff. “There is always a new stream of people coming in with new ideas. It’s about bringing in the new technology, bringing in those new ideas, and figuring out how to adapt that into our clinical world,” he said.

Connecting what they do to the clinical setting is essential, added medical technologist Jennifer Boyer. The team may work in a controlled setting, visually removed from the patient-care floors. However, they never forget that what they do is essential to the CC’s mission and to each individual patient.

“You always think: that is someone’s mom or that is someone’s child. And it hits home a little bit because you want to get an answer and you want to help them as fast as possible,” said Boyer.
Former pediatric patient gives back to CC community

Former Clinical Center pediatric patient and current AIDS activist Joey DiPaolo returned to the CC and The Children’s Inn at NIH July 11.

DiPaolo was one of the first pediatric HIV-positive patients at the CC and one of The Inn’s first residents. This month’s visit, his first in 19 years, was inspired by his foundation’s contribution to The Children’s Inn’s annual summer program, Camp INNcredible.

The Joey DiPaolo AIDS Foundation brought its own camp on wheels, Camp TLC (Together Living a Challenge), to Inn residents for the entire week. Camp TLC is a mobile performing and creative arts camp that visits shelters and hospitals across the country where children are living in isolated situations.

After learning that her son was infected with the HIV virus at the age of 4 from a blood transfusion during open-heart surgery, DiPaolo’s mother Carol searched for clinical trials all over the country. After being turned away from many research institutions that were not yet doing pediatric research, she found hope at the CC. Doctors in their hometown had said DiPaolo had only one year to live. Now, at the age of 31, DiPaolo, his mother, and fellow former CC patient and long-time friend Benjamin Banks were thrilled to tour The Inn and the CC’s new facilities. “The Clinical Center was a huge hole in the ground the last time I was here,” he said, marveling at the new space. “It was always really comfortable here, but this is amazing.”

DiPaolo was impressed with all the changes and additions at The Inn. He and Banks were kids again in The Children’s Inn game room and reminisced about exploring the CC and causing trouble through the building as young inpatients.

“I am looking forward to giving back to the staff and kids here,” DiPaolo said. “I was once in their shoes, and it was always great when people rolled up their sleeves and gave back to the kids and the community.”

DiPaolo and his mother started the Joey DiPaolo AIDS Foundation in 1996. Inspired after attending the first and only AIDS-related summer camp program in the country at the time.

Together, the DiPaolos have implemented more than 500 AIDS prevention and education programs nationwide.
Teen Retreat reminds patients of identity beyond illness

Over hot pizza and to the tune of Top 40 jams, teenagers laughed at their shared quirks and chatted about favorite video games. A scene out of any shopping mall or high school cafeteria, this interaction took place in the Clinical Center main playroom on June 27 at the annual Teen Retreat.

A collaboration between the Clinical Center Rehabilitation Medicine Department Recreation Therapy Section and The Children’s Inn at NIH, the Teen Retreat unites young adult patients over good times and therapeutic events.

“One of the most rewarding things for me is to watch them meet for the first time on Monday morning and by Tuesday night it’s as if they’ve known each other their whole lives and connected at a level we can’t really quite get,” said Recreation Therapy Section Chief Donna Gregory, who has been with the retreat since it began five years ago.

During two days of a pancake breakfast, field day games, and a collective art project, teens meet others who are going through similar challenges. “It just shows the teens that they are a part of something bigger and they are not their illness,” said Bridget Kuzma, The Children’s Inn family program and community outreach coordinator.

“If I hadn’t been through what I have been through—I've been through tons of surgeries—I wouldn’t be who I am today. I wouldn’t be as strong as I am. But what I’ve gained from this is strength and a better, positive attitude,” said Tristan Hanson, 14-year-old CC patient.

One of the highlights of the Teen Retreat is a panel of survivors of an illness or condition they suffered from while a teenager. “We have one young adult who is an amputee, and he shares his story of being diagnosed at 18. And he’s now in medical school,” said Gregory. “So it sends the message to these teenagers, who are wise beyond their years, that there is life after treatment.”

Summer medical and dental training program students visit CC

A group of undergraduate students enrolled in the Robert Wood Johnson Foundation Summer Medical and Dental Education Program at Howard University visited the Clinical Center on June 28. This program is designed to strengthen the overall academic preparation of underrepresented minority, disadvantaged, and low-income students who are interested in pursuing medical or dental school later in their careers.

The group heard a presentation about the NIH and available training opportunities from the CC Office of Clinical Research Training and Medical Education. Students also toured key CC research facilities, including the National Heart, Lung, and Blood Institute’s Vascular Biology Branch where they received a presentation from Dr. Gregory Kato head of the Sickle Cell Vascular Disease Unit in the NHLBI.

Dr. Gregory Kato (second, from left) explained to some of the visiting Robert Wood Johnson Foundation students how a normal volunteer’s blood flow is evaluated and how it compares to the blood circulation in patients with sickle cell disease.
Hospitality lends more than a smiling face

By: Kacey Ford

The smiling faces and helpful directions from the Clinical Center Hospitality Services staff are more than a welcoming greeting to new and returning patients, they are vital to the everyday functions and operations of the hospital.

On July 27, CAPT Denise Ford, department chief, held a Hospitality Appreciation Day to recognize and thank the employees for their dedication and exemplary service to the CC mission. Hospitality staff are designated to front line service areas in Radiology, Pharmacy, Admissions, and the West Drive Patient Entrance, as well as stationed at dedicated CC hospitality desks. At a luncheon, Ford told the hospitality staff that they are more than people who stand behind an information desk and answer questions. They play an extremely important role throughout the hospital to create a special experience for our patients and family members.

“I love helping the patients and guiding them to wherever they need to go,” said Tish Johnson, who works at the West Drive patient entrance and the CC north entrance hospitality desk. “Knowing that they go through so much pain and suffering motivates me to make their experience here special. When I see a smile on their face, it gives me the best feeling.”

Sino-American symposium focuses on translational research

Dr. John I. Gallin, Clinical Center director, and Dr. Shengli Yang, a member the Chinese Academy of Engineering's governing board, co-chaired the 2nd Sino-American Symposium on Clinical and Translational Medicine in Shanghai, China, in June.

Gallin noted that the goal of the assembly was to offer scientific leaders from the United States and from China opportunities to discuss how to stimulate translational science and sustain a robust clinical research program.

“In China, there is acute awareness of the importance of translational research,” said Gallin, “from bench to bedside and back to the bench. Improving health for everyone in China is an important national agenda there. Medical and scientific leaders understand that exploring opportunities for innovations in the conduct of clinical research can help fulfill that agenda.”

Dr. Zhu Chen, China’s minister of health, delivered the keynote address. Organizers for the event were the CC, the Chinese Academy of Engineering, the Chinese Academy of Medical Sciences, and GlobalMD.

In the last two years, the CC has introduced to China two courses from the NIH intramural clinical research curriculum, Principles and Practice of Clinical Research and Clinical Pharmacology. The NIH faculty have made four teaching visits to China and have provided training to 3,000 physicians and nurses in more than 500 hospitals and research institutes in China using both live courses and long-distance learning tools.

Two of the courses’ textbooks have been translated into Chinese, and the Chinese are now beginning to teach the courses on their own. An outcome of these training efforts was the 1st Sino-American Clinical Research Summit, held June 16-18, 2010, which Gallin co-chaired with Dr. Depei Liu, president of the Chinese Academy of Medical Sciences.