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March 2006











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NIEHS Spotlight

New Associate Director to Integrate Health Research and Patient Care

William J. Martin II, M.D., Named To Head Office of Translational Biomedicine

By Robin Mackar

William J. Martin II, M.D. will join NIEHS as associate director for Translational Biomedicine beginning March 6. Translational biomedicine focuses on moving research results from the NIEHS portfolio into clinical practice.

Martin will work to ensure that the Institute's research is more rapidly integrated into patient care. He will develop new clinical research programs, as well as interdisciplinary training initiatives to extend the influence of environmental health sciences into the clinical arena. He will also serve as liaison between NIEHS and its partners, including academia, professional societies, and other NIH institutes as NIEHS fosters and cultivates new relationships and collaborations.

Establishing the Office of Translational Biomedicine is in line with the NIEHS mission to understand how the environment influences human health and disease, according to NIEHS Director David Schwartz.



(Photo courtesy of William Martin II)

"As a physician-scientist who has worked in both the research and clinical arenas, Martin is uniquely qualified to help bridge the gap between research and patient care," said Schwartz. "He shares my vision that environmental health science can provide unique approaches to understanding diseases that affect people around the world. I am thrilled that he has agreed to join the leadership team at NIEHS. He brings a wealth of professional and practical experience, and also a vibrant creativity to this new role."

Martin served as dean of the University Of Cincinnati College Of Medicine and is a past president of the American Thoracic Society. He also served as the director of Pulmonary and Critical Care at Indiana University for 12 years before becoming the executive associate dean for Clinical Affairs at the University's School of Medicine.

Martin volunteered aboard the US Navy hospital ship, the USNS Comfort, as part of Project Hope during the Hurricane Katrina relief efforts. In this capacity, Martin helped establish clinics and provide medical services in devastated areas of Mississippi.

"I plan to approach my new position at NIEHS with the same sense of commitment and urgency I felt while working with the Katrina relief efforts," Martin said. "There is such a sense of excitement in the environmental sciences community right now about the new initiatives that NIEHS is undertaking, and I want to be part of that. I am very excited about the new office and the opportunity to work with the in-house and grant-supported researchers as we work together to develop new approaches to clinical research."

Some of the new interdisciplinary initiatives Martin will oversee include the Institute's Disease Investigation for Specialized Clinically Oriented Ventures in Environmental Research (DISCOVER) program, a new program designed to integrate environmental health research with patient-oriented and population-based studies. For more information, go to http://grants.nih.gov/grants/guide/rfa-files/RFA-ES-06-001.html.

Martin received his M.D. from the University of Minnesota in 1974, and completed his pulmonary and critical care training at Mayo Clinic in1979. Following completion of his research training in the Pulmonary Branch at the National Heart, Lung and Blood Institute, he joined the staff of Mayo Clinic as a clinician-investigator in 1981. While on faculty at Indiana University, Martin served as a Health Policy Fellow, United States Senate, Labor and Human Resources Committee in 1995.

He has authored more than 130 research and clinical papers, and has been an NIH-funded scientist for the past 24 years. Martin has been an invited speaker for nearly 200 events, including testifying before the World Health Organization and U.S. Congress. Martin has received numerous awards including the Sagamore of the Wabash, the highest award presented to a citizen of Indiana by the state's governor.

NIEHS, NHGRI Take Lead in New Genes-Environment Initiative

By Colleen Chandler

At a press conference on Feb. 8, NIH Director Elias Zerhouni, along with NIEHS Director David Schwartz and NHGRI Director Francis Collins, unveiled two new initiatives that will take advantage of recent technological advances to move healthcare research to the next level.

The President's fiscal year 2007 budget calls for \$40 million a year for the multi-year Genes and Environment Initiative, which will combine genetic analysis with the development of new environmental monitoring technology to accelerate research on common diseases like asthma, arthritis and Alzheimer's disease.

Collins and Schwartz will serve as co-chairs for the GEI coordinating committee.



NIEHS Director David Schwartz at a press conference in Washington, D.C. Feb. 8. Schwartz, NIH Director Elias Zerhouni and NHGRI Director Francis Collins announced two new initiatives: the Genes and Environment Initiative and the Genetic Association Information Network. (Photo by Maggie Bartlett, NHGRI)

The FY 2007 budget represents a \$40 million increase above the \$28 million already planned for these efforts in the NIH budget. Of the first year's funding, \$26 million will go to genetic analysis and \$14 million for the development of new tools to measure environmental exposures that affect health. As a result, GEI will have two main components: a laboratory procedure for efficiently analyzing genetic variation in groups of patients with specific illnesses, and a technology-development program to devise new ways of monitoring personal environmental exposures that interact with genetic variations and result in human diseases.

The other initiative, the Genetic Association Information Network, is a partnership between private industry and government researchers to determine genetic contributions to seven common diseases, and includes pledges of \$25 million from Pfizer and Affymetrix. This initiative includes plans to raise more money from private industry and non-profit organizations to fund research on additional diseases. The GAIN initiative, Zerhouni said, complies with one of the objectives of the NIH Roadmap for Biomedical Research: accelerating public-private partnerships.

"We have not yet found the very fundamental molecular events that start the disease process," Zerhouni said at the Feb. 8 press conference. "The paradigm has always been to wait for somebody to be struck by a disease, and then we intervene to bring that patient back from illness to health. The vision has always been to reverse that process, to understand enough of the fundamental determinants of disease, understand their regulation, understand their interaction with the environment, and hopefully, to usher in a new era in medicine."

Schwartz said the two initiatives will work together with a joint objective of identifying the genetically determined differential responses to environmental exposures that underlie the pathogenesis of complex diseases.

The GEI and GAIN initiatives will impact both the scientific community and the public health community, Zerhouni said. With 75 percent of the nation's health care costs associated with common chronic, long-term diseases, he said, the initiatives provide the nation's greatest hope to control these skyrocketing healthcare costs.

Both the GEI and the GAIN initiatives focus on genetic analysis of single nucleotide polymorphisms, or SNPs, that normally occur within the 3 billion DNA base pairs that make up a person's genome. While most of the genetic variations are biologically meaningless, one-tenth of 1 percent of these SNPs alter the function of a gene, and the combination of many slightly altered genes may significantly increase the risk of developing a specific disease, according to an HHS press release.

Data gained from the new initiatives will be freely available for the scientific community in both public and private sectors. The National Center for Biotechnology Information, a part of the National Library of Medicine at NIH, will maintain databases to manage the vast amount of data generated by these initiatives.

In 2003, the human genome was decoded, and in 2005 the National HapMap Project was completed, decoding the genome of all humans, enabling a better understanding of genetic variations across the population. Comparing genetic maps of patients with specific diseases with genetic maps of people without those diseases will enable researchers to find the genetic differences by matching SNPs across the genetic 'map.' As a result of these breakthroughs, there has been an exponential improvement in the ability to identify genetic variations that may be linked to disease, and a corresponding exponential drop in cost. However, researchers need to be able to measure exposure at an individual level, and that will require new tools.

The GEI initiative will provide \$14 million per year for five years to develop high-tech tools to measure environmental exposure and the biological responses to these exposures. These new tools could include small, wearable sensors. Schwartz said researchers need tools to measure individual exposure to environmental

agents, a precise measure of individual biological response in order to better understand the relationship between environmental exposures and human health.

"We need better tools to evaluate environmental exposures, dietary intake and activity levels, and then to determine how those risk factors interact with specific genotypes to either maintain health or lead to disease. Without these more precise measures of exposure, it will be very difficult to figure out why certain people develop disease and others do not. We also need to find out why a disease has such a different prognosis from one person to the next," said Schwartz.

HHS and NIH officials agreed that the time is right for these initiatives to build on recent biomedical research accomplishments. The NIH strategy, as described by Zerhouni, is to use the existing NIH institute cohorts of patients well characterized for specific diseases to determine if this approach will lead to prototype discoveries related to specific diseases. The confidentiality and privacy of the subjects, of course, will be protected, he said.

Meanwhile, NIEHS will hold a planning workshop in mid-May to discuss what technologies can be developed to measure common exposures, such as organic solvents, pesticides and metals associated with neurodegenerative diseases and metabolic disorders, and phthalates, which are known endocrine disrupters that may affect reproductive health.

Celebrating Black History Month

Panelists Discuss Nutrition and Obesity in the Black Community



On Feb. 14, a panel of local experts discussed "Obesity in the African-American Community." Deputy Scientific Director Bill Schrader moderated the session. Panelists were Nadine Goodwin-Blake, executive director of Child Nutrition Services in the Durham Public School District, Carmen Samuel-Hodge from the University of North Carolina – Chapel Hill's Department of Nutrition in the School of Public Health, and Collette Wallace, left, a participant in a clinical trial on obesity. A reception after the presentation included modified traditional Southern favorite foods. The traditional recipes were modified to be healthier. The event was sponsored by the NIEHS Diversity Council and the RTP Chapter of Blacks in Government. (Photos by Blondell Peterson)

Drug Discovery in the Twenty-First Century

Another presentation for Black History Month was held Feb. 23, with a presentation by Cecil Pickett, senior vice president of Shering-Plough Corporation, "Drug Discovery in the Twenty-First Century." That event was followed by a performance by the NIEHS Choir and a light reception.





Science Notebook

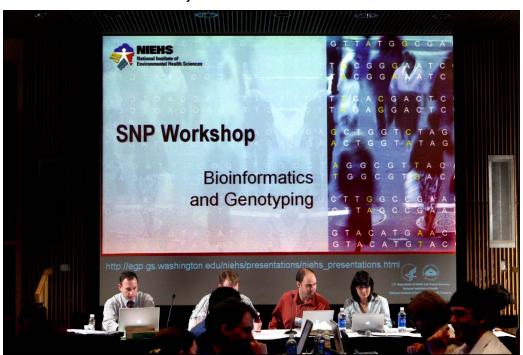
All Hands on Deck: SNP Workshop

High-Tech Training 'One of the Smoothest, Glitch-Free Events' Ever at NIEHS'

By Colleen Chandler
As the age of technology meets the world of biomedical research,
NIEHS is not about to be left behind.

A workshop held Jan. 30-31 at NIEHS was the first of a planned series of training courses designed to ensure that both intramural and extramural researchers understand the latest available technology for bioinformatics and genotyping.

"SNP Workshop: Bioinformatics and Genotyping" was designed to provide an overview of the latest approaches for identifying and genotyping



DERT and the Office of the Director sponsored the SNP workshop at NIEHS as part of an education series designed to ensure biomedical researchers keep abreast of the latest technology related to bioinformatics and genotyping. Participants had the opportunity to learn about the technology with hands-on training. (Photo by Steve McCaw, Image Associates)

single nucleotide polymorphisms, or SNPs. The course covered the extraction of SNP data from public resources, approaches for SNP discovery by re-sequencing, the use of software for haplotype inference and optimal SNP selection for genotying, platform approaches for SNP genotyping and analyses of these data sets.

DERT and the Office of the Director funded the workshop through a contract with the University of Washington. The workshop was the culmination of months of planning across divisions in the Institute, relying heavily on the technical expertise of NIEHS contractors. **NIEHS Director** David Schwartz and **Deputy Director Sam** Wilson hosted the event.

Lauranell Burch, a staff scientist in the Laboratory of Respiratory Biology who led the



Participants had the opportunity to learn about the technology with hands-on training. (Photo by Steve McCaw, Image Associates)

planning group, said attendance exceeded expectations, with about 100 people. Other members of the coordinating committee were Alma Britton, program specialist, Elizabeth Maull, DERT program administrator, and Jack Field, chief of the Scientific Computing Lab.

"The support staff at NIEHS participated in making the workshop happen. We all worked together and the result was one of the smoothest, glitch free events that has been held at NIEHS," Field said. According to an NIEHS memo, there are plans to offer additional workshops in conjunction with a variety of national meetings throughout the country.

Image Associates staff taped the conference, and will edit it to a two-hour presentation, which should be available this summer. Lockheed-Martin staff provided support in the areas of hardware, networks, and laptop set-up to enable the technological aspects of providing hands-on experience using laptops. The workshop was free. For more information, go to http://egp.gs.washington.edu/.

Genetic Alterations in Cancer Database Available to Scientists

By Robin Mackar

Busy scientists or students who want one-stop shopping for the latest peer-reviewed literature on genetic changes in tumors associated with chemical, physical or biological agents can turn to a new database developed by DIR researchers at NIEHS.

A great deal of analysis can be generated from the comprehensive collection of data compiled in the Genetic Alterations in Cancer (GAC) web-based knowledge system, which can be found at https://dir-

<u>apps.niehs.nih.gov/gac/</u>. The database collects, recombines and summarizes gene mutation data extracted from studies in the open literature.

"The GAC system provides a great tool for scientists to generate new hypotheses about how inherited genetic and environmental factors can create conditions that lead to cancer," said June Dunnick, a chemist in the Environmental Toxicology Program instrumental in developing the database and an author on the paper.

Both human and rodent study results are included in the GAC knowledge system. They are organized by species, target organ, tumor type and origin, and agent of concern. Data mining features search, combine, and summarize data from all studies that match the query criteria. The results are presented in graphs and data tables displayed in individual chart areas to facilitate comparative analysis.

"What is truly unique about this system is that it looks at environmental agents and the role they may play in diseases like cancer, and it also simultaneously looks at the vast array of genes that can be implicated," Dunnick said. "Other databases offer a wealth of information on mutations in a single gene, but this is one of the first to contain results from studies of multiple genes. It will help us understand the mechanisms of disease."

"Genetic Alterations in Cancer Knowledge System: Analysis of Gene Mutations in Mouse and Human Liver and Lung Tumors," in the online issue of *Toxicological Sciences*, specifically used the database to look at gene mutations in lung and liver cancers, Dunnick said. Researchers found that the pattern of genetic change observed in certain cancers can serve as the "fingerprint" for the cancer and the type of environmental agent that may be associated with it.

According to Dunnick, new data is being added daily, and future additions to the site will include genetic alterations in pre-neoplastic lesions and alteration such as loss of heterozygosity in chromosomes. The site will eventually be linked to other databases such as the Chemical Effects in Biological Systems (CEBS) developed at NIEHS and other databases developed by the National Cancer Institute. The GAC was developed in collaborations with scientists at Integrated Laboratory Systems, Inc.

Papers of the Month

By Jerry Phelps

1) Rao VP, Poutahidis T, Ge Z, Nambiar PR, Horwitz BH, Fox JG, Erdman SE. Proinflammatory CD4+ CD45RB(hi) lymphocytes promote mammary and intestinal carcinogenesis in Apc(Min/+) mice. Cancer Res. 2006 Jan 1;66(1):57-61.

Implications: These studies define a new model for inflammation-driven mammary tumor development, and represent an important new tool to investigate the inflammation/cancer link. The findings also allude to the broader applicability of anti-inflammatory therapies in the treatment of specific types of cancer that are responsive to COX-2 inhibitors and other non-steroidal anti-inflammatory drugs.

2) Metz RP, Qu X, Laffin B, Earnest D, Porter WW. Circadian clock and cell cycle gene expression in mouse mammary epithelial cells and in the developing mouse mammary gland. Dev Dyn. 2006 Jan;235(1):263-71.

Implications: The results of these studies show that circadian clock genes may play a role in mammary gland development and cellular differentiation. The patterns of gene expression also suggest that interactions between these genes and cell cycle control genes may have implications for not only mammary gland development but also the development of breast cancer.

3) Marsit CJ, Karagas MR, Danaee H, Liu M, Andrew A, Schned A, Nelson HH, Kelsey KT. Carcinogen exposure and gene promoter hypermethylation in bladder cancer. Carcinogenesis. 2006 Jan;27(1):112-6.

Implications: The results indicate that in bladder cancer there are specific associations between exposure to arsenic and tobacco smoke and methylation of the promoter region of tumor suppressor genes. This study adds human data to the body of knowledge from laboratory animal studies which have shown that bladder cancer may result from epigenetic alterations instead of mutations or genetic toxicology. It also suggests that exposure to carcinogens in tobacco smoke may silence specific genes in the time period close to the clinical manifestation of tumors, which may have important clinical implications for patients.

4) Rich DQ, Mittleman MA, Link MS, Schwartz J, Luttmann-Gibson H, Catalano PJ, Speizer FE, Gold DR, Dockery DW. Increased risk of paroxysmal atrial fibrillation episodes associated with acute increases in ambient air pollution. Environ Health Perspect. 2006 Jan;114(1):120-3.

Implications: Ozone is known to be an acute lung irritant and has been associated with acute myocardial infarction and exacerbation of asthma and other respiratory conditions. The results from this study identify ozone air pollution as a potential precipitant of ventricular arrhythmia. These findings add to the evidence that poor air quality is a risk factor for atrial fibrillation. They also indicate that persons with pre-existing AF and other heart conditions should reduce activity and remain indoors during periods of high ambient ozone concentration.



After Hours

WRAL Features Stella Sieber

By Colleen Chandler

If ever there was an example of someone who makes the most of a given situation, it is Stella Sieber.

This stalwart woman has undergone life-altering experiences that most people can't even imagine. From these difficult times, she has emerged as determined as ever to reach out to people in need. Sieber was featured Feb. 21 on WRAL TV's morning feature, "Ordinary People Doing Extraordinary Things" and in the January/February 2006 issue of *inMotion*, a publication for amputees.

She is featured on the WRAL blog at: http://html.wral.com/sh/blogger/wralextraordinary.html.

Until the night of July 29, 2001, when she pulled onto the side of a freeway in the rain to help a stranger who had crashed, Sieber was, perhaps, just an average person. She was active in her church and was planning a mission trip to Haiti. But that trip had to be postponed. That night, a car on the highway struck Sieber as she stood at the back of her car, pinning her between the cars. She suffered extensive injuries, and as a result of the crash, both legs were amputated.

Sieber, a research biologist in the microarray group at NIEHS, was the first bilateral amputee to be treated at Duke University Medical Center, she said. She and the staff that treats her are learning together, but she said it is nice to know that the knowledge learned from her treatment will help others in the future.

Since the accident, Sieber has had to learn to adapt physically and mentally. Acceptance and adaptation are key to moving forward, she said. "You either accept it, or be bitter," she said. But Sieber didn't simply accept it, she has become a role model and pillar of support for other amputees. She volunteers to be on-call for a support group for amputees. She answers questions



WRAL reporter and morning anchor Valonda Callaway interviews Stella Siber. (Photo by Colleen Chandler)

as well as offers encouragement and support. Through the support group, she said, people can "see that we're living, doing things. We're okay," Sieber said.

Since the amputations, Sieber has learned to walk on platforms and is working her way up to high-tech artificial legs. Sieber smiles as she describes an accomplishment last year, when, using her platforms and hiking poles, she completed a one-mile hike in the North Carolina mountains. She has learned to use a hand cycle to bike, and has applied for a grant from the Challenged Athlete Foundation to purchase one.

Last February she trained to teach life skills to amputees as part of the Promoting Amputee Life Skills, a study funded by NIH that is expected to release results in March. Six months ago, she volunteered to go to Baton Rouge to help with the disaster response to Hurricane Katrina. She worked in a donation center, organizing food, clothing and personal hygiene products. She assisted at the American Red Cross Distribution Center, which provided temporary housing and meals for hurricane victims. She also worked at a donation center in Slidell as evacuees began to return.

Sieber's journey has not been easy by any means, but along the way, she said, she has come to terms with who she is -- just exactly as she is. She laughs. "It freed me up to laugh, to laugh just the way I laugh." Instead of considering the accident that changed her life to be a tragedy, she said she feels she has been given a second chance to live.

She considers herself fortunate that she has a lot of support from the people around her in her personal life, her church and at work. At NIEHS, she has flexibility of work hours that allow her to continue physical therapy and daily exercise routines, and many people donated leave, she said.

Not to be deterred, Sieber still intends to take that mission trip to Haiti.

Dee Anderson: Poetry in Motion

By Colleen Chandler

Every day Dee Anderson comes to work a little bit early. When she arrives at her office in the F building of the main campus, she immediately sets off on foot, completing three laps, round trips from the F building to the A building. For more than four years now, this is part of her morning routine. It is her time, time to get focused, reflect and prepare for the day at work.

During her morning walk on Feb. 13, a poem popped into her head, and when she returned to her office, she wrote it down. Now, it seems, the poetry is flowing: Anderson has written 14 since then.

Before working on her brother's poems, Anderson had written only one of her own, which she shared with her coworker, Chris Hunt, and her husband. She is saving that poem, about her mother, for the moment in time when she will need it to comfort her nieces and nephews when Anderson's mother passes. That first poem, she said, was written to help young family members understand that it was just her mother's time to go.

In the meantime, Anderson has been busy typing up her brother's poems, a task she volunteered for because she believes he is not only talented and worthy of publication, but an enlightened person with a lot of insights into the human soul. As many a truly artistic person has done, her brother, Nehemiah, had accumulated quite a collection of paper scraps, like napkins, discarded envelopes and the sort, containing his rhetorical gems. Since he was 19 years old, he has been writing poetry on whatever medium he could find. Over the years, he has collected the scraps and has accumulated four bags full. Anderson is determined to get them all typed, formatted and ready for formal presentation to a publisher.

Nehemiah has had a hard life, Anderson said, and publishing a collection of his poems, which reflect his life experiences, will provide a well deserved sense of accomplishment for him. It will be proof, she said, that "the gift God gave him he has used."

Because of her work with Nehemiah's poems, Anderson has become accustomed to the rhythm of poetry. When the poem came to her during her walk



Deloris "Dee" Anderson (Photo by Colleen Chandler)

The Color of My Skin

When you look at me - What do you see Just the color of my skin Because that is how you were reared to be.

But I dare you to test my mind Because by surprise you will find that your's is no better than mine.

For a man should not be judged by how much he knows

Nor the color of his eyes Or the size of his nose But a man should be judged by the love that he shows.

So I ask you, if you see a brother down and out

Will you reach down and help him Or just wait for someone else Because you don't have the love it takes To give someone else a break.

So wake up - and you will see That we live in a new time and you are still living in a fantasy.

©2006 by Deloris A. Anderson

on the morning of Feb. 13, the words, like pieces of a puzzle, simply fell into place in time with the rhythmic pattern she had become accustomed to as she typed Nehemiah's poems. On this particular day, she was thinking about Black History Month.

Everyone has a gift, Anderson said, but she insists here is not writing poetry. She attributes the creation of *The Color of My Skin* to her work on her brother's poetry. She insists her gift is to serve others. It seems she has been able to do that, as well, with the poem, which dares people to examine their innermost thoughts.

Using words to touch the human heart is nothing new for Anderson, division secretary in the Health and Safety Branch. She is a minister, as is her 23-year-old son, Raymond.

For Anderson, reaching out to others in need is a way of life. For example, after Anderson married several years ago and she and her husband decided to consolidate belongings, she put her house up for sale. A young couple was interested in buying the house, but had some problems securing financing. Anderson and her husband worked with the couple and allowed them to stay in the house until they could resolve the financial issues. Anderson and her husband remain close to the couple who bought the home. The couple who bought the house had a baby, and Anderson and her husband became his godparents. In her office in HSB, Anderson's screensaver pops up with photos of her godson, whom she cares for every Saturday while his mother works.

"What really matters is how many people you help in life," Anderson said. "Life is only going to go around once, so you better make the best of it."



Did You Know?

Spirit Lecture March 20

Addiction: The Neurobiology of Free Will Gone Awry

Nora Volkow, director of the National Institute on Drug Abuse, will deliver the 2006 Spirit Lecture on March 20 in the Rodbell Auditorium. This year, the title is "Addiction: The Neurobiology of Free Will Gone Awry."

Volkow became NIDA director in 2003. She was the first woman to head that institute in its history. She came to NIDA from Brookhaven National Laboratory, where she held concurrent positions of associate director for life sciences, director of nuclear medicine and director of the NIDA-Department of Energy



(Photo courtesy of Nora Volkow)

Regional Neuroimaging Center. She also was a professor in the department of psychiatry and associate dean of the medical school at State University of New York – Stony Brook.

The NIEHS Spirit Lecture was inaugurated in 2002 by the Diversity Council in honor of Women's History Month and as a means of honoring the accomplishments of women. Speakers are selected who exemplify the successful navigation of responsibilities for families, jobs, mentoring and outreach in the community.

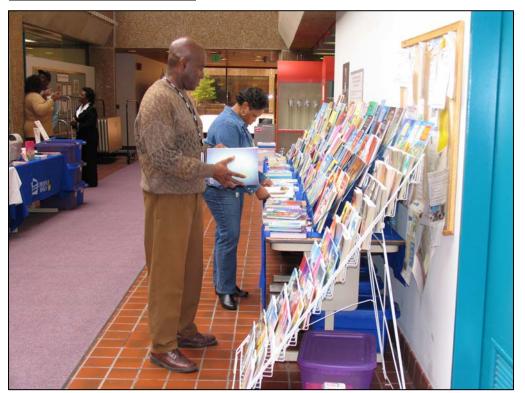
Volkow brought to NIDA a long record of accomplishment in drug addiction research. She is a recognized expert on the brain's dopamine system with her research focusing on the brains of addicted, obese, and aging individuals. Her studies have documented changes in the dopamine system affecting the actions of frontal brain regions involved with motivation, drive, and pleasure and the decline of brain dopamine function with age.

Openings at First Environments

First Environments Early Learning Center, the five-star child care center NIEHS shares with EPA, has openings for the children or dependents of federal employees and contractors at NIEHS and EPA. The center is located on the EPA campus at 109 T.W. Alexander Drive, near the main NIEHS campus. Tuition ranges from \$371 to \$529 every other week, depending on age of the child and employment status of the parent or guardian, and includes meals and snacks, diapers, wipes and special classes. For more information, go to http://www.niehs.nih.gov/daycare/home.htm or call the daycare center at 541-1361.

Education Begins at Home

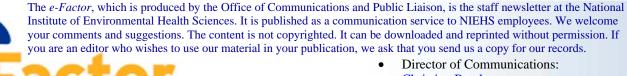
The NIEHS Book Fair



Pinkney Wilder and Tracey
Simmons check out the offerings
at the annual book fair held in
the mall area near the
glassware division. Shelley
Morrissette, an independent
consultant for Usborne Books,
set up the displays and assisted
buyers. The book fair, an
annual event, was held Feb. 2223. Usborne Books publishes
educational books for kids
ranging in age from infancy
through high school. (Photo by
Colleen Chandler)

Up and Coming

- Representative from Duke University's Master of Arts in Liberal Studies program will be at NIEHS **March 9** from 11 a.m. until noon. The MALS program is designed for working adults and offers a wide range of courses. The presentation will be in the Executive Dining Room adjoining the cafeteria. For more information about the program, go to http://www.mals.duke.edu.
- A four-day course, Delpro NIH Delegated Acquisition Training will be offered **March 13-16** at Nottingham Hall. The course will cover simplified acquisition and micropurchase levels and thresholds, regulations, and responsibilities, purchase requests, acquisition files, and sources for supplies and services. The course requires supervisor approval and a training nomination. For more information contact Cynthia Radford at 541-1806.
- The NIH Office of the Ombudsman is available to assist NIEHS employees with work-related problems. The ombudsman is an informal and neutral source that functions independent of management structure. The service if free of charge and strictly confidential. To schedule an appointment with the ombudsman, Kevin Jessar, who will be at NIEHS March 15-17, call his private line at (301) 594-9550. For more information, go to http://www4.od.nih.gov/ccr.



Your On-Line Source for NIEHS News

- Christine Bruske
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