Trainee forum introduces future collaborators

Students tune into NIH opportunities over busy two days

Despite the presence of NIH institute and center directors, distinguished researchers, and even NIH Director Dr. Francis S. Collins, some of the most important people young clinician-scientists met at a forum in November were those sitting next to them in the auditorium seats.

The Eighth Annual Clinical Investigator Student Trainee Forum—developed and hosted by the Clinical Center Office of Clinical Research Training and Medical Education—converged more than 260 medical, dental, and veterinary students in year-long enrichment programs at academic medical centers and at the NIH for two days of panels, tours, and networking.

“You are what we call, in epidemiology, a cohort,” said NIH Deputy Director for Intramural Research Dr. Michael Gottesman. “Look to your left and your right. These are the people who will be your collaborators. These are the people who will be reviewing your grant applications.”

In addition to the opportunity to talk shop with their peers, the CIST Forum presented fellows and scholars access to possible mentors and leaders in their fields of interest. Leaders of the CC, the National Institute of Biomedical Imaging and Bioengineering, the Fogarty International Center, and the National Institute on Drug Abuse spoke on the latest from their groups. Forum attendees could speak with investigators from their intended research areas at networking luncheons, and a panel on genomics and genetics elicited much interest from the students.

Another popular panel was the group of recent alumni from the same programs as CIST Forum attendees. Dr. Eric Adler, assistant professor of cardiology and medicine at Oregon Health Sciences University and a former Sarnoff Fellow, kept the crowd laughing, as he referred to content from NIDA Director Dr. Nora Volkow’s presentation.

“I was addicted to science,” he said. “Find something you’re addicted to, but not something destructive like methamphetamines.”

continued on page 4

CC meeting gathers clinical research nurses

Discover a better nursing career for a better world. So said a video played at the beginning of the Clinical Research Nursing 2010: Nursing Practice at America’s Research Hospital pre-conference November 17.

Clinical Center Nursing and Patient Care Services hosted the event, which was held the day before the International Association of Clinical Research Nurses conference (see page 7 for more). The pre-conference reviewed the department’s four-year initiative to define the specialty.

Clinical Research Nursing 2010 worked toward the goal of taking this definition to the level of detail and consensus required to create a certification process for nurses practicing in clinical research. This nursing specialty focuses on the care of research participants. In addition to providing and coordinating clinical care, clinical research nurses have a central role in assuring participant safety, ongoing maintenance of informed consent, integrity of protocol implementation, accuracy of data collection, data recording, and follow up.

“Clinical research is a complicated enterprise,” said CC Director Dr. John I. Gallin in his welcome remarks. “For me, most important is the people you get to interact with every day who make it what it is. Right at top are the nurses.”

Chief Nursing Officer Dr. Clare Hastings introduced Gallin to a nursing ritual—pinning. She presented him a Clinical Research Nursing 2010 team pin, naming him an honorary clinical research nurse for his support of her department’s effort.

Hastings also explained the role of nurses at the CC and demonstrated the value of the profession in the continued on page 6
Take a bite into a healthy recipe from the Clinical Center executive chef

Clinical Center Executive Chef Robert Hedetniemi prepares fresh weekly specials for patients, including this salmon salad with healthy greens and sunflower seeds. See more of his creations at http://www.cc.nih.gov/scienceexpo/recipes.pdf.

Salmon Salad
Serves 4

Ingredients:
- 4-6 oz. salmon filet, fresh or frozen
- ½ cup barbecue sauce
- 12 oz. raw baby spinach leaves
- 1 cup tomatoes, diced
- ½ cup mushrooms, sliced
- ½ cup mandarin oranges, canned
- ¼ cup red onion, diced
- 2 tbsp dried, sweetened cranberries
- 2 tbsp sunflower seeds
- ¾ cup fat-free Italian dressing

Method of Preparation:
- Coat each salmon with two tablespoons of barbecue sauce, cover in plastic, and marinate for 2-4 hours.
- Cook salmon (grill, if possible) until fish reaches internal temperature of 145 degrees Fahrenheit.
- Mix spinach, tomatoes, mushrooms, and dressing in a bowl. Place evenly onto four entree salad bowls.
- Top with mandarin oranges, red onions, dried cranberries, sunflower seeds, and cooked salmon.

Flavorful salmon atop vitamin-rich fruit, vegetables, and seeds make a healthy and delicious meal for Clinical Center patients.

Lecture will look at alternative cancer remedies

The National Center for Complementary and Alternative Medicine presents the second annual Stephen E. Straus Distinguished Lecture in the Science of Complementary and Alternative Medicine on December 15 at 9 am in Lipsett Amphitheater. Dr. Vikas Sukhatme will speak on the “Promise for the Future in Yesterday’s Remedies: Traditional Therapies to Modern Medicine.”

Sukhatme is the Victor J. Aresty Professor of Medicine at Harvard Medical School and chief academic officer at Beth Israel Deaconess Medical Center. He is also chief of the Division of Interdisciplinary Medicine and Biotechnology in the Department of Medicine at Beth Israel and a member of both the nephrology and hematology-oncology divisions of that department.

Sukhatme’s research interest is in tumor metabolism and tumor immunology and on “outside-the-box” approaches to therapies for advanced cancer. Among these is lifestyle manipulation—specifically dietary adjustments and stress reduction—that may show promise in treating certain forms of cancer or in alleviating some of the side effects of current cancer therapies. Similar opportunities lie in generic FDA-approved drugs and nutritional supplements. These therapies share one feature—because there is not enough money to be made on them, there is little incentive for industry to fund their development and to rigorously test them in human studies. Sukhatme will discuss the importance and benefits of studying such “fiscal orphans” and discuss challenges in trying to make these therapies more widely available and accepted.

South Drive entrance closed during Building 35 construction

South Drive at Old Georgetown Road will be closed for more than a year as construction of the John Edward Porter Neuroscience Research Center (Building 35) is completed. The entrance will service construction vehicles only until completion of the major construction, when it will reopen for employee use.

The entrance at Center Drive at Old Georgetown Road will now be open until 9 pm on weekdays. Please be aware this is near the NIH Fire Department, and emergency vehicles are routinely entering and departing via Center Drive. Do not block the fire lane while waiting for the traffic light to change.

There is no change for employees entering campus as pedestrians or bicyclists on South Drive between Old Georgetown Road and Convent Drive. Hours of operation for visitors entering the West Gateway Center remain unchanged from the existing schedule: Monday to Friday, 6 am to noon.

For an updated map of the NIH campus and complete schedule of the hours of operation for entrances/exits, visit: http://parking.nih.gov/employee_access_map.htm.
Astute Clinician examines genes’ role in liver and heart disease

The 13th Annual Astute Clinician Lecture brought a crowd to Masur Auditorium on November 17 with a popular topic—“Genes Versus Fast Foods: Eat, Drink & Be Wary.”

Dr. Helen H. Hobbs delivered the lecture established through a gift from the late Dr. Robert W. Miller and his wife Haruko. The Astute Clinician Lectureship honors a US scientist who has observed an unusual occurrence and, by investigating it, has opened an important new avenue of research.

Hobbs is a Howard Hughes Medical Institute investigator, director of the Eugene McDermott Center for Human Growth and Development, and professor of internal medicine and molecular genetics at the University of Texas Southwestern Medical Center. For the past 10 years she has spearheaded the Dallas Heart Study, a large population-based study of Dallas County.

In her lecture—part of the NIH Director’s Wednesday Afternoon Lecture Series—Hobbs presented the case study of Morgan Spurlock, the star of the documentary “Supersize Me” that chronicled his experience with a McDonald’s-only diet. Spurlock’s elevated liver function tests and cholesterol levels after only 12 days of his experiment is indicative of the effect such diet has on many Americans, albeit at a slower rate, Hobbs said.

The elevated liver function tests are most likely due to the development of fatty liver disease, which is associated with both obesity and insulin resistance. However, some diabetics and obese people do not have fatty liver disease, Hobbs said.

“The question that we wanted to address was ‘Are there genetic factors that are responsible for individuals contributing to the propensity to deposit triglyceride in the liver?’” she said.

Hobbs’ team also used genetics to examine the relationship between plasma levels of cholesterol and heart disease. Researchers know that high plasma levels of cholesterol promote atherosclerosis [plaque buildup in the arteries], Hobbs said. She presented evidence that low plasma levels of cholesterol, if maintained over a lifetime, provide protection from heart disease.


Nursing research institute marks 25th year with Grand Rounds

The National Institute of Nursing Research celebrated its 25th anniversary with a special Grand Rounds lecture on November 3. Dr. Mary Kerr, deputy director of NINR introduced the two speakers, both special volunteers for NINR and former intramural research program scientists with the institute.

“NINR doesn’t focus on the curing of any disease. We focus on symptom biology and building the scientific foundation for clinical practice, especially related to symptoms that occur with acute and chronic illness and with the end of life,” said Kerr.

Dr. Jessica Gill, assistant professor at George Mason University, presented on her research into the resiliency and vulnerability factors for Post-Traumatic Stress Disorder. Her lecture, “Insights into the Role of Inflammation in Post-Traumatic Stress Disorder (PTSD) With and Without Depression,” addressed the endocrine and immune function differences between PTSD with and without depression and the associated health risks.

“This program of research is deeply informed by NINR’s focus on interdisciplinary research that links clinical and biological methods to look at common problems in a new and novel way,” she said.

Dr. Taura Barr, assistant professor at the West Virginia University School of Nursing, presented on her work involving the use of technologies for genomic characterization and treatment of neurological diseases. She discussed the use of gene expression profiling to characterize ischemic stroke and neurological disease in her lecture, “An Inflammatory Profile for Stroke Diagnosis and Outcome Prediction.”
Panelist Dr. Adam M. Zanation, assistant professor in the Department of Otolaryngology at University of North Carolina School of Medicine and former Doris Duke Charitable Foundation fellow, reflected, “Being a successful researcher is about commitment, effort, and having good ideas.”

The other two panelists were Dr. Karen E. Hoffman, assistant professor in the Department of Radiation Oncology at the University of Texas MD Anderson Cancer Center and former CC Clinical Research Training Program (CRTP) fellow; and Dr. Jayanta Debnath, assistant professor in the Department of Pathology at the University of California, San Francisco Medical Center and former Howard Hughes Medical Institute-NIH research scholar. [Read about Hoffman’s journey from CRTP to clinical research at a premier academic medical institute on page 5.]

For the second year, CIST Forum organizers used social media to appeal to their millennium generation audience. Students asked questions and staff provided helpful links through tweets marked with the hashtag #CIST8, which were displayed on the Masur Auditorium screen during question-and-answer sessions and breaks. Additionally, a Google Group linked attendees and organizers before the conference—getting them need-to-know information and letting them coordinate travel.

Tours of CC units allowed forum attendees to see first-hand the cutting-edge facilities that allow the groundbreaking work of the NIH intramural program.

Lauren Stossel, a Doris Duke Charitable Foundation fellow from the Mount Sinai School of Medicine, visited the new Pharmacy Department’s Pharmaceutical Development Section and Rehabilitation Medicine Department’s Clinical Movement Analysis Laboratory. “I thought it was really interesting,” she said. “They demonstrated the different technologies and showed us the clinical correlates.”

The featured speaker of the forum—keynote NIH Director Collins—addressed the importance of translating basic science discoveries into new and better treatments and how the NIH is putting science to work for the benefit of health care reform. Collins also discussed what the NIH is doing to encourage innovation and empower young researchers like CIST Forum attendees.

“As the director of the NIH, one of the things that I enjoy most is the opportunity to brainstorm, particularly with people that are going to lead our field in the future, and that is all of you, about the directions that science is taking that are going to be particularly transformative,” he said.

Dr. Collins closed his speech with a musical performance on his double helix-inlaid guitar: a self-penned update about DNA to the tune of Del Shannon’s 1960’s hit “Runaway.”

“Dr. Collins was amazing. He’s like the superman of scientists,” said CRTP fellow Hari Trivedi from the Medical College of Georgia.

Above all, for many of the forum attendees, though, was the chance to walk away with new contacts.

“These are going to be my future colleagues, future collaborators, and people who I’ll be seeing over and over again. So getting to know them now, at this early stage, is going to be beneficial for fostering those relationships,” said Shah Ali of the Stanford University School of Medicine, a Howard Hughes Medical Institute fellow.
Former CRTP fellow reflects on influence of training program on her career path

The NIH Clinical Research Training Program (CRTP) aims to prepare the next generation of clinician-scientists through a year of immersion in the NIH intramural program. One alumna of the program recently returned to speak on her experience and to inspire her successors.

Karen Hoffman, assistant professor in the Department of Radiation Oncology at The University of Texas MD Anderson Cancer Center, spoke on a panel of graduates of the year-long research programs represented at the Clinical Investigator Student Trainee Forum which was held in the Clinical Center in November. She was part of the CRTP class of 2001-2002. The CRTP competitively selects participants, known as fellows, to spend a year engaged in a mentored clinical or translational research project in an area that matches their clinical research interests and goals.

Hoffman did her undergraduate work at the University of Virginia and earned her medical degree from Duke University. She also holds a Master of Public Health from the Harvard School of Public Health and Master of Health Science in Clinical Research from Duke University. While in the CRTP, Hoffman researched the late effects of treatment in long term survivors of pediatric sarcoma with Dr. Patrick Mansky, formerly of the National Center for Complementary and Alternative Medicine, and genetic and hormonal regulation of osteosarcoma metastasis with Drs. Lee Helman and Chand Khanna of the National Cancer Institute Center for Cancer Research.

“My experience here in the CRTP helped launch my career,” she said. “It really helped me develop the thought process to formulate research questions and provided the skills to pursue my independent work.”

At MD Anderson, Hoffman conducts prostate and breast cancer clinical research. Her time is split with 75 percent devoted to clinical practice and 25 percent to research. She enjoys the interaction with patients this balance allows her, Hoffman said.

Meetings supports advancement in critical care trials

By: Britt Ehrhardt

Clinical Center staff joined other NIH representatives and researchers from around the nation to encourage the best science and exchange ideas on clinical trials in critical care medicine on November 9 and 10.

Approximately 100 researchers attended the third meeting of the U.S. Critical Illness and Injury Trials Group, which vets study ideas, offers networking opportunities, and facilitates large, multi-center trials. This year’s meeting at Natcher Conference Center focused on neurologic emergencies. Attendees discussed the key role played by emergency room and ICU staff in treating strokes and other neurologic emergencies, when quick response matters most.

“Meetings like this improve the efficiency of studies,” said Dr. Anthony Suffredini, associate chief of the CC Critical Care Medicine Department and member of the meeting organizing committee. “There was a lot of synergy between different groups in the multidisciplinary critical care community who might not otherwise have the opportunity to communicate or collaborate.”

Evidence-based changes to standard care—changes that improve the chances of thousands of patients—come from large studies aided by this group and similar networks overseas, Suffredini said. For example, trials supported by this group worked to determine factors that help predict which patients in the emergency room are at high risk for developing severe respiratory failure. This information will allow health care staff to target patients for preventive therapies.

Staff from multiple NIH institutes and centers attended this year’s meeting, which was sponsored by the National Institute of General Medical Sciences and the NIH Critical Care and Injury Scientific Interest Group.

Trials recruiting research volunteers

Plaque Regression
If you have narrowing of the arteries and taking statin medication, you may be eligible to participate in a Clinical Center study that will investigate if using magnetic resonance imaging (MRI) is an effective method of measuring plaque in comparison to other methods available to estimate your risk of heart disease and stroke. Participants must be age 55 or older. For more information about study #10-CC-0214, call: 1-866-444-2214 (TTY: 1-866-411-1010) or visit http://clinicaltrials.gov.

Non-Invasive imaging
If you have been diagnosed with heart failure and you are not claustrophobic, you may be eligible to participate in a study that will evaluate the accuracy of non-invasive imaging testing in assessing how the heart functions. Study participants will undergo an MRI or CT scan with iodine contrast. All study-related tests and medications will be provided at no cost. For more information about study #10-CC-0153, call: 1-866-444-2214 (TTY: 1-866-411-1010) or visit http://clinicaltrials.gov.

Dr. Karen Hoffman, part of the 2001-2002 Clinical Research Training Program class, is now assistant professor in the Department of Radiation Oncology at the University of Texas MD Anderson Cancer Center.
If you want precision data collection and patient care as specified in the protocol, you can’t be understaffed,” she said.

Pre-conference attendees, who came from academic institutions across the country, heard from LCDR Dr. Margaret Bevans on the results of a role delineation study—differences between a research nurse coordinator and a clinical research nurse—and the need for further analysis.

Later in the day, representatives from different roles gave their perspectives on nursing roles in research, and nurses attended round table discussions on innovative approaches to a particular challenge in clinical research nursing.

The afternoon also held an opportunity for tours of the Clinical Center and discussion of research in particular patient care settings.

Bertha Robbins, clinical research nurse coordinator, is one of a small research staff at Middlesex Hospital Cancer Center in Middletown, Conn. She traveled to the Clinical Research Nursing 2010 pre-conference to learn from and share with others in her field.

“I think the initiative is a great idea,” Robbins said. “This is the only way to move the profession forward.”

Clinical research is a complicated enterprise. For me, most important is the people you get to interact with every day who make it what it is. Right at top are the nurses.

–Dr. John I. Gallin, NIH Clinical Center director

Pre-conference attendees toured patient units and learned of research in different Clinical Center settings. Nurse manager Nicole Gamba (right) presented a study conducted on the 1NW pediatric unit.

A panel of representatives of different clinical research nursing positions gave their perspectives on their roles in research. Participating were (from left) Leslie Wehrlen, nurse specialist in research; Dirk Darnell, clinical research nurse; and Carol Levinson, senior clinical research nurse.

Heather Rhine (left), chair of the Nursing and Patient Care Services Recognition and Retention Committee, helped pre-conference attendees check in on November 17, including panelist Leslie Wehrlen (right).
Clinical research nurses from more than 20 states and four countries discussed the “Road Ahead” this November at the Second Annual International Association of Clinical Research Nurses (IACRN) Conference co-hosted by Clinical Center Nursing and Patient Care.

Dr. Christine Grady, acting chief of the CC Bioethics Department, delivered the conference’s keynote, “Clinical Research Nursing: Ethical Foundations and Challenges on the Road Ahead.” Grady described some of the central ethical tensions experienced by nurses in a clinical research setting and encouraged nurses to be active, vocal members of the research team.

“Each of the diverse nursing roles has its own absolute critical function in the conduct of clinical research, and all of us are committed to quality research practices, high ethical standards, regulatory compliance, and human subjects protection,” she said. “In order to accomplish those goals, we need to be familiar with the ethical challenges that we face—the principles, regulations, and other guidance for the ethical conduct of clinical research.”

According to Grady, clinical research nurses or research nurse coordinators often find themselves in a position where they are advocates for three competing components of research: the individual as patient, the individual as study participant, and the research.

“All of us, I think, can recognize times when there is a tension between a data point that needs to be taken care of and a patient who might be upset or asleep,” she said. “We wake them up, we calm them down, but the tension that we feel in that process is real. There are struggles between what we believe is important for the comfort and interest of the patient, and the need to collect and report accurate data.”

The emphasis on ethics in this year’s conference was offered in response to feedback received by conference coordinators from IACRN members who wanted to learn more about the ethical issues surrounding clinical research nursing.

Dr. Clare Hastings, CC chief nursing officer, was honored with the IACRN Distinguished Clinical Research Nurse Award at a dinner on November 18.

“Thank you for your leadership and vision,” said past-president Margaret McCabe, director of Nursing Research/Medicine Patient Services at Children’s Hospital Boston, during the award presentation. McCabe noted that the CC is the world’s largest employer of clinical research nurses.

Hastings was moved by the gesture. “This is just fabulous. You guys are just—you’re my people,” she told the room of clinical research nurses.

A third speaker from the CC, nurse consultant Julie Kohn, shared the clinical research nurse competencies as determined by the CC Clinical Research Nursing 2010 initiative.
CFC sweetens campaign with bake-off

The Clinical Center Combined Federal Campaign (CFC) committee hosted a fundraiser in early November—a bake-off that raised $1,687 for local food banks. The CFC is the annual philanthropy drive conducted by federal employees in the workplace each fall.

Clinical Center departments could submit more than one dessert to sell but enter only one sweet treat for judging. Representatives from the benefiting local food banks were also in attendance to speak with attendees about their services.

Deciding which of the cakes, cookies, pies, and such was the best was: Clinical Center Executive Chef Robert Hedetniemi; Pain and Palliative Care Chief Dr. Ann Berger (who judged aesthetics); Karen Baker, also from Pain and Palliative Care; and CFC keyworker Lakenya Crockett of the Social Work Department.

Taking home first prize was Rita Lapointe of Lab Medicine’s white chocolate raspberry cheesecake. Second went to Janey Hoey of the Nutrition Department’s carrot muffin, and in third was Bekah Geiger from the Office of the Director’s Oreo truffles.

Governor O’Malley tours Clinical Center

Governor Martin O’Malley met with NIH leaders and toured the Clinical Center before addressing the Federal Facilities Advisory Board on November 18. The governor appointed the board last year to develop a comprehensive assessment of how Maryland can best support and leverage the vast potential of its more than 50 federal facilities and help connect Maryland companies with federal opportunities to create jobs.