NIH, ‘Discovery’ Prove Perfect Combination

National Cable Channel Brings Kids’ Science Battle Here
By Carla Garnett

A small team garbed in protective gear huddled over several pages and screens of data in an NIH lab one late-October morning. The facts didn’t look good: A patient, call him Joe, was showing symptoms of infection with a virus that had been top news for months. What exactly did he have and how widely had he spread it? The team had just 90 minutes to work: Identify the illness. Prevent a pandemic with limited antiviral supply and no vaccine. Develop public health policy. Communicate with the media. No one seemed worried, though. On the contrary. Teammates looked eager, confident and excited. A couple even...giggled.

Fortunately, the facts were pure fiction. Joe was made-up. The team, dubbed “disease detectives,” was 5 middle-schoolers among 40 competing as finalists in this

To Improve Care, Talk About Mistakes
Medical Error Both Systemic and Individual, Says Weingart
By Belle Waring

In March 1984, Libby Zion, an 18-year-old with a history of depression, was admitted to New York Hospital. Eight hours later, she died. Zion’s case resulted in a lawsuit in which a jury found that three medical residents had contributed to her death. In a series of errors, the residents had ordered Demerol even though, prior to admission, Zion had taken Nardil, a powerful anti-depressant that cross-reacts with it. The jury also found that the first-year resident should have heeded a nurse’s call to the patient’s bedside and should have requested back-up.

The Libby Zion case prompted several major investigations and ultimately changed the training of medical residents as New York became the first state to restrict their work hours and increase their supervision. By 2003, the Accreditation Council for Graduate Medi-

NHLBI Launches Campaign About Peripheral Arterial Disease

When you think about your legs, what first comes to mind? Maybe you think about how they keep you active. Or about how they look. You probably don’t immediately think about the health of your legs. The National Heart, Lung, and Blood Institute, through a recently launched awareness campaign, wants Americans over 50 to pay attention to their leg health and their risk for peripheral arterial disease (PAD).

PAD develops when arteries that become clogged with plaque limit blood flow to the legs. Just like clogged arteries in the heart, clogged arteries in the legs mean a person is at higher risk for having a heart attack or stroke.
briefs

NIHCR Symposium Honors Cohen

NIHCR will sponsor a symposium titled “The Integral Role of Behavioral and Social Sciences in a Systems Approach to Oral Health Research: A Tribute to Dr. Lois K. Cohen,” on Monday, Dec. 11 from 8:30 a.m. to noon in Lipsett Amphitheater, Bldg. 10. The program honors Cohen, who retired in June after 42 years of government service, 30 of them with NIHCR.

Speakers include NIHCR director Dr. Lawrence Tabak, who will open the program, and Dr. David Abrams, director of the NIH Office of Behavioral and Social Sciences Research. Dr. Judith Albino and Dr. Samuel Dworkin, leaders in social sciences research in oral health, will talk about the past, present and future of the field. Following the talks, a panel will discuss research needs and opportunities in such areas as individual, family and community-based research, communications research, research capacity and infrastructure and social policy and global health research.

Cohen is known for her work on incorporating the social sciences into dental research and expanding interdisciplinary oral health research around the globe.

NIH-Duke Training in Clinical Research

Applications for the 2007-2008 NIH-Duke Training Program in Clinical Research are now available in the Clinical Center, Office of Clinical Research Training and Medical Education, Bldg. 10, Rm. 1L403.

The NIH-Duke program, implemented in 1998, is designed primarily for physicians and dentists who desire formal training in the quantitative and methodological principles of clinical research. The program is offered via videoconference at the CC. Academic credit earned by participating in this program may be applied toward satisfying the degree requirement for a master of health sciences in clinical research from Duke School of Medicine.

For more information about course work and tuition costs, visit http://tpcr.mc.duke.edu. Email queries about the program may be addressed to tpcr@mc.duke.edu. The deadline for applying is Mar. 1, 2007. Applicants who have been accepted into the program will be notified by July 2, 2007.
Bloom To Give Barmes Lecture

Dr. Barry R. Bloom will present the David E. Barmes Global Health Lecture on Monday, Dec. 4 at noon in Masur Auditorium, Bldg. 10. His talk, “Agendas and Architecture of Global Health Research,” will explore several topics covering key issues in global health.

Dean of the Harvard School of Public Health as well as Joan L. and Julius H. Jacobson professor of public health, Bloom received a bachelor’s degree and an honorary Sc.D. from Amherst College, a master’s degree from Harvard University and a Ph.D. from Rockefeller University.

He is widely recognized as a scientist in the areas of infectious diseases, vaccines and international health. He served as a consultant to the White House on international health policy from 1977 to 1978, was elected president of the American Association of Immunologists in 1984 and served as president of the Federation of American Societies for Experimental Biology in 1985.

He was a member of the national advisory council of the National Institute of Allergy and Infectious Diseases, the national advisory board of the Fogarty International Center, the U.S. national vaccine advisory committee and the scientific advisory board of the National Center for Infectious Diseases of the Centers for Disease Control and Prevention. In addition, Bloom was an investigator at the Howard Hughes Medical Institute. He received the first Bristol-Myers Squibb Award for Distinguished Research in Infectious Diseases, the John Enders Award of the Infectious Diseases Society of America in 1994 and shared the Novartis Award in Immunology in 1998.

He is currently a member of the Ellison Medical Foundation scientific advisory board, the Earth Institute external advisory board at Columbia University, the scientific advisory board of the Wellcome Trust Center for Human Genetics in Oxford, U.K. and the advisory council for the Paul G. Rogers Society for Global Health Research. He is a member of the National Academy of Sciences, the Institute of Medicine, the American Academy of Arts and Sciences and the American Philosophical Society.

The lecture series honors the late David E. Barmes, a long-standing World Health Organization employee, special expert for international health in the NIDCR Office of International Health and ardent spokesman for global health. The National Institute of Dental and Craniofacial Research and the Fogarty International Center jointly sponsor the annual lecture.

Five NIH’ers Named 2006 AAAS Fellows

Five NIH scientists are among 449 newly elected fellows of the American Association for the Advancement of Science. Election as a fellow is an honor bestowed upon AAAS members by their peers.

The new NIH fellows and the AAAS sections to which they belong are: Dr. Kyung J. Kwon-Chung, head, molecular microbiology section, Laboratory of Clinical Infectious Diseases, NIAID (section on biological sciences); Dr. Philip A. Anfinrud, chief, ultrafast biophysical chemistry section, Laboratory of Chemical Physics, NIDDK (section on chemistry); Dr. Ronald N. Schwartz, chief of the Laboratory of Cellular and Molecular Immunology, NIAID and Dr. Thomas E. Wellems, chief, Laboratory of Malaria and Vector Research, NIAID (both from the section on medical sciences); and Dr. Edward L. Korn, a mathematical statistician in the Biometric Research Branch, NCI (section on statistics).

The fellows are elected because of their scientifically or socially distinguished efforts to advance science or its applications. New fellows will be presented with an official certificate and a gold and blue (representing science and engineering, respectively) rosette pin on Feb. 17 at the Fellows Forum during the 2007 AAAS annual meeting in San Francisco.

The tradition of AAAS fellows began in 1874. Currently, members can be considered for the rank of fellow if nominated by the steering groups of the association’s 24 sections, or by any three fellows who are current AAAS members (so long as two of the three sponsors are not affiliated with the nominee’s institution) or by the AAAS chief executive officer.

The AAAS is the world’s largest general scientific society and publisher of the journal, Science. It was founded in 1848 and includes some 262 affiliated societies and academies of science, serving 10 million individuals.
cal Education (ACGME) implemented similar changes for the 7,800 medical residency programs it oversees.

Nevertheless, recent estimates show that medical error causes between 40,000 to 90,000 preventable medical deaths per year and injures more than a million people.

“We are faulty engines,” says Dr. Saul Weingart, vice president for patient safety and director of the Center for Patient Safety at Dana-Farber Cancer Institute. In a recent Clinical Grand Rounds lecture, he called for “systems built and designed to make errors transparent, rather than blaming and shaming,” and invited his audience into the process.

“Hands up,” he said. “How many of you have made a mistake?” Lipsett Amphitheater showed a sea of hands. “How many of you have made a mistake as a clinician? Now—you don’t have to put your hand up this time—how many of you made a mistake that injured a patient?”

Weingart recalled the case of Boston Globe health care columnist Betsy Lehman, who died suddenly of an overdose of chemotherapy.

“I knew the intern on that case,” he said, “An ambiguous chemotherapy order led to Betsy Lehman’s death.”

In response to such seminal cases, he said, a 1999 study by the National Academy of Science’s Institute of Medicine revealed that more Americans died each year of medication errors than from workplace injuries and that annual U.S. costs ran as high as $29 billion. A recent follow-up study counts 1.5 million medication-related injuries per year.

Weingart outlined how the patient safety movement has grown and now affects policy change on several fronts: the quality interagency coordination task force and congressional hearings; the Agency for Healthcare Research and Quality; the Joint Commission on Accreditation of Healthcare Organizations (JCAHO); ACGME; National Quality Forum; and various advocacy groups.

“There’s been a lot of action,” he said, citing JCAHO’s ’07 National Patient Safety Goals. Nonetheless, he noted “a little bit of push-back from physicians. Although error is ubiquitous, in a single year a physician may not be aware that he or she made any harmful error.”

Perhaps that’s because “patients most likely to be harmed are at the extremes of age”—pediatric patients and seniors—“and the sickest”—including those admitted for high-risk surgeries.

“Some researchers argue that the number of error-related deaths is overestimated, since many of these patients would have died anyway of their disease. My own view is that we underestimate the amount of harm and that even a low-ball number is too many.”

In routine medical practice, where a patient’s average face-time with a physician is 12 minutes and the average time to first interruption is 18 seconds, Weingart reported that 75 percent of patients have unanswered questions. Doctors fail to act; patients fail to inform; that can hurt when a patient is most vulnerable—say, right after hospital discharge. The average full-time primary care provider reviews 1,000 lab results a week—no wonder we need “safety scientists” to help design care improvements, he suggested.

Weingart showed cognitive models for how we err as individuals. “But errors are also attributes of systems,” he explained. “Sometimes the hazards line up like holes in Swiss cheese, as interconnected series of events. There are design flaws in health care and if we’re not free to talk about such errors we’ll never learn from them.”

He showed a slew of such flaws, including one handwritten order so illegible that Weingart called its signer “Dr. Zorro, who is privileged at many institutions.” Another order included the scrawled comment—or plea—“me forget.” As for electronic orders with pre-programmed alerts, in one study 90 percent of alerts were overridden.

“We can’t improve the human condition,” said Weingart, quoting psychology professor James Reason, who studies human error, “but we can improve the conditions under which humans labor. How do we build a system so this never happens again?”
He called for teamwork training, which includes assertiveness, good communication and big-picture awareness. He also cautioned clinicians to beware of drugs with high adverse-drug-event rates such as heparin, insulin, chemotherapeutics, narcotics and antibiotics.

Other suggestions seemed pointed at institutional policies on workloads: “Do not rely on memory or vigilance,” he said dryly, “and expect excellent performance with fatigue.”

Weingart’s own current projects include studies of the patient’s role in identifying errors and adverse events; patient safety leadership; and creating medical error curricula for clinicians.

The reaction of the audience—chock-full of clinicians—included the rueful laughter of recognition.

“I’ve given this lecture to audiences who were afraid to laugh,” Weingart said, “and that can be dangerous. It’s a sign that a place is very hierarchical, that people are afraid of looking dumb.”

A doc who’d survived a big-city hospital fellowship seemed frustrated: “From the point of view of the house officer, he said, “there is a Kafkaesque sense of things. What’s the point of complaining? What do you do if you are over capacity?” Research and education are crucial, Weingart said, “Teach patients and families to advocate for themselves,” he urged. “Bring a list of medications along with you. Challenge the doctor, but find a way that works; don’t make the doc feel defensive.” He also noted that the CC’s high nurse-to-patient ratio is a huge plus.

Asked about trends in countries with a national health service, he responded, “We found the same rate and type of error in the U.K. and Canada.”

What’s amazing, he said, is seeing the spread of best practices. Johns Hopkins’ rate of central line infections is down to zero; and while average hand-hygiene compliance runs from 30 to 40 percent, Dana-Farber’s is now as high as 95 percent. Improvement can be dramatic, he said.

Disaster Drill Set for Area, Dec. 7

The Bethesda Hospital Emergency Preparedness Partnership will conduct a mass-casualty exercise Thursday, Dec. 7. The drill will test the partnership’s medical readiness and—for the first time—emergency response capability across the national capital region. Eighteen organizations, including the NIH Fire Department and hazardous response team, will participate.

Planners say those in the area can expect to see smoke, helicopters and emergency vehicles associated with the drill between 10:30 a.m. and 3 p.m. Most of the activity will take place on the grounds of the National Naval Medical Center. As part of the exercise, some emergency vehicles will travel to Suburban Hospital and the Clinical Center.

Navy, Suburban and the CC make up the partnership, formed in 2004 to assure that each institution can respond rapidly and effectively to any emergency situation.

NHGRI Appoints Two New Branch Chiefs

The National Human Genome Research Institute recently named Dr. Leslie G. Biesecker chief of the Genetic Disease Research Branch and Dr. David Bodine chief of the Genetics and Molecular Biology Branch. Both have been at NIH for 13 years.

Biesecker’s research centers on a range of human developmental syndromes that cause physical malformations, some of which are caused by rare genetic variations. He identified the genetic mutation that underlies a devastating brain disorder called microcephaly, which is common among infants in the Old Order Amish community in Pennsylvania. Because the work found a tie between energy metabolism and brain development, the findings may shed light on how the human brain develops.

He also is interested in examining the genetic architecture of human disease, including both rare genetic diseases and more common ones such as diabetes, high blood pressure and heart disease. For both rare and more common diseases, Biesecker focuses on using newfound genomic knowledge and tools to improve the care of patients with such disorders.

Bodine studies the genetic mechanisms that underlie the production of blood cells—a complex series of steps known as hematopoiesis. This process is disrupted in anemia, leukemia and a variety of other disorders. Bodine investigates how certain stem cells, known as pluripotent hematopoietic stem cells that are found mainly in the bone marrow, differentiate into red blood cells and the many different types of white blood cells that circulate in the bloodstream. A major goal of this research is to improve the effectiveness of bone marrow transplantation. Bodine’s laboratory was among the first to demonstrate the potential of pluripotent hematopoietic stem cells as a vehicle for gene therapy.

Dr. Leslie Biesecker (top) and Dr. David Bodine are new branch chiefs at NHGRI.
PAD has partnered with the PAD Coalition, an alliance of more than 40 national organizations, to launch Stay in Circulation: Take Steps to Learn About PAD. This multi-year public awareness campaign encourages Americans to stay active and healthy by learning more about PAD, being alert to its signs and symptoms and talking to their health care providers about ways to reduce their risk.

Between 8 million and 12 million Americans over the age of 50 have PAD, but many may not know it because PAD doesn’t always have obvious symptoms. Even those who experience symptoms, such as fatigue, heaviness, pain and cramping in the leg muscles when walking that go away with rest, often think their symptoms are just a sign of aging and don’t tell their doctors about it. Those at risk for PAD include people over 50, particularly African Americans; those who smoke or have a history of smoking; those with diabetes, high blood pressure, high cholesterol or those with a personal or family history of other vascular diseases such as heart attack or stroke.

The week of Sept. 18-22 was declared National Peripheral Arterial Disease Awareness Week by the U.S. Senate. That week, NHLBI director Dr. Elizabeth Nabel and PAD patient Rita Smith were interviewed by television and radio stations from across the country and NHLBI staff and members of the PAD Coalition were joined by patients and the media at the National Press Club to mark the official launch of the campaign.

“Raising awareness of PAD through the Stay in Circulation campaign is a priority for NHLBI,” said Nabel. “PAD is not an inevitable consequence of aging. Early detection and treatment of PAD are important for staying in circulation and preserving or restoring mobility.”

NHLBI also showcased the patient-education materials developed for the campaign, which include brochures and a poster in English and Spanish, radio and print public service announcements and an educational video in which patients shared their personal stories about living with PAD.

More information can be found at www.about-pad.org.

NINDS Names Koretsky New Scientific Director

Dr. Alan Koretsky, internationally known for developing imaging techniques that allow for a better understanding of brain structure and nerve system function, was recently appointed scientific director of the NINDS intramural research program. He began on Oct. 1.

“Dr. Koretsky is an outstanding choice to manage our science program’s intellectual and financial resources,” said NINDS director Dr. Story Landis. “We are fortunate to have someone with his intellectual breadth and curiosity serving as our scientific director.”

Koretsky has been chief of the NINDS Laboratory of Functional and Molecular Imaging since June 1999. He also directs the NIH Magnetic Resonance Imaging Research Facility/Mouse Imaging Facility. His major research interest is in the area of developing novel MRI techniques to visualize brain structure and function. He has used these techniques to study cellular energy metabolism, monitor the regulation of blood flow and, most recently, map changes in the brain that occur in a variety of normal and pathological conditions.

As scientific director, Koretsky will plan, lead and assess all aspects of the intramural program of basic and clinical research, which focuses on the causes, diagnosis, treatment and prevention of neurological disorders. He will also oversee the institute’s intramural multidisciplinary research efforts, develop new research programs, recruit new investigators and build networks of scientists involved in various fields of neuroscience and neurobiology. In addition, he will serve as the basic neuroscience program director.

Before coming to NIH, Koretsky spent 12 years as a professor of biological sciences at Carnegie Mellon University, where he held the Eberly chair in structural biology. He received his undergraduate degree from the Massachusetts Institute of Technology and his master of science and Ph.D. degrees from the University of California at Berkeley.

Koretsky has coauthored more than 130 publications, served on the editorial boards of several journals and served on the advisory boards of a number of organizations. Currently, he is on the editorial board of Contrast Media and Molecular Imaging.—Shannon E. Garnett
Reasons for Giving Are Many

When you think of philanthropy, you probably think of high-profile foundations and corporations that give generously to charity. But you might not realize that charities would be nowhere without you, the individual donor. Last year in the U.S., for example, individual donations added up to $216 billion—83 percent of all charitable giving.

Like most people, you probably give to one or more charitable causes in any given year. You might ask, “Why should I go through the Combined Federal Campaign to support my favorite charity?” Here are a few reasons:

• More of your money goes to a charity’s programs when you donate through CFC. That’s because CFC contributions reduce a charity’s overhead, allowing it to spend less on fundraising and processing numerous separate donations and more on programs.

• It’s easy and fast for you. The catalogue of some 3,000 charities and the pledge form are delivered right to your office. You can donate to any number of charities with a single check or pledge form. And the money goes only to those charities you’ve selected.

• You don’t have to pay all at once. If you use the payroll deduction option, your contribution is divided into 26 installments.

• Record keeping is a snap with payroll deduction—your year-end pay stub serves as your tax receipt.

So remember, not only will your CFC donation help your favorite cause, but also making that donation will be fast and easy for you!

Rockledge CFC ‘Alley-Oop’ a Success

Despite the rainy day, more than 200 people came out to the Rockledge CFC “Alley-Oop” on Nov. 8 that featured the Walter Johnson High School Jazz Combo, food vendors and a basketball free-throw contest. Also on hand were players from the Maryland Nighthawks—an American Basketball Association team—and the team’s mascot, Dunkin’. The cheering squad “Divas and Dudes” was there to root for the free-throw contestants. About two dozen CFC charities were also represented.

Top:
NIDCR director Dr. Lawrence Tabak, whose institute is leading this year’s CFC, addresses the crowd at the Rockledge Alley-Oop event. On stage with him are members of the Walter Johnson High School Jazz Combo.

Middle:
Ardell Jackson (l) of NIAID takes his best shot. About two dozen people from ICs and OD participated in the contest.

Bottom:
NIBIB’s Todd Merchak (holding ball) won the Rockledge CFC free-throw contest. Pictured with him are players from the Maryland Nighthawks—an American Basketball Association team—and Dunkin’, the team’s mascot. Merchak won a basketball signed by University of Maryland basketball coach Gary Williams. He also won an iPod for NIBIB to give to a deserving CFC contributor or keyworker.

PHOTOS: MICHAEL SPENCER

Kosh Creates CFC Costume

Carol Kosh, administrative officer in the Office of Extramural Research, usually doesn’t show up for work in costume. But when NIH deputy director for extramural research Dr. Norka Ruiz Bravo encouraged her staff to dress up for the annual Halloween party, Kosh got inspired.

“I was trying to think of something creative,” she says. As OER’s CFC team captain, she already had the campaign’s promotional posters. She twinned them like sandwich boards, added Monopoly money and pledge cards and viola! “Everybody loved it. They got the idea they needed to give.”

Kosh got lots of support from Executive Office program advisor Janie Kuhn, who calls Kosh part of her “dream team. She’s creative, enthusiastic and a joy to work with. Carol and the rest of the team’s efforts will have a significant impact on the lives of many.” Laverne Stringfield, OD executive officer, heads up their effort.

A 28-year veteran of NIH, Kosh worked in Bldg. 10 until last year, when she transferred to OER. While in the CC, she worked her way up from teenage volunteer to stay-in-school student, office manager and AO technician to her current position as AO.

“When you’re in Bldg. 10 you see so much—the families with little children pushing their IVs around. I used to be an office manager in a lab,” Kosh recalls, “and for many years I ordered supplies and medications. I know what impact NIH has in the community and worldwide. CFC is close to my heart.”—Belle Waring
year’s Discovery Channel Young Scientist Challenge. Little did they realize, though, their 3-day adventure in science here took months of detailed planning and signaled the start of what planners hope will be a beautiful new friendship between NIH and Discovery.

Natural Match Made

As successful partnerships often do, the NIH-Discovery union began with an introduction by a mutual friend. Discovery is a long-time generous donor to the Children’s Inn at NIH, said the inn’s director of development and public relations, Anne Swire. She recalled the network’s donation of office equipment, production of an inn video, an Animal Planet show about the inn’s butterfly garden as well as financial contributions over the years. In fact, Discovery Communications CEO Judith McHale sits on the inn’s advisory council.

“Earlier this year we were at one of our regular meetings,” Swire said, “when she mentioned that they were looking for a new federal partner for their young scientists program and wondered if NIH might be interested. That’s how we brought them together.”

The Young Scientist Challenge was developed in 1999 by Discovery Communications and Science Service, a non-profit organization, as a way to help boost the nation’s achievement in science and math. More than 13,000 youngsters have participated in the challenge since then, with winners collecting more than $700,000 in scholarship awards. Discovery has collaborated on the contest with other federal agencies in the past, most recently the Smithsonian Institution.

For its part, NIH—via its Office of Communications and Public Liaison—jumped at the opportunity to associate with the popular science contest, which shares the agency’s goals to educate young people about medical research and interest them early in pursuing science careers.

“I think it only makes sense that these two organizations team up,” said Dr. Milton English, a research fellow in NHGRI’s Genetics and Molecular Biology Branch, who developed a zebrafish experiment for the event. “I know NHGRI is actively involved in education by reaching out to students and teachers both in the local area and across the country...Perhaps this partnership with Discovery will provide us with yet another conduit for us to reach more students. I would certainly encourage other scientists here to get involved in programs like this. Far too often scientists are viewed as nerds and geeks. If students can get a connection to scientists, they will come to realize that science is lots of fun and the people who do the research are not that strange at all. Plus, if we as scientists could serve as positive role models for kids, I think it is certainly worth the effort and time.”

Forging a Bond

The new partners began intense prep sessions in early spring to bring “Finalist Week” to NIH. Essentially Discovery asked NIH for challenges that would stimulate bright kids, motivate them in teams, give them a taste of medical research but also allow them to finish projects in an hour and a half. Led by NIH deputy director for intramural research Dr. Michael Gottesman, several institute directors and senior scientists enthusiastically rallied to the cause with ideas. Experienced Discovery head judge Steven “Jake” Jacobs, a scientist and science division director of the National Science Teachers Association, helped gear potential exercises for children. Judging would be provided by Science Service, which had already reviewed about 6,000 science fair projects by kids around the country and whittled the number of competitors down to 40. Narrowing the list of projects NIH could provide proved to be no small hurdle either.

“My challenge did turn out to be more kid-friendly than I anticipated,” says Clinical Center senior investigator and staff radiologist Dr. Ron Summers, who crafted an experiment imaging a somewhat sensitive area. “When I initially proposed the challenge, it was unclear to me how the kids would deal with a subject as delicate as the colon. Somehow, the kids all got into the spirit of it. I think the virtual colonoscopy software and virtual-reality colonoscopy simulator smoothed the way, since they were hands-on and like a video game in some respects. I also think that Jake’s idea about having the kids make a
video to explain to other kids what they learned was a stroke of brilliance."

Beyond the Ceremony

By Oct. 23, all was in place at about 8 a.m. in Lipsett Amphitheater. That’s when 40 eager youngsters, their chaperones and the Discovery Channel crew began their search for “America’s Top Young Scientist of the Year.”

“Every day we do challenges very similar to the ones you’ll be doing here today,” said Gottesman, welcoming the finalists and releasing ceremonial trial balloons shaped like jack o’ lanterns. “This is an exciting time to be interested in medical research.”

After a humorous warm-up charge to contestants by Jacobs, the 8 teams—designated by T-shirt color—were led to their first projects. A 10th-floor ACRF lab had been temporarily outfitted to host three challenges: “Environment: Breaking the Mold,” “Endoscopy/Imaging/Colonoscopy: From the Inside Out” and “Avian Flu: Something in the Air.” Another challenge lab, “Obesity: Eat, Think & Be Healthy,” was set up on the B1-level atrium.

Six lab skills activities, a chemistry challenge and a media center were located in conference rooms in the Natcher Bldg. Discovery provided a bus to shuttle kids between the two buildings.

“We did Something in the Air,” wrote Team Gray’s 13-year-old Anthony Henning of Virginia. “That was quite fun. Nolan and Amy did the epidemiologist and mayor roles. Shillipi and Nick were the doctors diagnosing the patient, Joe Plastic, and I was the virologist and I got to wear a suit that protected me from the H5N1 virus. We did a press conference in the end.”

“arid the flu one was especially fun,” enthused Red teammate and Californian Otaba Abdulla of Florida. “We had lunch. (Does anyone else find the scheduling of this a little bit...strange?)”

Happily Ever After

So what did NIH discover about its debut in kids’ television edutainment?

“Though I knew these kids were the best of the brilliant, I was surprised at how quickly they grasped some of the more complicated aspects of our challenge,” said Dr. Hillery Harvey, whose NIAID group conceived of Joe and the flu exercise with Dr. Robert Glass of the Department of Energy and his middle school-age daughter, Laura. [In fact, the Glasses coauthored a paper on their concept in the November 2006 Emerging Infectious Diseases.]

NIAID’s Dr. Lone Simonsen, who conducted the pandemic challenge, agreed:

Discovery Detectives Take Show on the Road

A packed auditorium of red- and yellow-shirted school children sat attentively as the Discovery Channel took its Young Scientist Challenge Contest to Ketcham Elementary School in southeast D.C. on Oct. 25.

Students from Ketcham listened to presentations by senior advisor to the NIH director Dr. Ruth Kirschstein and acting NIDDK director Dr. Griffin Rodgers. Rodgers, a sickle cell expert, recounted his own elementary school training and singled out a fourth grade teacher as being particularly encouraging. He told the students he was once interviewed by a television reporter from WUSA whom he learned was the daughter of that same teacher.

“I don’t think I would be here if it were not for [your mother],” he told the reporter.

Students also watched a science show given by the competition’s head judge, Steven “Jake” Jacobs, which was designed to inspire the children to explore science. Jacobs called on student volunteers to help with a series of experiments that modeled principles used by working scientists such as observing and predicting. Rodgers proved himself a good sport and won the hearts of the students by joining a group of volunteers tapped for one exercise.

Ketcham is a school of 400 students located in Anacostia, a historic neighborhood. The school is part of an NIH Outreach effort called “Out of the Box,” spearheaded by the agency’s Office of Equal Opportunity and Diversity Management. Kirschstein visits the school regularly and is well known by students, teachers and school principal Joyce Goche-Grimes.

Wearing red shirts were Discovery competition finalists, who came to the school for a mentoring exercise. Students broke into small teams—finalists paired with Ketcham students—to talk about ideas for science fair projects.

Afterwards, students reconvened with Jacobs, who works for the National Science Teachers Association and is associated with Science Service, the D.C.-based nonprofit that administers the contest. As a gift to the school, executives from Elmer’s Glue were on hand to donate poster board, project journals and science fair tool kits to Ketcham.—Stephanie Clipper
I was impressed by the talents I saw among them. There was a kid or two who I could see in the White House helping make sensible decisions for pandemic planning based on mathematical modeling!

Dividends from experiment interactions were mutual too, Simonsen reported. “NIH scientists had great fun working with the kids even though it was hard work,” she said.

On day three, NIH-Discovery took their science show on the road to Ketcham Elementary School in southeast Washington, D.C. (see sidebar), before a grand awards ceremony that evening that would crown the overall champion scientist and name the winners of several prize trips donated by the Discovery Networks. Some of the finalists also visited the Children’s Inn. An hour-long show about the entire week is set to air in February on Discovery Channel, Science Channel and Discovery Kids. Nothing, however, beats rave reviews from the target audience.

“We love Discovery,” wrote Green Team blogger Aaron Burrows, 14, of Texas. “The chemistry lab was amazing, and we actually got to work with the kids and top scientists on the challenges. The experience is just thrilling, and even though...we’re all competing with each other, everyone is building bonds with one another and...having the best time ever.”

A 14-year-old from Hawaii was the eventual challenge victor for the week. Nolan Kamitaki of Team Gray summed up the event on the blog, “The real win? The experience and knowledge that we can take away from this. I can’t put into words how much fun this has been...”

To read more about the competition and see a complete list of finalists, challenges and prize winners, visit http://school.discovery.com/sciencefaircentral/dysc/index.html.

NIH Intern Addresses National Conference

Among the speakers at a recent national conference on underage drinking prevention was college student and NIH summer 2006 intern Victoria Wright, whose account of her research at NIAAA offered a picture to the audience of the varieties of data that can inform policy and prevention efforts aimed at reducing underage drinking.

The annual National Leadership Conference is cosponsored by the Department of Justice and the National Liquor Law Enforcement Association. This year’s conference sought to highlight proven strategies for community groups and law enforcement to work together to reduce youth access to alcohol.

Wright’s presentation offered an overview of the areas of research she had investigated over a summer working with NIAAA’s Linda Chezem. A long-time judge in Indiana, Chezem came to NIAAA in 2003 under a temporary appointment. She was interested in how research—particularly on underage drinking—can contribute to the appropriate adjudication of court cases. Her initial goal for Wright was to help the intern explore how NIAAA research was relevant to policy. According to Chezem, Wright “really took to it,” learning not only basic legal research, but also how to access research on alcohol and apply it to different legal situations.

Wright covered a lot of territory during her time at NIAAA, surveying, for example, law schools with substance abuse-related courses; underage drinking laws, and exceptions, by state; state laws regarding fetal alcohol syndrome; penalties for underage drinking and the impact of expungement of charges against juvenile offenders; custody cases in which alcohol is involved; and the prevalence of court orders relating to Antabuse, a drug used in alcoholism treatment. Wright found that research on adolescent drinking was a good example of how studies of alcohol and its effects provide a context for the law, “especially,” she said, “in light of the studies coming out on the harmful effects of alcohol on adolescents, including increased risk of alcohol use disorders and alcoholism later in life.”

According to Chezem, the purpose of Wright’s presentation was to help raise awareness among people working on alcohol-related policy and law that there is research relevant to these issues. Wright said her experience at NIAAA “will be a stepping stone in my future studies.” She plans to pursue a Ph.D. in psychology and continue doing research.
IT and patient-centered care. Experts discussed such key issues as e-health in the HMO setting, electronic medical records in research networks and international settings, care coordination and patient self-management and the personal health record as a research design and data collection resource. A special panel discussed national research priorities in informatics.

Besides NCI, cosponsors of the conference included NLM, NIDA, the Office of Behavioral and Social Sciences Research and the Office of Disease Prevention.

Conference Examines Health Information Technology, Patient-Centered Care

Information technology (IT) is redefining the way health care is delivered. Consider, for example, patients who can send digital photographs of a suspicious mole to their physician to determine if an office visit is warranted. Other studies involve patients using web-based, multimedia and wireless programs that have been developed to help enhance the quality of health care. But how do researchers determine the effectiveness of these innovative approaches?

“Health information technology is developing at a very rapid pace. Electronic health research related to emerging technology has not kept pace with that progress,” said Dr. Audie Atienza, health scientist administrator/behavioral scientist, National Cancer Institute. He was the organizer of “Critical Issues in eHealth Research Conference: Toward Quality Patient-Centered Care,” held recently.

“There are many competing assumptions and hypotheses about the impact and value of new technologies on patients and other users,” said Dr. Robert Croyle, director of the Division of Cancer Control and Population Sciences at NCI. “These need to be tested empirically to ensure that future investments have the greatest possible impact on reducing morbidity and mortality.”

The field of e-health has emerged from the explosion of advances in IT over the past decade as innovative concepts have been applied to health-care settings. Atienza defines patient-centered e-health as “health information technologies that are used for bridging patient care across time and distance, moving beyond traditional boundaries to connect patients to care, clinical teams and other health systems.” Developing e-health research has become a national priority as a means of not only enhancing the quality of care, especially for underserved populations, but also for improving patient outcomes and satisfaction with the health care experience.

The conference provided an interdisciplinary forum to discuss major methodologic and conceptual issues in e-health research, connective
Long-Time NIEHS Leader Sassaman Retires
By Eddy Ball

Dr. Anne Sassaman, director of the Division of Extramural Research and Training, NIEHS, retired on Nov. 3 after 32 years of federal service. She left with a long list of accomplishments and awards to her credit, a well-attended retirement ceremony and fond memories of the many friends she made over the years.

Known and admired throughout NIH, Sassaman had an enduring influence on the institute and earned the respect of everyone who worked with her. Moderating a retirement celebration for Sassaman, NIEHS director Dr. David Schwartz said, “All of us will miss her enthusiasm and her ability to oversee a very complex operation… [and] I will personally miss her loyalty and persistence.”

After joining NIEHS in 1986, Sassaman took her group from program status with 26 employees, including only three program administrators, and a small portfolio of individual research grants and centers, to division status with 20 program administrators and a large cadre of other extramural professionals. Today, DERT is responsible for overseeing more than 800 grants, more than 3,000 individual researchers and a network of core environmental health research centers and centers specializing in innovative research into children’s health, breast cancer and the environmental health effects of the oceans.

NIH presented Sassaman with a series of Director’s Awards over the years and the American Association for the Advancement of Science honored her with its fellowship in 2002. She received her first Director’s Award while still at the National Heart, Lung and Blood Institute, where she was an administrator for 10 years before coming to NIEHS; she was instrumental in developing national and international programs in thrombosis and hemostasis.

Of her burgeoning division, which she led under three NIEHS directors, Sassaman said, “We probably have the most diverse portfolio of any institute at NIH, particularly an institute of our size.”

Sassaman helped NIEHS grow beyond its initial role as an agency concerned primarily with toxicology testing and assessment of environmental hazards. She also worked to raise awareness of gender and family issues in the workplace. When the NIEHS Diversity Council inaugurated the Spirit Lecture Series in 2002 to honor outstanding women during Women’s History Month, few were surprised that Sassaman was the first lecturer.

NIEHS’ Venditti Mourned

Dr. John M. Venditti, 79, who spent 26 years as chief of the Drug Evaluation Branch, National Cancer Institute, during his 39 years at NIH, died on Oct. 21 at home in Bethesda.

Born in Baltimore, he attended St. Dominic Parochial School, Mt. St. Joseph High School, the University of Maryland and received his Ph.D. in pharmacology from George Washington University Medical Center Institute for Biomedical Sciences.

During the early 1950’s, Venditti’s laboratory work was instrumental in the development of a number of anticancer drugs. He was considered one of the world’s leading experts on drug interactions, a subject on which he published extensively.

For many years, he was an active member of NCI’s acute leukemia task force, and from 1966 through 1986, he directed the NCI anticancer drug screening program, a worldwide network of research and development projects for the discovery of improved chemotherapy. In 1983, he established National Cooperative Drug Discovery Groups, consortia of academic, industrial and government organizations, thus mobilizing the nation’s top scientific talent in the fight against cancer. He directed that program until his retirement from government service in 1987.

While at NCI, Venditti was a party to a number of agreements for scientific exchanges with Germany, Japan and Russia. He served as U.S. delegate to the First International Conference on Anticancer Screening Methodology held in Geneva in 1974 and was a U.S. representative on the anticancer screening panel of the World Health Organization.
After his retirement from NCI, Venditti held a number of private-sector positions including vice president and director of research at Microbiotest, Inc., of Sterling, Va.; senior associate at Technical Resources International of Rockville and senior scientist at SAIC-Frederick, a subsidiary of Science Applications International Corp.

Venditti was an author on more than 160 scientific publications and a number of book chapters in the field of cancer research and had been scientific editor of the journal Cancer Chemo-therapy Reports. He was a member emeritus of the American Association for Cancer Research and the American Society for Pharmacology and Experimental Therapeutics. He was also a member of the Federation of American Societies for Experimental Biology and Sigma Xi, the national science honor society.

Survivors include his wife Nancy; three children, Nancy V. Gauss of Gunnison, Colo., Rev. J. Michael Venditti of Allentown, Pa., and Mary Ruth Yao of Silver Spring; and three grandchildren.

**NHGRI’s Reese Dies**

Regina Ann Reese, 53, a secretary at the Genetics and Molecular Biology Branch (GMBB), part of the intramural research program of the National Human Genome Research Institute, died Oct. 28 following a several-month battle with brain cancer.

She began her NHGRI career as a secretary in September 1997. She previously had been a unit clerk at the Clinical Center.

A resident of Hagerstown, Reese graduated from Robert E. Peary High School in Rockville in 1972 and attended the University of Maryland. She spent 7 years thereafter in Colorado. She came to NIH following in her father’s footsteps—the late John C. Reese was employed at NIH as an accountant until his death in 1976. Her sister-in-law, Cheryl Reese, is a secretary in the Division of AIDS and Health and Behavior Research, National Institute of Mental Health.

At NHGRI, Reese provided administrative support for six principal investigators and became an expert at navigating the increasingly complex NIH travel regulations. “Regina Reese was a valued member of the Genetics and Molecular Biology Branch,” said her supervisor Dr. David Bodine, GMBB chief. “She maintained her good humor throughout her recent devastating illness and is remembered fondly by all her colleagues.”

Reese dedicated time to the NHGRI community, serving on the genomes on your side committee charged with improving the quality of the work environment and as the Combined Federal Campaign coordinator for GMBB. She had an enduring love for the outdoors and a great passion for animals. She will be remembered for her special fondness for Tai Shan, the young panda at the National Zoo.

She is survived by her mother, Marion Reese; two brothers and three sisters; and 12 nieces and nephews, plus many relatives. A memorial service was held Nov. 3 at Rockwood Manor in Potomac. Donations in Reese’s memory may be made to Montgomery Hospice, 1355 Piccard Dr., Suite 100, Rockville, MD 20850.

**NIAMS’s Kastner Links to Institute’s Beginnings**

Dr. Ephraim P. Engleman still serves—at age 95—as director of the Rosalind Russell Medical Research Center for Arthritis at the University of California, San Francisco. He has a special link to NIAMS’s beginnings: Engleman—who joined the UCSF faculty in 1947—chaired the 1975-1976 National Commission on Arthritis, whose National Arthritis Research Plan resulted in the creation of what is now NIAMS.

In a recent event that tied the institute—now celebrating its 20th anniversary—to its early roots, NIAMS clinical director Dr. Dan Kastner was honored at UCSF as the 10th annual Jean S. and Ephraim P. Engleman visiting professor of rheumatology at the institution’s medical school.

During the visit, Kastner enjoyed a conversation with Engleman in his office, where the two discussed arthritis research in general and its status at NIH in particular. A special treat was the gala dinner, where Engleman performed classical chamber music pieces on the violin, accompanied by his son (a professor of medicine and pathology at Stanford University) and by the principal cellist of the San Francisco Orchestra.
### CIT Computer Classes

All courses are given without charge. For more information call (301) 594-6248 or consult the training program’s home page at http://training.cit.nih.gov.

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### NIH Alumni Association Honors Two

Dr. Philip S. Chen, Jr., former senior advisor to the NIH deputy director for intramural research, and Dr. Victoria Harden, former director of the Office of NIH History, were honored by the NIH Alumni Association at its annual meeting Nov. 4. NIH director Dr. Elias Zerhouni addressed the group and helped honor the two alumni for their service to NIH. He urged NIHAA members to use their extensive institutional memory and their considerable talent to educate the public about NIH. “It is not yet self-evident how important, effective and valuable America’s investment in NIH is,” he said. “We have conducted and supported medical research that has led to major advancements against global killers and cripplers but many more research challenges remain...NIH alumni—many of whom were yesterday’s top leaders—can help today’s NIH leaders work with patient advocates, cooperate with alumni worldwide and encourage young scientists to excel in tomorrow’s highly competitive research environment.”

### Bridges Appointed DAIT Branch Chief

Dr. Nancy D. Bridges has been named Transplantation Immunobiology Branch chief in the NIAID Division of Allergy, Immunology, and Transplantation where she previously served as section chief. Before coming to NIAID in 2002, she was a professor of pediatrics and associate division chief at Mount Sinai School of Medicine in New York City. Bridges is board-certified in pediatrics and pediatric cardiology and is a certified physician for heart and lung transplantation.
NIDCD Welcomes New Council Members

The National Institute on Deafness and Other Communication Disorders recently announced the appointment of six new members to its advisory council. They are:

Dr. Margaretha Casselbrant, director, department of pediatric otolaryngology, Children's Hospital of Pittsburgh, University of Pittsburgh School of Medicine.

Dr. Jennifer Horner, associate professor and chair, department of rehabilitation sciences, Medical University of South Carolina, Charleston.

Ronald L. Lanier, director, department for the deaf and hard of hearing, Commonwealth of Virginia, Richmond.

Dr. Sharon E. Moss, director, scientific programs and research development, speech-language-hearing-science and research unit, American Speech-Language-Hearing Association, Rockville.

Dr. Lorraine O. Ramig, professor, department of speech, language and hearing sciences, University of Colorado at Boulder.

Dr. Steven D. Rauch, associate professor, department of otology and laryngology, Harvard Medical School, Massachusetts Eye and Ear Infirmary, Boston.

Study of Pulmonary Sarcoidosis

Individuals with pulmonary sarcoidosis are needed for a study. Call 1-866-444-2214, TTY 1-866-411-1010.

Osteoarthritis and Men

Men ages 30-65 are invited to take part in an NIH study (04-AT-0239) evaluating hormones in men with osteoarthritis pain. Compensation is provided. Call 1-866-444-2214 (TTY 1-866-411-1010).

Thyroid Conversion Study

A thyroid research study seeks volunteers 18+ with thyroid gland removed or hypothyroidism. Call 1-866-444-2214 (TTY 1-866-411-1010). Compensation is provided.

Anthrax Vaccine Study

Anthrax vaccine study (04-CH-0283) seeks healthy volunteers ages 18-30. For more information call 1-866-444-2214 (TTY 1-866-411-1010). Compensation is provided.

Adults with Rheumatoid Arthritis

Adults 18+ with rheumatoid arthritis are asked to consider participating in an NIH study. Compensation is provided. Call 1-866-444-2214 (TTY 1-866-411-1010). Refer to study 03-AR-0133.

Kidney Transplant Studies

Do you have kidney failure and need a kidney transplant? NIH has kidney transplant studies designed to reduce need for anti-rejection drugs. Call 1-866-444-2214, TTY 1-866-411-1010.

Allergy Clinic for Children

NIH Pediatric Clinic offers allergy and asthma care (ages 6 months to 18 years) and is recruiting for an allergy and asthma study. Call 1-866-444-2214 (TTY 1-866-411-1010).

Sleep and Obesity Study

Sleep and weight study for obese adults ages 22 to 50 who sleep less than 6 hours at night. Compensation is provided. Call 1-866-444-2214 (TTY 1-866-411-1010).

Mood, Anxiety Disorder Studies Need Volunteers

Doctors at NIMH are seeking healthy volunteers to participate in studies on mood and anxiety disorders. Participation may include a physical exam, lab work, brain imaging, medication and/or psychological interviews at the Clinical Center. You may be eligible if you are between ages 18-65, medically healthy, free of current or past psychiatric illness, have no history of head trauma with loss of consciousness and not currently taking any medication. Compensation is provided. Call 1-866-MAP-NIMH (1-866-627-6464) (TTY 1-866-411-1010).
NIH Celebrates ‘America Recycles Day’ Nov. 15

The hall linking the CRC with the CC became a green dream as NIH celebrated “America Recycles Day” on Nov. 15. It was just the right spot to catch the eye with nifty giveaways transformed from the trash triaged in our bins.

Question: What do garden mulch, fetching floor tiles, Skilcraft pens and fleecy hats have in common? Answer: All come from recycled materials.

Go ahead, take the bait and hear the pitch: It is everyone’s job to recycle.

The recycling program’s administrative home is the Division of Environmental Protection, which currently funds NIH’s Environmental Management System (NEMS), an NIH initiative kicked off in January 2005. Ultimately, NEMS will be pushed out to all institutes and centers. For more information on the NIH Recycling Program contact Gareth Buckland at bucklandg@mail.nih.gov or (301) 496-7990. Visit the NEMS web site at http://orf.od.nih.gov/Environmental+Protection/Environmental/.

Clockwise from top:
NIH recycles over 8 tons of trash daily.
Dr. Johan Van Der Veen (l) takes a recycled-plastic cup from Gareth Buckland, DEP’s “Recycle Guy.” On Montgomery County’s mandate that businesses recycle 50 percent of their waste, Buckland says: “This year we’ll meet that goal quite easily.”
Marie Taboada (l) and Nicole Huntington of the Division of Travel and Transportation Services offer energy-saving commuter choices.
Padma Natarajan (l), contractor, along with NEMS coordinator Theresa Leland pass out recycling quizzes.
Beth Scott of National Industries for the Blind offers a wide sample of environmentally friendly products, including a recycled version of the original Skilcraft pen. Just like the old one, it writes a linear mile.