

May 2006









NIEHS Spotlight

- Daycare Center Dedication
- New NIEHS Strategic Plan Unveiled
- > The Strategic Plan in Action
- Earth Day 2006
- ➤ Children Learn What Parents Do All Day
- > Gadgets Galore: Spring Vendor Show
- > Awards



Science Notebook

- ► <u>DERT Search function</u>
- **Papers of the Month**



Did You Know?

- Retirements: Judy Bullard and Joyce Bumann
- Family Day at NIEHS
- > CFC Theme Contest
- Up and Coming



NIEHS Spotlight

Daycare Center Dedication



Rich Freed, executive officer at NIEHS, was master of ceremonies at the First Environments dedication ceremony April 24.

Below, children from First Environments led the Pledge of Allegiance. (Photos by Steve McCaw, Image Associates) First Environments Early Learning Center, the daycare center NIEHS shares with EPA, officially opened April 24 with a dedication ceremony attended by government officials and Congressional representatives.

Rich Freed, executive officer of NIEHS, served as master of ceremonies, along with William Laxton, director of the EPA Office of Administration and Resources Management. Freed's daughter, Emily, attends First Environments. Congressmen Brad Miller and David Price also attended and spoke at the ceremony. The Congressmen both spoke about the 9 year appropriations battle that enabled construction of the new facility, which is located on the

EPA campus near NIEHS's main campus.

NIEHS Director David Schwartz commended staff who worked to develop the energy-efficient, low chemical exposure building. That concept illustrated NIEHS's commitment to environmental sustainability, Schwartz said.





New NIEHS Strategic Plan Unveiled

One year into his role as the director of NIEHS, David A. Schwartz, M.D., unveiled a new strategic plan aimed at challenging and energizing the scientific community to use environmental health sciences to understand the causes of disease and to improve human health. The plan, "New Frontiers in Environmental Sciences and Human Health" fundamentally changes the way NIEHS approaches research. Traditionally, NIEHS has supported individual scientists whose work focused on either basic biological responses to environmental agents or environmental problems in public health. The new strategy emphasizes research focused on complex human disease, and calls



for inter-disciplinary teams of scientists to investigate a broad spectrum of disease factors, including environmental agents, genetics, age, diet, and activity levels. Recent advances in technology make this emphasis on human health and new integrative approach possible.

"Given that almost every human disease can be caused, modified, or altered by environmental agents, the NIEHS is in a unique position to focus on the interplay between exposures and biological responses," said Schwartz. He cites the Institute's work in the areas of genetic toxicity, inflammation, and oxidative stress, as well as its contribution to improved public health as examples of its strengths.

The seven interrelated goals established in the new NIEHS Strategic Plan focus around four critical elements including basic research, human health and disease, global environmental health, and training. The goals are:

- Expand the role of clinical research in environmental health sciences.
- Use environmental toxicants to understand basic mechanisms in human biology.
- Build integrated environmental health research programs to address the crosscutting problems in human biology and human disease.
- Improve and expand community-linked research.
- Develop sensitive markers of environmental exposure, early (pre-clinical) biological response, and genetic susceptibility.
- Recruit and train the next generation of environmental health scientists.
- Foster the development of partnerships between the NIEHS and other NIH institutes, national and international research agencies, academia, industry, and community organizations to improve human health.

Each of the broad goals includes examples of necessary steps for achievement. For example, to strengthen the Institute's role in clinical research, NIEHS will encourage the training of more Ph.Ds and physicians to conduct and/or support this type of integrated research.

The plan was published as a supplement to the May issue of the journal *Environmental Health Perspectives* and is available online at http://www.niehs.nih.gov/external/plan2006/.

The NIEHS has already begun implementing some new programs to meet its goals and objectives. The establishment of the Outstanding New Environmental Scientist (ONES) program, http://grants.nih.gov/grants/guide/rfa-files/RFA-ES-05-005.html, to be awarded to at least six recipients for the first time this year will help to bring talented new scientists to the field. The NIEHS is also planning to develop an outpatient clinical research unit at its facility in Research Triangle Park, N.C.

Another major area identified as critical is the need to develop sensitive, quantitative markers to assess levels of environmental exposures at the individual level. One way this will be accomplished is through the new Genes and Environment Initiative, http://www.niehs.nih.gov/oc/news/gei.htm, a research effort at NIH to

combine a type of genetic analysis and environmental technology development to understand the causes of common diseases.

To ensure a more integrated approach to research, NIEHS has developed an Office of Translational Research and has initiated several new opportunities in integrated research. NIEHS has recently announced the Director's Challenge for in-house scientists and a new research program called DISCOVER (Disease Investigation for Specialized Clinically Oriented Ventures in Environmental Research) for scientists outside NIEHS. Both the Director's Challenge and the DISCOVER program are designed to support teams of researchers focused on integrating environmental health research with patient-oriented and population-based studies.

Another goal articulated in the plan includes fostering the development of partnerships with other Institutes, agencies, academia, industry and community organizations. "We see this plan as an evolving document that reflects the current collective thinking about the direction the field of environmental sciences needs to go," said Schwartz.

The Strategic Plan in Action

The NIH Roadmap – Though the NIH Roadmap pre-dates the NIEHS Strategic Plan, the Roadmap supports the Plan, and Goals of the Plan support the Roadmap.

- NIEHS through the NTP has formally participated in the NIH Roadmap Molecular Libraries Initiative (MLI) by adding toxicity testing capability to the MLI effort.
- This collaboration is allowing rapid implementation of the NTP's High Throughput Screening Assays Program by providing NTP access to testing laboratories. Thereby NTP links data on the biological activity of environmental substances generated from high throughput screening.

DISCOVER (Disease Investigation for Specialized Clinically Oriented Ventures in Environmental Research) brings together basic, clinical, and population-based scientists to conduct integrative research programs on:

- Etiology and pathogenesis of environmentally related disease,
- Use exposure to understand interplay of genetic and environmental factors,
- Apply state-of-art technologies and methods to improve human health.

ONES (The Outstanding New Environmental Scientist Award)

- A first independent research grant for young scientists of uniquely distinguished talent,
- Provides a strong career start in launching innovative research programs focusing on environmental exposures, human biology, human pathophysiology, and human disease.

Genes and Environment Initiative: Launched by NIH to accelerate the understanding of how genetic and environmental risk factors influence health and disease

- Two main components: A system for analyzing genetic variation in groups of patients with specific diseases, and technology development to produce and validate new methods for monitoring environmental exposures related to disease,
- GEI Working Group is co-chaired by NIEHS Director David Schwartz and Francis Collins, Director of the National Human Genome Research Institute,
- Industry partners Pfizer, Inc., and Affymetrix are contributing over \$20 million through a public-private partnership.

Earth Day 2006

Among the displays for Earth Day at NIEHS, NC Green Power set up a solar-powered fan as an example of a renewable energy source available in North Carolina. According to a brochure by NC Electric Power, power company customers in North Carolina can add \$4 to their monthly electric bills that will be used to offset the emission of carbon dioxide, sulfur dioxide and nitrogen oxide by reducing the amount of coal required to provide power in the state.

Other booths touted the benefits of ride-sharing to get to work or promoted ecological activities and wildlife protection. At the recycling booth, information was available on how to recycle common items at NIEHS, such as paper, plastic, cardboard, cans, glass and the more exotic recyclables such as toner cartridges, lab ware, pipettes and polystyrene. It was standing-room only for most of the afternoon at the ever-popular plant exchange.

Another booth provided information about bluebird houses. NIEHS has 45 houses installed across campus to encourage bluebirds to nest. The program started in 1973 when employee Grant McNichols installed the first bluebird box. Jerry Phelps and his daughter, Emily, took over the program 13 years ago, when Emily was just 2 years old. They came to NIEHS on weekends every spring and fall, cleaning old nests from the boxes and making repairs as needed. Phelps also added plastic reinforcements to doorways of the birdhouses to provide better protection for the nests and houses. Now, the Phelps have turned over bluebird house maintenance duties to Susanna Clark, who has helped with the tasks for a number of years.





Charles Alden, above, a technical writer-editor for the National Toxicology Program, checks out a solar display from NC Green Power. The display used a solar panel to power a fan. Left, Jerry Phelps (on the right) accepts an award for the work he and his daughter, Emily, did over the past 13 years to encourage bluebirds to nest at NIEHS. A bluebird house with an engraved plaque to honor their work will be installed on campus. Emily Phelps was unable to attend the presentation. Meanwhile, Susanna Clark (second from left) will take over maintenance of the birdhouses. Dick Sloane (far left) and Colleen Anna (third from left) are the co-chairs of the NIEHS Environmental Awareness Advisory Committee. (Photos by Colleen Chandler)

Children Learn What Parents Do All Day





Above left, Tong Xuan Guo, daughter of Hong Zhu, makes a bird feeder using peanut butter on a pine cone, which she then rolls in bird seed. Above right, Jada Council, center, daughter of Glenda Corniffe, gets some help from Magdalena Wielgus, left, daughter of Albert Wielgus. The giant Lego box and platforms on display at the Earth Day booth for First Environments Early Learning Center attracted the kids as they passed by during Take Your Child to Work Day. Both events were held April 20 at NIEHS. Below, the kids ended the day with ice cream sandwiches in the cafeteria, but started the day decorating bags to hold the goodies they collected throughout the day. (Photos by Colleen Chandler)





Gadgets Galore: Spring Vendor Show



Above, Bill Sigmon, director and owner of Kennedy Office Supply, talks with Kelly Godfrey, supply technician at NIEHS, and Jeana Sanner, account manager at Kennedy. Below, left, research fellow Carlos Navarro checks out the Biomek 3000 PCR liquid handler. Bill Martyanik, representing Beckman Coulter, explains how the equipment works. (Photos by Colleen Chandler)



The annual NIEHS
Spring Vendor Show
brought in about 30
vendors, including
international vendors.
Employees browsed the
rows of wares in the
Rodbell Auditorium,
checking out the latest
technology.

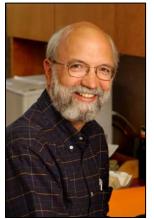
The show provides an opportunity for NIEHS staff to explore the possibilities with hands-on displays of new technology.

The technology on display varies slightly each year, but generally spans information technology to biotechnology and related machinery. Vendor show organizer Marcus Harris said more than 400 NIEHS employees and contractors attended the event.

Among the displays was the Biomek 3000 PCR liquid handler, which automatically does the pipetting, freeing lab techs to do other things, said Bill Martyanik, representing vendor Beckman Coulter.

Awards

Allen Wilcox: UNC School of Public Health Distinguished Alumnus



The University of North Carolina School of Public Health distinguished alumni awards were presented March 29. One of those awards went to NIEHS's Allen Wilcox, M.D., Ph.D., M.P.H.

Wilcox, a senior investigator in the Epidemiology Branch, was the 2006 recipient of the Harriet Hylton Barr Distinguished Alumnus Award, the single highest alumni honor given by the UNC School of Public Health.

The award recognizes leadership, experimentation, collaboration and innovation within the profession; impact within the practice arena; and outstanding service beyond the requirements of the recipient's employment.

Wilcox's leadership as president of the three major epidemiologic societies -- Society for Pediatric Epidemiologic Research, Society for Epidemiologic Research and the American Epidemiological Society -- influenced not only generations of researchers, but also the research direction and national policy of reproductive health care in the United States and the in the world, according to the award citation. He is a universally recognized distinguished leader within the broader epidemiology community.

Wilcox serves as editor-in-chief of the journal *Epidemiology*. His research interests span the range of reproductive and perinatal epidemiology, with studies on fertility, pregnancy loss, fetal growth and birth defects. He is currently carrying out an investigation of genetic and environmental causes of facial clefts, based on a large case-control study conducted in Norway.

Gary Boorman: University of Minnesota Distinguished Alumni

The University of Minnesota College of Veterinary Medicine honored the research accomplishments of its graduate students, faculty, alumni, and research partners at its annual Points of Pride Research Days on March 14-15.

The Distinguished Research Alumni Award went to Gary Boorman, a member of the college's class of 1967. Boorman, a pathologist in the Environmental Toxicology Program, presented the Points of Pride Distinguished Research Alumnus Seminar, "The Role of Veterinarians on Research in the Genomic Era."

Sylvia Ramos: UNC Women's Health Day, Hulka Innovators Award

Research fellow Sylvia Ramos received the Hulka Innovators Award at the Seventh Annual Women's Health Research Day at the University of North Carolina for her work, " ΔN -ZFP36L2 mouse: a new model of female infertility and early embryonic development."

The event was held April 5, with a poster preview on April 4. The Hulka Innovators Award is named in honor of Jaroslav Hulka, a renowned professor emeritus of obstetrics, gynecology and maternal and child health at UNC. He made outstanding contributions to laparoscopy, endoscopy and minimally invasive surgery through development of new instrumentation and techniques. The award in his honor is made in recognition of innovation in methods, population, study design, or study content area, with focus on novel contributions to advancing science.

"I am very proud that Perry Blackshear, the clinical director, allowed me to pursue such a quest by providing the necessary research conditions and excellent scientific mentorship. In Perry's lab I had the right environment to transform myself from an immunologist into a female reproductive biologist," Ramos said.

John Seubert: Former NIEHS Postdoc Receives Canadian Junior Faculty Grant

John Seubert, a former postdoc in Darryl Zeldin's Laboratory of Respiratory Biology who is now a faculty member at the Pharmacy and Pharmaceutical Sciences division of the University of Alberta, has received a grant from the Canadian Institutes of Health Research (CIHR). The grant is similar to an NIH R01 grant.

Seubert said the grant is a natural continuation of his post-doctoral research and will compliment his work at NIEHS. The CIHR-funded project will look at the protective role of fatty acids – particularly arachidonic acid – in the heart.

"I was very fortunate to have worked under Darryl and at NIEHS. It was an excellent experience which has provided me with many opportunities and greatly enhanced my career. I feel I would not have excelled to my present position without the support and training I received while at the institute," Seubert said via e-mail.



Grantee Lora Fleming: Florida Outstanding Woman in Public Health



University of Miami epidemiologist Lora Fleming was named the Florida Outstanding Woman in Public Health for 2006 by the University of South Florida College of Public Health.

The College bestows the award each year on a woman whose career accomplishments and leadership have contributed significantly to the field of public health in Florida. Fleming was honored at an awards ceremony at the USF College of Public Health in Tampa, Fla. She is a professor in the Department of Epidemiology and Public Health at the University of Miami Miller School of Medicine. She holds a joint appointment in the Rosenstiel School of Marine and Atmospheric Science.

Fleming studies the environmental toxicity of algal blooms on human health. She has been instrumental in promoting occupational and environmental health at the local, state and national levels.

Grantee Philip Landrigan: 2006 Children's Environmental Health Champion Award

The 2006 Children's Environmental Health Champion award was presented to NIEHS grantee Philip J. Landrigan, M.D., M.Sc. The Children's Environmental Health Champion is an honorary award to recognize outstanding efforts and commitment to advancing environmental health issues.

Landrigan is a pediatrician and the Ethel H. Wise Professor and chair of the Department of Community and Preventive Medicine of the Mount Sinai School of Medicine in New York City. He holds a professorship in pediatrics at Mount Sinai and directs the Mount Sinai Center for Children's Health and the Environment and the Mount Sinai Pediatric Environmental Health Specialty Unit.



Science Notebook

DERT Search function

A new search capability has been added to the NIEHS Extramural Research Portfolio web pages. All active NIEHS grants can now be searched by principal investigator, institution name, grant number, project title, description, abstract, and/or CRISP terms/keywords. To access the new search screen, choose the *Specific Search* link or button on the Portfolio home page (https://www-apps.niehs.nih.gov/portfolio/).

Any portion of a search field can be entered to yield results. For example, to pull up a list of all active R01 grants, enter R01 in the grant number field. Or, to find all active grants that have DNA repair in the grant abstract, enter DNA Repair in the *Description/Abstract* field.

Searches can be conducted using two different words or phrases in the *Project Title, Description/Abstract,* and CRISP Terms/Keywords fields, using the and/or operator. For example, DNA Repair can be entered in the first field of the Title, choose the and operator, and enter Mouse in the second field, to yield a list of all grants with DNA Repair and Mouse in the title.

Any combination of two or more fields can be used to perform a search. For example, you can enter R01 in the *Grant Number* field and *DNA Repair* in the *Project Title* field, to yield a list of all active R01 grants with *DNA Repair* in the title. Or, enter R01 in the *Grant Number* field, *DNA Repair* in the *Description/Abstract* field, and *Mouse* in the CRISP *Terms/Keywords* field, to yield a list of all active R01 grants with *DNA Repair* in the grant abstract and *Mouse* in the CRISP terms.

Searches by science code or state can still be conducted using the science code or state links on the *Portfolio* home page, or by using the Enter the Site button at the bottom of the home page. And, search results can be downloaded into an Excel spreadsheet or Word document.

Searches saved to an Excel spreadsheet provide the capability of linking back to grant information in the Portfolio web pages by clicking on one of the *Title* links; or linking back to a list of publications associated with a grant by clicking on the highlighted number in the *Pub* field.

Papers of the Month

By Jerry Phelps

1) Walsh T, Casadei S, Coats KH, Swisher E, Stray SM, Higgins J, Roach KC, Mandell J, Lee MK, Ciernikova S, Foretova L, Soucek P, King MC. Spectrum of mutations in BRCA1, BRCA2, CHEK2, and TP53 in families at high risk of breast cancer. JAMA. 2006 Mar 22;295(12):1379-88. (Mary-Claire King, Ph.D., Departments of Medicine and Genome Sciences, University of Washington, NIEHS Grant R01ES013160.)

Implications: This study demonstrates that commercial genetic testing does not detect all mutations in women with a strong familial history of breast and ovarian cancer. According to Dr. King, these findings are important because "risk reduction interventions for those with mutations are highly effective." The results suggest that commercial testing should be expanded to include these and possibly other mutations so that at-risk women have the best information available when deciding to undergo invasive interventions such as preventive mastectomy or ovary removal.

2) Dominici F, Peng RD, Bell ML, Pham L, McDermott A, Zeger SL, Samet JM. Fine particulate air pollution and hospital admission for cardiovascular and respiratory diseases. JAMA. 2006 Mar 8;295(10):1127-34. (Francesca Dominici, Ph.D.; Scott L. Zeger, Ph.D.; and Jonathan M. Samet, MD; Departments of Biostatistics and Epidemiology, Bloomberg School of Public Health, Johns Hopkins University, NIEHS Grants R01ES12054 and P30ES03819.)

Implications: This study shows that exposure to PM2.5 at levels within the current standard is a risk factor for cardiovascular disease in elderly persons. Additional efforts need to be targeted towards identifying the sources of these particles and designing new strategies to prevent their release. Additional biomedical strategies include identifying the characteristics of fine particles responsible for these adverse effects so that new strategies can be developed to prevent or treat them.

- 3) Stephens M, Sloan JS, Robertson PD, Scheet P, Nickerson DA. Automating sequence-based detection and genotyping of SNPs from diploid samples. Nat Genet. 2006 Mar; 38(3):375-81. (Deborah Nickerson, Ph.D. Department of Genome Sciences, University of Washington, NIEHS Contract N01ES15478.)

 Implications: The new algorithm presented by these investigators makes considerable advances in methods for SNP identification and genotyping and could greatly ease and enhance automation in these efforts. PolyPhred is available free-of-charge to academic and non-profit institutions and is compatible with a number of computing platforms. To learn more about the software, visit: http://droog.gs.washington.edu/PolyPhred.html.
- 4) Thomas DM, Francescutti-Verbeem DM, Kuhn DM. Gene expression profile of activated microglia under conditions associated with dopamine neuronal damage. FASEB J. 2006 Mar;20(3):515-7. (Donald M. Kuhn, Ph.D., Department of Psychiatry and Behavioral Neurosciences and Center for Molecular Medicine and Genetics, Wayne State University, NIEHS Grant P30ES06639.)

Implications: Microglial activation has been linked to numerous neurological conditions including Alzheimer's disease, amyotropic lateral sclerosis, Creutsfeldt-Jakob disease, and especially those that target the dopamine-producing neurons such as Parkinson's disease. Therefore the panel of genes differentially regulated by the three microglial activators in these experiments provides a number of possibilities for future studies to search for early biomarkers of neuronal damage associated with activated microglia.



Did You Know?

Retirements: Judy Bullard and Joyce Bumann

Two more NIEHS employees bade farewell to friends and coworkers in April.

Judy Bullard

Judy Bullard has been at NIEHS since 1981. She moved to Durham with her two daughters. At the time that she made the move, she did not know a soul in the area.

When Bullard came to NIEHS, mag card machines were still being used. She was one of the first to get a DecMate computer at her desk. She said it is her sense of humor that enabled her to get through tough times and transitions within the Institute. Being able to laugh, she said, has helped her keep her sanity.

Both of Bullard's daughters finished high school in North Carolina and both received college degrees. She married her husband, Herb, in 1987. Both her daughters married and left home. Bullard intends to spend some of her free time with her four grandchildren, who have been her main topic of conversation for the past 14 years. She also has three step-grandchildren.

She hopes to see all of her family members more often now that she is retired. She has two older brothers and an



Joyce Bumann, left, Freedom of Information Act and Privacy Act specialist, and Judy Bullard, long-time secretary in the National Toxicology Program, retired in April. (Photo by Colleen Chandler)

older sister. She and Herb enjoy cruises and plan to do some traveling. They are both active in their church and will spend more time with those activities as well. She said she has fond memories of working at NIEHS and learning about biomedical research.

Joyce Bumann

Here is the new theme in Joyce Bumann's life: Tennis forever, housework whenever.

Bumann, who has been at NIEHS since 1990, said she intends to re-establish her "piddling" skills during retirement. There are many things, she said, that she has not had time to do at home that she intends to do now that she will have more time on her hands.

An avid tennis play, Bumann is sure to be found on the courts in Durham, where she lives. Tennis was the theme of her retirement party on April 28, "Advantage Bumann." Bumann is recovering from a broken bone in her shoulder and has taught her coworkers a number of physical-therapy style exercises, all demonstrated with a discussion on the physical benefits of playing tennis.

At NIEHS, Bumann handled requests under the Freedom of Information Act and the Privacy Act. Much of her work involved reviewing material requested by individuals, organizations and reporters. She interacted with NIH FOIA and Privacy Act staff to coordinate the release of information.

Bumann also spent a lot of her time educating NIEHS staff about the requirements of FOIA, and what materials might be included in requests for information. Such requests could include e-mails, handwritten notes and any memos or electronic documents. She patiently recited the requirements of the act, time and time again.

Coworkers in the Office of Communications and Public Liaison came up with 10 reasons why Bumann should NOT retire:

- 10) NIEHS will lose its reputation for having the fastest redact marker in the Southeast.
- 9) We'll no longer have a resident "mold" expert.
- 8) Someone else will have to face the next platoon of tobacco lawyers who demand copies of our files.
- 7) We will no longer be up on all the latest physical therapy exercises. Who will lie on the floor and climb the walls as we wander by?
- 6) NIEHS will lose all hope of ever having an employee win at Wimbledon.
- 5) The Institute will lose one of its prime examples of the Motor Trend car of the year, the Honda Civic.
- 4) Her travel agent isn't ready for the extra work load.
- 3) Joyce's leaving may result in her drinking less tea with milk, causing a slump in the economy of several tea-growing nations and dairy farmers.
- 2) She is the only person in the South who has decoded the Freedom of Information Act. Dan Brown's Da Vinci Code's got nothing on Joyce.

And the number one reason Joyce can't leave NIEHS:

1) It goes without saying.....we will all miss her too much!!!

Family Day at NIEHS

The planning committee has been busily planning the return of the NIEHS Family Day. Old timers here may remember when it was a regular event. It returns May 4, with a host of activities for employees and their loved ones. The preliminary schedule for the event shows activities beginning at 3 pm. Director David Schwartz will welcome the crowd at 3:30, and a picnic dinner will be served at 4 p.m. Activities include making hats from the Scrap Exchange, a cake walk, face painting, hula hoops, bubbles, a balloon toss, a clown, ping pong games and nature walks.

CFC Theme Contest

Wanted: Creative Ideas

In preparation for the 2006 Combined Federal Campaign, the search is on for a new theme that exemplifies the spirit of the CFC. Entries must do so in ten words or less.

Federal employees in the Research Triangle area are encouraged to submit their ideas via fax or e-mail. The deadline for submissions is May 10. Entries will be reviewed by the Local Federal Coordinating Committee, and the winner will receive a \$25 gift certificate to the Cheesecake Factory. The winner's name and agency will appear on CFC 2006 campaign posters.

For more information, contact Gina Misasi-Wood at 541-1827.

Your On-Line Source for NIEHS Nev

Up and Coming

- The NIEHS Work Life Center career counselor will be available on **May 9** and **May 23** for private confidential career consultation sessions. To book a session, call the NIH Work Life Center at (301) 435-1617.
- May is Older Americans Month, and NIEHS is offering a free seminar for employees: "Living Arrangement for Older Family Members." The seminar will be **May 10** from noon until 1 p.m. in Nottingham Hall, room 204 A-B. To register for the seminar, call A'tondra Carree at 541-7883.
- The NIEHS Diversity Council will host the annual Asia Pacific Islander celebration on **May 10** in the cafeteria. This year the theme will be the tea culture, and will offer tea samplings, the Japanese tea ceremony and Chinese musical performances. More information will be distributed via e-mail.

