

nih record

24th Version of Event

Research Festival Honors Spirit of Nobelist Nirenberg

By Rich McManus

It's hard to believe that it was less than a year ago that NIH's first intramural Nobel Prize winner, Dr. Marshall W. Nirenberg (1968), was presiding with his customary warmth and enthusiasm over a symposium in honor of his groundbreaking discovery of the universal genetic code in the early 1960s at NIH. He died only 2 months after that November 2009 event, so it was appropriate that the 2010 version of NIH's annual Research Festival was held in his memory Oct. 5-8.

"Marshall Nirenberg's imprint on NIH research is immense," said NIH director Dr. Francis Collins in remarks opening the festival on Oct. 5 in Masur Auditorium. "There is probably no one here whose work is not dependent in some way on his legacy...in many ways, he was really the soul of the [intramural research] program."



NIH director Dr. Francis Collins opened the 24th NIH Research Festival, which honored the spirit and accomplishments of Dr. Marshall Nirenberg.

SEE RESEARCH FESTIVAL, PAGE 6

\$40 Billion Up for Bid

NIH Calls for Potential IT Contractors, Targets Small Businesses

By Carla Garnett

NIH, through its Information Technology Acquisition and Assessment Center (NITAAC), has solicited proposals to establish government-wide acquisition contracts (GWACs) worth about \$40 billion—the second-largest GWAC program award ever. Two solicitations are involved: one unrestricted solicitation has been released; a second solicitation restricted to small businesses will be released shortly.

"The separate small business set-aside is designed to better protect the interests of small business," said Mary Armstead, NITAAC program director. "The two nearly identical solicitations will each have a 10-year period of performance and contract ceilings of approximately \$20 billion."

Understanding Alphabet Soup

NITAAC currently manages three GWACs: ECS

SEE NITAAC, PAGE 4



Longtime NIDDK grantee Dr. Jeffrey Friedman Celebrates Past, Looks to Future
Scientific Symposium Marks NIDDK's 60th Anniversary

By Amy F. Reiter

On the day Dr. Jeffrey Friedman won the Lasker Award for his part in the discovery of the hormone leptin, he arrived at NIH to take part in another honor: a longtime grantee, he was one of nine researchers presenting at NIDDK's 60th anniversary symposium—an honor, he said, he wouldn't miss.

"NIDDK is indispensable for promoting work of this sort," said Friedman about the dis-

SEE NIDDK ANNIVERSARY, PAGE 8



ABOVE • The annual CFC kickoff featured singer Kaitlyn Maher. See story on p. 12.

features

	1
Research Festival is 'NIH's Woodstock'	
	3
Grantee Wins Nobel Chemistry Prize	
	9
West To Speak at Global Health Seminar	
	12
CFC Kickoff Features Music	

departments

Briefs	2
Feedback	5
Digest	10
Volunteers	11



The NIH Record is published biweekly at Bethesda, MD by the Editorial Operations Branch, Office of Communications and Public Liaison, for the information of employees of the National Institutes of Health, Department of Health and Human Services. The content is reprintable without permission. Pictures may be available upon request. Use of funds for printing this periodical has been approved by the director of the Office of Management and Budget through September 30, 2011.

To receive alerts to our latest issue, send an email to listserv@list.nih.gov with the words "Subscribe NIHRECORD" in the message body.

NIH Record Office Bldg. 31, Rm. 5B41
Phone (301) 496-2125 Fax (301) 402-1485

Web address <http://nihrecord.od.nih.gov>

Editor
Richard McManus
Rich.McManus@nih.gov

Assistant Editor
Carla Garnett
Carla.Garnett@nih.gov

Staff Writers
Jan Ehrman
Jan.Ehrman@nih.gov

Valerie Lambros
Valerie.Lambros@nih.gov

The NIH Record reserves the right to make corrections, changes or deletions in submitted copy in conformity with the policies of the paper and HHS.

APAO Solicits Award Nominations

The NIH Asian and Pacific Islander American Organization (APAO) will continue its tradition of honoring NIH employees with significant contributions in the following two categories: an employee in the field of management who has made an outstanding contribution to the advancement of Asian and Pacific Americans; an APA researcher/scientist who has realized significant accomplishments in biomedical research.

The awardees will be honored with a plaque of recognition from APAO at its annual holiday awards luncheon on Wednesday, Dec. 15 in Wilson Hall, Bldg. 1.

A review committee composed of APAO members from several ICs will evaluate nominations. All nominations must be received electronically by Friday, Nov. 19 for consideration. To make a nomination, send a 1-page statement and, if applicable, a CV to Phyllis Chui, chuiph@mail.nlm.nih.gov, (301) 435-7027.

Questions about the awards or APAO's mission may be directed to APAO president Dr. Rashmi Gopal-Srivastava at gopalr@mail.nih.gov, (301) 402-4336.

FAES Holds Insurance Open Season

The FAES Health Insurance Program is holding an Open Enrollment from Nov. 1-30. The program is open to those who work for or at NIH in full-time positions but are not eligible for government plans. This includes NIH fellows, exchange scientists, special volunteers and guest researchers. The minimum enrollment period is 3 months. Benefits take effect Jan. 1, 2011.

Open enrollment is for those who did not enroll when first eligible for benefits coverage, current subscribers who want to make changes to their coverage and to renew dental coverage for 2011. FAES offers CareFirst BC/BS Blue Preferred PPO for medical coverage and Dominion Dental HMO and PPO for voluntary dental coverage.

For more information visit www.faes.org, email faesinsurance@mail.nih.gov and/or call (301) 496-8063. FAES is open Monday through Friday from 8:30 a.m. to 4 p.m.

Use or Lose Reminder

Don't forget to officially schedule your "use or lose" annual leave no later than Saturday, Nov. 20. Questions about "use or lose" leave should be directed to your administrative officer.

American Indian, Alaska Native Heritage Month

The 10th annual NIH American Indian and Alaska Native Heritage Month Program will be held on Wednesday, Nov. 10 from 11:30 a.m. to 12:30 p.m. at Natcher Main Auditorium, with a poster session to follow. This year's program will feature a scientific speaker and cultural performance.

Dr. Malcolm King will speak on the "Pathways to Health Equity for Indigenous Peoples in Canada." He is scientific director of the Institute of Aboriginal Peoples' Health, Canadian Institutes of Health Research. His areas of interest include respiratory health issues among Aboriginal peoples, health service delivery to vulnerable populations, the interaction of education and health, airborne disease transmission and chronic obstructive lung diseases. King is the author of more than 160 scientific papers and has supervised over 20 biomedical trainees. He has been a guest professor at several universities in Germany, Brazil, Switzerland and New Zealand.

The cultural performance will feature Jackie Bird, a Lakota Indian who is a championship hoop dancer. She will sing traditional songs in her native language and perform a dance using intricate manipulation of hoops to form images and tell a story to celebrate the heritage of American Indians and Alaska Natives. A tasting of traditional American Indian and Alaska Native food will be held following the cultural performance.

A poster session co-sponsored by the Fogarty International Center and NHLBI will be open from 1 to 3 p.m. at Natcher Conference Center, Rms. F1/F2. The posters will feature projects from the Native American Research Centers for Health program, which is funded by the Indian Health Service in collaboration with NIH. The event is co-sponsored by the NIH American Indian/Alaska Native Employee Council and the NIH Office of Equal Opportunity and Diversity Management.

Sign language interpreters will be provided. Individuals who need other reasonable accommodation to participate should contact Darlene Pearson 7 days before the event. In addition, for program information, you may also direct inquiries to Pearson at (301) 451-0745.



Purdue University President France A. Córdoba (l) talks with Dr. Ei-ichi Negishi, Nobel laureate in chemistry, at his home in West Lafayette, Ind. Negishi is the Herbert C. Brown distinguished professor of chemistry at Purdue.

PHOTO: PURDUE UNIV./ANDREW HANCOCK

Grantee Wins 2010 Nobel in Chemistry

The 2010 Nobel Prize in chemistry has been awarded to NIH grantee Dr. Ei-ichi Negishi of Purdue University. He shared the award with Dr. Richard F. Heck of the University of Delaware and Dr. Akira Suzuki of Hokkaido University, Japan. The three were honored for developing complementary methods to find more efficient ways of linking carbon atoms together to build complex molecules.

The scientists were recognized for developing “palladium-catalyzed cross couplings in organic synthesis,” methods for making carbon-carbon bonds. Their achievements have given scientists more precise, efficient and environmentally friendly tools for creating a wide range of molecules used in the production of high-tech materials, agricultural chemicals and pharmaceuticals, including the cancer drug Taxol and the asthma drug Singulair.

“The methodology developed by these stellar scientists has broad implications for the medical, electronic and agricultural fields,” said NIH director Dr. Francis Collins. “It has already allowed chemists to synthesize compounds to fight the herpes virus, HIV and colon cancer.”

Negishi has received more than \$6.5 million in support from the National Institute of General Medical Sciences since 1979.

“Like the frame of a house, carbon-carbon bonds must be right for the structure to be functional and useful,” said Dr. Jeremy Berg, NIGMS director. “The powerful methods these scientists developed have provided a solid foundation for building a wealth of molecules that have benefitted medicine and industry.”

The molecules that give penicillin its bacteria-killing properties, that give snakes their venom and that give flowers their color are based on carbon-carbon bonds. To make molecules as complex and vast as those found in nature, scientists need to join carbon atoms together. Each of the three scientists selected for the 2010 Nobel Prize in chemistry developed

reactions that improved this chemical synthesis. By using the metal palladium as a catalyst, the scientists were able to bring two molecules very close together, allowing them to couple, form a compound with a new carbon-carbon bond, release the product and be ready for another cycle.

Negishi, whose NIGMS grants have focused on the use of transition metals such as palladium to create synthetic reactions, discovered that compounds with carbon-zinc bonds formed effective coupling partners. His method has been used in making natural products with therapeutic properties, including a toxin found in frog skin and an antiviral agent from marine sponges. ①

Institute of Medicine Elects 5 NIH'ers

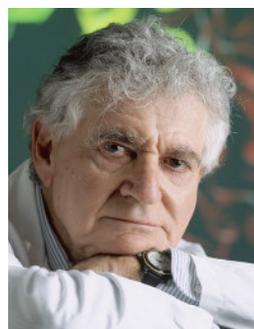
Five NIH scientists are among 65 new members and five foreign associates elected to the Institute of Medicine. Election to the IOM is considered one of the highest honors in the fields of health and medicine and recognizes individuals who have demonstrated outstanding professional achievement and commitment to service.

Honored from NIH were NIGMS director Dr. Jeremy Berg; NIEHS and National Toxicology Program director Dr. Linda Birnbaum; Dr. Ira Pastan, chief, Laboratory of Cell Biology, NCI; Dr. Thomas Wellems, chief, Laboratory of Malaria and Vector Research, NIAID; and Dr. Carl Wu, chief, Laboratory of Biochemistry and Molecular Biology, NCI.

“It is a great pleasure to welcome these distinguished and accomplished individuals to the Institute of Medicine,” said IOM president Dr. Harvey Fineberg. “Each of these new members stands out as a professional whose research, knowledge and skills have significantly advanced health and medicine and who has served as a model for others.”

New members are elected by current active members through a selective process that recognizes individuals who have made major contributions to the advancement of the medical sciences, health care and public health.

Established in 1970 by the National Academy of Sciences, IOM has become recognized as a national resource for independent, scientifically informed analysis and recommendations on health issues. With their election, members make a commitment to volunteer on IOM committees, boards and other activities.



New IOM electees include (top row) NIGMS director Dr. Jeremy Berg and NIEHS director Dr. Linda Birnbaum. In second row are NCI's Dr. Ira Pastan (l) and NIAID's Dr. Thomas Wellems. At bottom is NCI's Dr. Carl Wu.

NITAAC

CONTINUED FROM PAGE 1

Right:
Mary Armstead, NITAAC program director, shepherds one of the agency's largest-ever contracts.

PHOTO: CARLA GARNETT

III, CIO-SP2i and IW2nd. By definition, a GWAC is an ID/IQ contract. If those last two sentences seem like secret code to you, here's the legend:

▲ ID/IQ stands for indefinite delivery, indefinite quantity. This type of vehicle enables buyers to issue orders against an umbrella contract, instead of openly competing each individual requirement.

▲ ECS III is the Electronic Commodities Store contract. Now in its third generation, this GWAC allows users to buy computer hardware, software and related support services.

▲ CIO-SP2i is the second generation of Chief Information Officer-Solutions and Partners. This GWAC covers IT services and solutions including infrastructure, security, operations and maintenance.

▲ IW2nd refers to Image World, second generation. It offers imaging solutions for business, medical science and geographic information systems.

Why GWACs?

GWACs make buying IT products, services and solutions easier, faster and less expensive than other types of government contracts.

Since 1996, when Congress revolutionized IT procurement in federal agencies, only three agencies have been designated "executive agent" by the Office of Management and Budget. This designation is what enables an agency like NIH to offer GWACs, which any federal buyer can then use. NITAAC can provide IT products, services and solutions not only for NIEHS and the Office of AIDS Research, but also for other agencies like NOAA and NASA.

For federal procurement officers, GWACs are like superstores that carry merchandise from only the best designer labels.

"NIH received its first designation as executive agent in September 2000," Armstead noted. "Since that time, NIH's authority has been continually renewed."

IT Services and Solutions, Soup to Nuts

The new \$40B contract, called CIO-SP3, will consolidate CIO-SP2i and IW2nd. In addition to offering general IT products, services and solutions, it is designed to align with the Federal Health Architecture. The CIO-SP2i contract will remain in place through the end of 2012 and



may be extended as a bridge to customers.

Ten tasks covering the spectrum of IT services comprise CIO-SP3: IT services for biomedical, health sciences and health care; CIO support; imaging; outsourcing; IT operations and maintenance; integration services; critical infrastructure protection and information assurance; digital government; enterprise management systems; and software development.

Armstead estimates the request for proposals, the evaluations and the selection processes will take months to complete. If all goes according to plan, the new GWACs should be awarded sometime during summer 2011.

"NIH employees who are interested in finding out more about GWACs, or about NITAAC and its online ordering systems, can call or email our Customer Support Center [1-888-773-6542, NITAACsupport@mail.nih.gov], email me [ma19d@nih.gov] or email Robert Coen, deputy program director [Robert.coen@nih.gov]," said Armstead.

NITAAC's web site—www.nitaac.nih.gov—was revamped last April, she noted, and is full of useful information. On each contract page, for example, a column of related links contains user guides for online purchasing systems, contract holder listings, recent awards and more. An events calendar lists trade shows and conferences where NITAAC is exhibiting, along with upcoming customer training. 📍

feedback

Have a question about some aspect of working at NIH? You can post anonymous queries at www.nih.gov/nihrecord/index.htm (click on the Feedback icon) and we'll try to provide answers.

Feedback: I use the Center Dr. entrance to come into NIH each morning. On several occasions, when I have an appointment, I arrive at NIH around 10:15 a.m. At this time, only one lane is open at the entrance and the other lane is blocked by either a police vehicle and/or cones. I have seen traffic backed up at the entrance onto Old Georgetown Rd. Some vehicles trying to avoid being on Old Georgetown go into the right (closed) lane and then jockey for a space in the left lane. Given that there is an officer in the booth during this time of day (when there are still many cars entering NIH), why can't both lanes remain open until either later in the morning or at all times that the entrance is open? This looks like an accident waiting to happen. I would suggest that both lanes at all entrances be open at all times for improved safety and enhanced flow of traffic.

Response from the Office of Research

Services: Initially, one lane of traffic was closed due to mandatory budget cuts. As part of the cuts, the staff was reduced at Center Dr. and Old Georgetown Rd. from two guards at the gate to one guard or police officer.

Since it is very difficult for police officers or security guards to provide quick and thorough security observations for two lanes of traffic, especially when additional passengers are in a vehicle, the NIH Police close one lane of traffic during non-rush hour periods when only one guard or officer is present. However, police officers and security guards are instructed to open a second lane of traffic to relieve congestion when they notice a backup at an entrance.

Feedback: The NIH shuttle [web] site used to have a very convenient function where one could enter from: and to: and it would pop up with the shuttle route/s one could take. Will this return?

Response from ORS: The service on the NIH Shuttle site that allowed employees to choose a destination (to/from) with a beginning and ending timeframe was removed due to technical difficulties. The Office of Research Services, Division of Amenities and Transportation Ser-

vices is working with IT staff to repair the program and hopes to have the service restored for employees to use in the near future.

Feedback: I would like to know if NIH has a sign in/out policy? I work for DEAS and they have a tendency to create their own policy, such as some employees are required to sign in/out while others are not, even if you do not work AWS or comp time.

Response from the Office of Human Resources: As a general policy, NIH does not require employees to sign in and out. However, the manual issuance regarding sign in/sign out states that there are some exceptions to this. Regarding employees who earn and use credit hours and/or overtime, ICs may establish internal reporting mechanisms, including signing in and out, to record the exact hours worked for the purpose of paying overtime or compensatory time and the earning and use of credit hours. If employees are not working overtime or earning/using credit hours, they normally do not sign in or out (unless they are working at varying locations or are on special leave procedures). 🗨️



2010 Executive Leadership Program graduates include (front row, from l) Maryland Pao, NIMH; Dexter Collins, NICHD; Andy Baxevanis, NHGRI; Heng Xie, NCCR; Wendy Liffers, OD; Gwen Collman, NIEHS; Michael Krause, NIDDK; Redonna Chandler, NIDA; Anna Ramsey-Ewing, NIAID; Doug Stenger, CIT; Valerie Florance, NLM. At rear are (from l) Petra Kaufmann, NINDS; Chris O'Donnell, NHLBI; Patricia Powell, NIAAA; Molly Wagster, NIA; L. Michelle Bennett, NHLBI; Mark Rotariu, NIDCD; Emmeline Edwards, NCCAM; Rene Etcheberrigaray, CSR; Bob Carter, NIAMS.

Leadership Program Graduates First Class

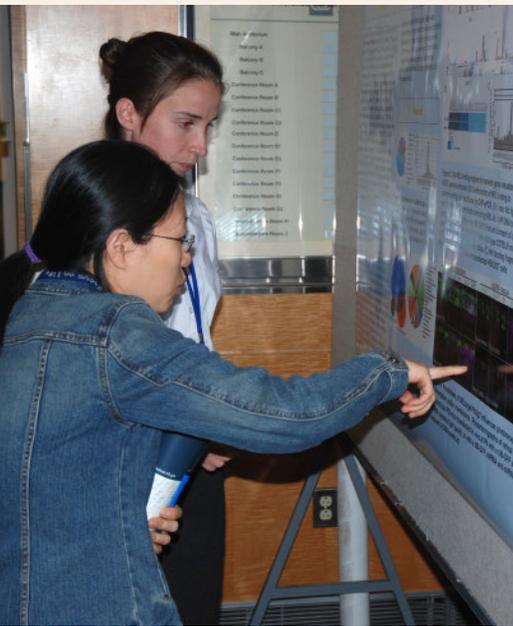
Twenty NIH leaders recently completed NIH's first competitive leadership program geared toward aspiring and existing "Top 5" leaders at NIH—the NIH Executive Leadership Program.

The commencement ceremony featured Dr. Lawrence Tabak, NIH principal deputy director, and Colleen Barros, NIH deputy director for management.

The program integrates the academic experience of NIH's educational partners—Brookings Executive Education and Washington University in St. Louis—and the hands-on involvement of senior NIH executives to provide a rewarding leadership experience for participants.

Key features of the program include: content themes Leading at the Top, Executive Communications, Policy Making on the Hill and Leading in Networks; opportunities to participate and/or lead high-priority work groups and committees; peer advising/mentoring; leadership coaching; and access to NIH executives in the form of panel discussions, lectures and special events.

For more information about the program, visit <http://trainingcenter.nih.gov/ExLP.html> or contact Keisha Berkley at (301) 496-6211.



RESEARCH FESTIVAL

CONTINUED FROM PAGE 1

Above, l:
Janina Gregorski (at rear) and Dr. Li Jia inspect a National Eye Institute poster on Wednesday of Research Festival week at Natcher Bldg.

Above, r:
Collins and Nirenberg's widow Dr. Myrna Weissman stand before the new exhibit honoring NIH's first intramural Nobelist.

Below, r:
NCI's Dr. Robert Kortum (r) explains his poster to Dr. Ira Berkower (l) of the FDA as John Pinski of NCI looks on.

PHOTOS: MICHAEL SPENCER, RICH MCMANUS

Collins recounted how Nirenberg began his work as the junior member of a small lab, but with ideas bold enough to attract the support of dozens of colleagues who set aside their own research to help him succeed.

"He trained a whole cohort of leaders in biomedical research," said Collins, and established a tradition of collaboration and team effort that formed the basis of such modern initiatives as the Undiagnosed Diseases Program and the Therapeutics for Rare and Neglected Diseases Program.

Many of those leaders, some of whom are themselves Nobel laureates, returned to campus at the end of Research Festival to honor Nirenberg. But between those powerful bookends lay the festival itself. "It's like our version of Woodstock," quipped Collins. "Three days of peace, love and science, minus the mud, I hope."

A near-fathomless feast of intellectual inquiry, the festival included three symposia covering 21 topics, more than 120 lectures and three poster sessions featuring more than 600 post-

ers. "From biochemistry to virology...we leave no cell or topic unturned," said Collins.

He recounted the festival's origins in 1986, when it was a 1-day celebration called NIH Intramural Research Day. "It began as a great idea that no one could say no to," Collins noted. It was not celebrated in 1987 because of NIH's centennial observance but has continued unabated since then.

"Research Festival has become critically important...especially to early and mid-career scientists," Collins said. "With Marshall's bold leap in mind, let's sit back, enjoy the festival and think about what the next great leap might be."

After the opening plenary session in Masur, the festival largely moved to Natcher Bldg. for the symposia and poster sessions. A large tent erected outside the cafeteria served as a food court during the festival. Another massive tent, located on lot 10-H behind the Clinical Center, housed the Technical Sales Association's annual display of wares.

Nirenberg was remembered once again at the festival's closing event on Oct. 8. That morning, nine scientists participated in a symposium on neurobiology, the field Nirenberg pursued for more than 40 years following his Nobel-winning work. In the afternoon, a memorial service in Nirenberg's honor attracted a full house in Lipsett Amphitheater, including Nirenberg's widow, Dr. Myrna Weissman, and other family members.

At the morning session, NHLBI's Dr. Alessandra Rovescalli, who spent the past 20 years in Nirenberg's lab, recounted her mentor's many contributions since his decision, at a 1966 meeting at Cold Spring Harbor Laboratory, to switch fields to neurobiology.



Rovescalli said Nirenberg assembled a huge collection of neural cell lines and developed assays to characterize them, in addition to identifying genes crucial to the development of the nervous system. But, like most other speakers, she concluded with a tribute to Nirenberg's humanity: "He was a very caring and very humble person who never failed to credit his colleagues."

Dr. Lloyd Greene of Columbia University Medical Center, who was a postdoc in Nirenberg's lab from 1971 to 1973, said, "Marshall was the quintessential lab person." Three attributes made him successful, said Greene: "First, the idea of a reductionist approach to neuroscience, which is the same approach he used to solve the [genetic] code. Second, he created a great atmosphere in the lab, full of creative ideas and advice. Also, there was a constant stream of visitors, many of whom were quite distinguished. Third, his handling of young scientists was remarkable. He said the important thing is to find your own project and focus on it without distraction."

Another former colleague, NHLBI's Dr. Alan Peterkofsky, who said he interacted with Nirenberg for almost 50 years, including more than 30 years in the same lab, said Nirenberg was unusually generous and never asked for credit on papers that Peterkofsky wrote. "That's a little different than the current style," he said.

At the afternoon memorial service, which Collins called "a family celebration of the life of Marshall Nirenberg," eight speakers paid tribute to their friend and colleague. Collins quoted Virgil: "Happy is he who has been able to learn the cause of things."

Scientist emeritus Dr. Maxine Singer, who has been associated with NIH for 54 years, said her abiding memory is of a youthful Nirenberg, a man whose "modest and quiet demeanor masked a fierce competitive streak. We desperately wanted Marshall and the NIH to succeed [in the race against better-known scientists to crack the genetic code]." She also lamented that "the opportunities for young scientists back then are now beyond reach but not, I hope, beyond imagining."

Nobel laureate (1985) Dr. Joseph Goldstein, who was at NIH from 1968 to 1970, could count five other future Nobel laureates besides himself as colleagues back then, along with a Shaw Prize winner, a former head of Merck Research Labs and the man who built Baylor Medical Center into a powerhouse (Dr. C. Thomas Caskey). "There must have been something in the water in Bldg. 10," he joked.



Speaking at the morning symposium on Nirenberg's career in neurobiology were (top, from l) Dr. Lloyd Greene of Columbia and Dr. Alan Peterkofsky of NHLBI. Those who remembered Nirenberg at an afternoon memorial service included (bottom, from l) Dr. Maxine Singer, Dr. Joseph Goldstein and Norma Z. Heaton.

"The thrill of discovery was in the air," he said of that era. "We worked hard and we had a lot of fun."

Norma Zabriskie Heaton, who spent more than 40 years as Nirenberg's lab tech, said her boss loved "quickies," fast little experiments that yielded useful answers. Nirenberg would prowl the lab leaving no detail overlooked, asking "How goes it?" and inevitably answering a colleague's reply with a quiet, "Terrific!"

"He always liked to end the week with a successful experiment," she said.

Weissman said that the National Library of Medicine will receive a large portion of her husband's papers, including the genetic code as it was originally reported.

"Next to his family, Marshall loved NIH with a deep passion," she said. "He turned down many lucrative offers over the years to remain at NIH. He didn't want to give up his scientific leadership for a position of oversight."

Following the memorial, Collins and NHLBI acting director Dr. Susan Shurin unveiled a new exhibit honoring Nirenberg, the third at NIH since 1992, in a hallway outside Lipsett.

"Generations will pass through this hallway and they will stop and marvel at the equipment, which now seems so antiquated," said Collins. "It's not about the equipment though, but the creativity and determination to do something important. We hope visitors will be inspired when they see it. It's a wonderful gift to have. Those who see it will be encouraged about what NIH can do." 🗨️



NIDDK ANNIVERSARY

CONTINUED FROM PAGE 1

Above, l:

Dr. Laura Calvi of the University of Rochester Medical Center, one of 12 recipients of the NIDDK 60th Anniversary Early Career Investigator/Scholar Awards, talks about her research with Dr. Daniel Wright, senior scientific advisor and program director for hematology research in NIDDK's Division of Kidney, Urologic and Hematologic Diseases.

Above, r:

Three former directors of NIDDK joined current NIDDK director Dr. Griffin Rodgers (second from l) at the institute's 60th anniversary symposium. They are (from l) Dr. Lester Salans, Dr. Phillip Gorden and Dr. Allen Spiegel.

PHOTOS: ERNIE BRANSON

covery of leptin, an advance for which he and Dr. Douglas Coleman shared the 2010 Lasker Award. "I felt like [NIDDK] gave me support in ways that went beyond the funding."

The Sept. 21 symposium—"Unlocking the Secrets of Science: Building the Foundation for Future Advances"—nodded to the past but focused squarely on the future. Its three co-chairs, Drs. Phillip Gorden, Lester Salans and Allen Spiegel—all former NIDDK directors—orchestrated a day as diverse as NIDDK's mission.

Celebrating Past Discoveries

While Friedman, an investigator in the Howard Hughes Medical Institute at Rockefeller University, spoke about "The New Biology of Obesity," other talks discussed the human gut microbiome, benign prostatic hyperplasia and chromatin boundaries, insulators and the epigenetic regulation of gene expression, the last a talk by intramural researcher Dr. Gary Felsenfeld.

"The speakers are national leaders in their fields, and we wanted to represent the breadth of the institute," said Gorden, currently an NIDDK intramural researcher. "All these talks represent major [ways] the institute has impacted the lives of people. In each area of our mission, people's lives are better."

Presenter Dr. Jeffrey Flier, dean of the Harvard University Faculty of Medicine, credited NIDDK funding for enabling many scientists in his field to continue their research. He saluted NIDDK intramural researchers as well. "The field of diabetes and obesity, as I pursued it for many years, had a lot of its origins in the NIDDK intramural research" program, he said.

Dr. C. Ronald Kahn, section chief of obesity at the Joslin Diabetes Center and professor of medicine at Harvard Medical School, was in NIDDK's intramural program for more than a

decade and has been a grantee for nearly two more. "NIDDK, despite the categorical name, actually covers almost anything," said Kahn, who advocated for a "whole body" approach to research during his presentation. "It has its focus areas, but it's also got the big picture."

Salans, now a professor at Mt. Sinai Medical School and director of Forest Laboratories, said the symposium provided not only a venue for bringing together diverse scientists at the top of their fields, but also served as an opportunity to show that "science can be as exciting as we heard today."

Mary Schluckebier, executive director of the Celiac Sprue Association, wanted to show her appreciation for NIH's efforts by traveling from Nebraska for the day's events. She was grateful for both the speakers' talks and the materials that showcased research advances. "It's very interesting to see how many commonalities there are and how much there still is to learn."

Spiegel, now dean of Albert Einstein College of Medicine, said the institute's impact over the last six decades has been, "in one word—huge.

"The work NIDDK has supported has measurably improved people's health and that deserves to be celebrated," he said. "But as much as NIDDK can take justifiable pride in its accomplishments, we certainly can't declare 'mission accomplished.' As NIDDK director Griff Rodgers states in his message in the 60th anniversary booklet, we need to build on these accomplishments if we hope to ameliorate some of the major diseases within NIDDK's mission."

Encouraging Future Advances

One way the institute is building on accomplishments is by nurturing early career scientists, 12 of whom were recognized at the symposium and received Early Career Investi-



At an anniversary gala, NIH principal deputy director Dr. Lawrence Tabak delivers the keynote talk.

gator/Scholar Awards at an anniversary gala the same evening.

The gala's keynote speaker, NIH principal deputy director Dr. Lawrence Tabak, continued the discussion, encouraging future generations in their pursuit of scientific discovery and emphasizing the need to convey to the public the importance of science.

"Science needs to be part of the conversation, because science is integral to the solution," he said. Referring to the young award winners, he added, "You have done, as part of your celebration, one of the most important things you can do," he said, in nurturing "the next generation of investigators."

As the institute moves onward, Gorden feels its "vital research community" is ready to tackle the challenges ahead, taking maximum advantage of technical advances to assist in their research.

From the first human liver transplant in the 1960s to the identification of genes or gene regions commonly associated with diabetes in this century, among many other advances, NIDDK-supported "research has laid the groundwork for today's discoveries," said Rodgers. "We anticipate major victories within some of these areas." 🌐

West To Speak at Global Health Seminar, Nov. 10

Dr. Sheila West, the El-Maghraby professor of preventive ophthalmology at Johns Hopkins School of Medicine, will give a lecture titled "New Directions for Trachoma Control: Lessons from the STAR and PRET Trials for Trachoma in Africa." The talk, to be held on Wednesday, Nov. 10 at 2 p.m. in Bldg. 31, Rm. 6C10, is sponsored by the trans-NIH global health working group. West's lecture is part of a series of occasional seminars examining best practices in the planning and conduct of international clinical trials, especially those in low- and middle-income settings.

Trachoma, an ocular disease caused by *Chlamydia trachomatis* infection, is a leading cause of blindness in the developing world. Repeated infections can lead to trichiasis, a sight-threatening condition in which the eyelids turn inward, causing the eyelashes to scrape and damage the cornea. Through the Surgery for Trichiasis, Antibiotics to prevent Recurrence (STAR) trial, West and colleagues established that surgery followed by a single dose of azithromycin significantly reduces the recurrence of blinding trichiasis. In other work, investigators have established that a biannual dose of azithromycin given over 3 years can eliminate trachoma in hyperendemic areas. Subsequent analysis found that this treatment regimen also significantly reduced childhood mortality.

In recognition of this work, Johns Hopkins received a \$10 million grant from the Bill & Melinda Gates Foundation to accelerate progress toward eliminating the disease. West leads the Gates Foundation-funded Partnership for the Rapid Elimination of Trachoma, which also includes the London School of Hygiene and Tropical Medicine; the University of California, San Francisco; Pfizer, Inc.; the World Health Organization; and the Trachoma Control Programs at the ministries of health in Tanzania, Ethiopia and the Gambia.

Sign language interpreters will be provided. Individuals who need reasonable accommodation to participate should contact Robert Eiss, (301) 496-1415 (TTY callers should use the Federal Relay Service at 1-800-877-8339).



Dr. Sheila West (c) in Niger with youngsters suffering from trachoma

Children, Males and Blacks at Increased Risk For Food Allergies

A new NIH-funded study estimates that 2.5 percent of the U.S. population has food allergies. Food allergy rates were found to be higher for

children, non-Hispanic blacks and males, according to the researchers.

The research, which appears in the October issue of the *Journal of Allergy and Clinical Immunology*, is the first to use a nationally representative sample as well as specific immunoglobulin E (IgE) or antibody levels to quantify allergic sensitization to common foods, including pe-

anuts, milk, eggs and shrimp. The hallmark of food allergy is production of IgE antibodies to a specific food protein. Once IgE antibody is made, further exposure to the food triggers an allergic response.

“This study is very comprehensive in its scope,” said Dr. Darryl Zeldin of NIEHS, senior author on the paper. “It is the first study to use specific blood serum levels and look at food allergies across the whole life spectrum, from young children aged 1 to 5, to adults 60 and older. This research has helped us identify some high risk populations for food allergies.”

NIH Scientists Discover How Dengue Virus Infects Cells

NIH researchers discovered a key step in how the dengue virus infects a cell. They found out how the dengue virus releases itself from the protective membrane that shields it as it penetrates deep inside the cell. The discovery allows researchers to study the invasion process in the laboratory and provides a means to test potential treatments for the virus. Dr. Leonid V. Chernomordik of NICHD and colleagues published their findings online Oct. 7 in *PLoS Pathogens*.

Transmitted by mosquitoes, dengue infects up to 100 million people each year; 22,000 people—most of them children—die from dengue annually, according to the World Health Organization.

To infect a cell, the virus binds to the cell membrane. The cell membrane engulfs the virus,

enveloping it in a pouch-like structure known as an endosome. To begin the infection process, the virus delivers its hereditary material into the cytosol, the fluid interior of the cell, where it begins reproducing itself. To do so, however, it must first release itself from the endosome. The virus does this by fusing its membrane with the endosomal membrane. When the two membranes come together, they form a pore through which the virus’s genetic material is released.

Study Details Structure of Potential Target for HIV and Cancer Drugs

In a technical *tour de force*, structural biologists funded by NIH have determined the three-dimensional structure of a molecule involved in HIV infection and in many forms of cancer. The high-resolution structure sheds light on how the molecule functions and could point to ways to control its activity, potentially locking out HIV and stalling cancer’s spread. The findings appeared in the Oct. 7 advance online issue of *Science*. The NIH Common Fund and the Protein Structure Initiative funded the study.

The molecule, CXCR4, is part of a large family of proteins called G-protein coupled receptors (GPCRs). These molecules span the cell’s membrane and transmit signals from the external environment to the cell’s interior. GPCRs help control practically every bodily process, including cell growth, hormone secretion and light perception. Nearly half of all drugs on the market target these receptors.

Gene Variations that Alter Key Enzyme Linked To Prostate Cancer

Researchers at NIH have found that variations in a gene for an enzyme involved in cell energy metabolism appear to increase the risk for prostate cancer.

The genetic variations all impair the enzyme phosphodiesterase 11A (PDE11A), which helps regulate a cell’s responses to hormones and other signals. Previous studies by NIH researchers have linked genetic variations that inactivate PDE11A with increased susceptibility to testicular cancer and adrenal tumors.

Scientists found that a group of men with prostate cancer were nearly four times more likely to have variations affecting the activity of PDE11A than did men who did not have prostate cancer.

“Our study indicates that PDE11A one day may have a place in genetic screening for predisposition to prostate cancer,” said senior author Dr. Constantine Stratakis of NICHD. The findings were published online in the *Journal of Clinical Endocrinology and Metabolism*.—compiled by Carla Garnett



A new NIH-funded study estimates that 2.5 percent of the U.S. population has food allergies.



Sharon Nouzari Louis (far l), outreach program coordinator of the NIAMS Career Development and Outreach Branch, and Dr. Mario Cerritelli (far r), chief of the branch, pose with students and two staff members from the SEED School of Washington, D.C.

SEED Students Visit NIAMS, NIH Campus

Students from the SEED School of Washington, D.C., recently visited NIH as part of a newly formed partnership with the Intramural Research Program of the National Institute of Arthritis and Musculoskeletal and Skin Diseases.

The SEED (Schools for Educational Evolution and Development) Foundation opened its first school in Washington in 1998. The school is a tuition-free, lottery selection-based boarding school that aims to provide an academically rigorous college preparatory curriculum to middle and high school students from underprivileged inner-city areas. When President Obama recently visited the SEED School of Washington, D.C., he praised the program as a “true success story” with 97 percent of graduates being admitted to college. In the past year, the school was also featured in a segment on CBS’s *60 Minutes* television show as well as on CNN.

As part of the new partnership, 15 students from the school, two of whom were D.C. Science Fair winners, visited with NIAMS IRP staff for a special daylong event featuring presentations and tours. SEED staff members Keven Cotton, external operations coordinator, and Lesli Brannon, student life logistics coordinator, accompanied the youngsters.

During the visit, Dr. Mario Cerritelli, chief of NIAMS’s Career Development and Outreach Branch, gave a presentation on career opportunities at NIH and urged the students to obtain a solid and broad education, in addition to focusing on science and math. He informed the students of the importance of bringing diverse perspectives to biomedical research, which promotes greater innovation in solving the complex health problems facing our nation today.

The students also learned about animal care and the use of animals in research from Dr. Crystal Brobst-Wormell, a clinical veterinarian. This was followed by tours of the Clinical Center led by Cerritelli and of a laboratory in the NIAMS Genetics and Genomics Branch by Geryl Wood, a research assistant. Students were also treated to lunch in the CC cafeteria, providing an opportunity to network with staff from the Career Development and Outreach Branch.

The visit showed the students the variety of research taking place at NIH and, organizers hope, inspired them to consider careers in science.



Pioglitazone Severe Asthma Clinical Trial

Patients with severe asthma may be eligible to participate in a study at the Clinical Research Center. The purpose of this study is to determine if a widely used agent for diabetes can improve asthma. Eligible patients will receive a comprehensive evaluation. There is no cost for participating in the study. For more information, contact our research coordinator, toll free, at 1-877-NIH-LUNG (1-877-644-5864), ext. 2 or via email at LungStudy@nhlbi.nih.gov. You may also contact the NIH Patient Recruitment and Public Liaison Office via TTY, 1-866-411-1010.

Healthy Volunteer Smokers Needed

The Molecular Imaging Branch, NIMH, is looking for healthy male and female volunteers who smoke occasionally, or regularly, with no current or history of psychiatric illness, between the ages of 35 to 65, for a multitude of studies. Studies may include PET scans, MRI, psychological interview, neuropsychological testing and other procedures depending on which project you choose to participate in. Call (301) 435-8982 for additional information.

Weight Management Program

African-American women between the ages of 18 and 60 and free from any major medical conditions/diseases are needed for a study addressing approaches to weight loss and maintenance. Eligible volunteers will receive group counseling for weight management at the Uniformed Services University in Bethesda. Additional compensation may be provided. To see if you qualify or to get more information, call (301) 295-9718.

Parents of Teen Daughters

Are you concerned about your daughter’s eating? Is she above average weight but not yet obese? Consider participating in a research study. The study tests how effective group programs are in the prevention of excess weight gain. Sought are girls ages 12-17 years who are above average weight and report loss of control eating. The study is conducted at the Uniformed Services University of the Health Sciences and the Clinical Center. Eligible participants will be compensated. For more information call 1-800-411-1222 (TTY 1-866-411-1010). Se habla español. Refer to study o8-CH-0139.



In kickoff photos (from l): NIH director Dr. Francis Collins (l) and NIMH director Dr. Tom Insel (2nd from r) get help starting this year's CFC from young singer Kaitlyn Maher and speaker Michael Curtin Jr.; Collins shares the stage with singing phenom Maher; a solo Maher begins CFC 2010 on the right note.

CFC Kickoff Sets Tone for Yearly Giving Campaign

Beautiful fall weather, the chance to meet face-to-face with charity representatives and a little star power all made for an excellent turnout Oct. 7 for the Combined Federal Campaign's annual kickoff event, hosted this year by the National Institute of Mental Health.

NIMH organizers wearing tie-dye shirts welcomed hundreds of NIH'ers to a tent set up between Bldgs. 31 and 33. Staff from several nonprofits well-known to the NIH community such as the Children's Inn, Friends of the Clinical Center, the Foundation for NIH, Special Love and Really Awesome Times stood side-by-side with representatives from groups such as the Audubon Naturalist Society, A Wider Circle, EarthShare, Youth for Tomorrow and Partners in Health. Everyone brought messages to share with potential supporters.

Following opening remarks by NIMH director Dr. Thomas Insel and NIH director Dr. Francis Collins, Michael Curtin Jr., CEO of D.C. Central Kitchen, offered his impressions on giving to non-profit organizations.

"The decision to give is very personal and I urge you to take those decisions very seriously," he said, suggesting that NIH givers perhaps redefine for themselves what donating means. "Don't think of it as charity. Think of it as a community-based business. You are making an investment in your community. Demand a return on that investment."

The event had an extra sparkle with the addition of 6-year-old Kaitlyn Maher of Ashburn, Va., who 2 years ago, at age 4, appeared as one of 10 finalists on the program, *America's Got Talent*. With a voice that belied her age, Maher sang the *National Anthem*, *God Bless the U.S.A.*, and later, with Collins on guitar, *Over the Rainbow*.

Visitors to the event grew silent and stood on tip-toe to see the tiny girl with the enormous voice. Maher, who Collins said "brightens up every space she enters," smiled as the duo finished their song, adding a meek "thank you" into the microphone before stepping off the stage and back into child mode, skipping around the event tent.

Another event—Margaritaville—continued the kickoff's enthusiasm on Oct. 13. A beach-like atmosphere, complete with NIH-style "Parrotheads," set the stage behind the Neuroscience Center on Executive Blvd. Slushies and lemonade were available as was information on several organizations that benefit from the CFC.

This year's goal for NIH's CFC effort is \$2.3 million, which accounts for nearly half of the \$5 million goal set for the whole Department of Health and Human Services.—Valerie Lambros



At a makeshift Margaritaville, clockwise from above:

Representatives from various organizations that will benefit from CFC donations offer information about their missions.

Several attendees don wild spectacles to mug with Marc Rosenberg, the "Lemonade Shakin' Guy."

NIMH's Toni Boswell exchanges an exuberant hug with Rosenberg.

Jessica Schwartz (l) and Theresa Tolbert, both of NIMH, volunteer at the event's bamboo booth/luau hut.

PHOTOS: MICHAEL SPENCER

