



NIEHS Spotlight

- [NIEHS Welcomes Dr. David Schwartz](#)
- [The NTP: A Quarter Century of Progress and a Bright Future](#)
- [Two NIEHS Grantees Elected to National Academy of Sciences](#)
- [Familiar Face? It's John Grovenstein on the Cover of Red Hat's Course Catalog](#)
- [Triangle Postdocs Flock to 8th Annual NIEHS/NTA Career Fair](#)
- [NIEHS Goes All Out for Health Week](#)



Science Notebook

- [Microarrays: One Step Closer to Personalized Medicine](#)
- [NIEHS-Funded Study: People with Diabetes More Susceptible to Cardiovascular Damage from Pollution](#)
- [DERT Papers of the Month - April 2005](#)



After Hours

- [Making it Work: NIEHS Staffers Find Ways to Stay Active](#)



Did You Know?

- [What to do when a Reporter Calls](#)
- [Polishing the Image: Must-Dos for Today's Professionals](#)
- [Cued Speech at NIEHS](#)
- [Why Do We Sleep?](#)
- [News Faces](#)
- [Up and Coming](#)



NIEHS Spotlight

NIEHS Welcomes Dr. David Schwartz

By Colleen Chandler

It is official: NIEHS has a new director.

David Schwartz is the fourth director of NIEHS, and as such, also serves as director of the National Toxicology Program.

Schwartz will continue his research in the newly established Environmental Lung Disease workgroup in the Laboratory of Respiratory Biology, under branch chief Steve Kleeberger. Schwartz's lab is in module C2.

High on his list of research priorities is basic research, understanding how environmental exposures fundamentally alter human biology, and understanding environmental exposures on both the etiology and pathogenesis of complex human disease.

In a presentation to the NIEHS advisory council last month, Schwartz said his vision for NIEHS includes research programs focused on global environmental health and training for the next generation of scientists.



Schwartz said in that presentation that supporting the very best science and integrating a multi-disciplinary approach – combining environmental sciences with basic science, computational biology, medicine and public health to focus on relevant disease processes – are ways NIEHS can improve human health.

NIH Director Elias Zerhouni said Schwartz's interdisciplinary approach that also involves human and molecular genetics, the medical sciences, environmental genetics and genomics will lead to more effective strategies for preventing, diagnosing and treating disease.

Schwartz will begin working to develop a formal strategic plan for NIEHS. A local strategic working group of about 100 scientists and stakeholders will be formed to assist in the development of the draft, which will be presented for public comment. A final plan is expected in early 2006.

These questions will be posed to the public as part of the strategic plan development:

- What are the disease processes and public health concerns that are relevant to environmental sciences?
- How can environmental sciences be used to understand how biological systems work, why some individuals are more susceptible to disease, or why individuals with the same disease have very different clinical outcomes?
- What are the major opportunities and challenges in global environmental health?
- What are the critical exposures that need further investigation?
- What are the mission critical needs in training the next generation of scientists in environmental health?
- What technology or structural changes are needed to fundamentally advance environmental health science?

Schwartz replaces Kenneth Olden, who announced last year he planned to return to research after 14 years as NIEHS and NTP director.

Schwartz, an M.D. and MPH, was director of the pulmonary, allergy and critical care division and vice chair of research at Duke University. He accepted the NIEHS appointment last year, but officially took over as director on May 23. At Duke, Schwartz was instrumental in the establishment of three NIEHS-funded research centers. He is the former chief investigator for the Duke Toxicogenomics Center.

The NTP: A Quarter Century of Progress and a Bright Future

By Robin Mackar

Ever wonder what agency determines what chemicals are hazardous to your health? Well, in many cases it's the National Toxicology Program. The NTP, an interagency program headquartered at NIEHS, celebrated more than 25 years of scientific progress and its role in protecting the health of the public, in grand style this past May.

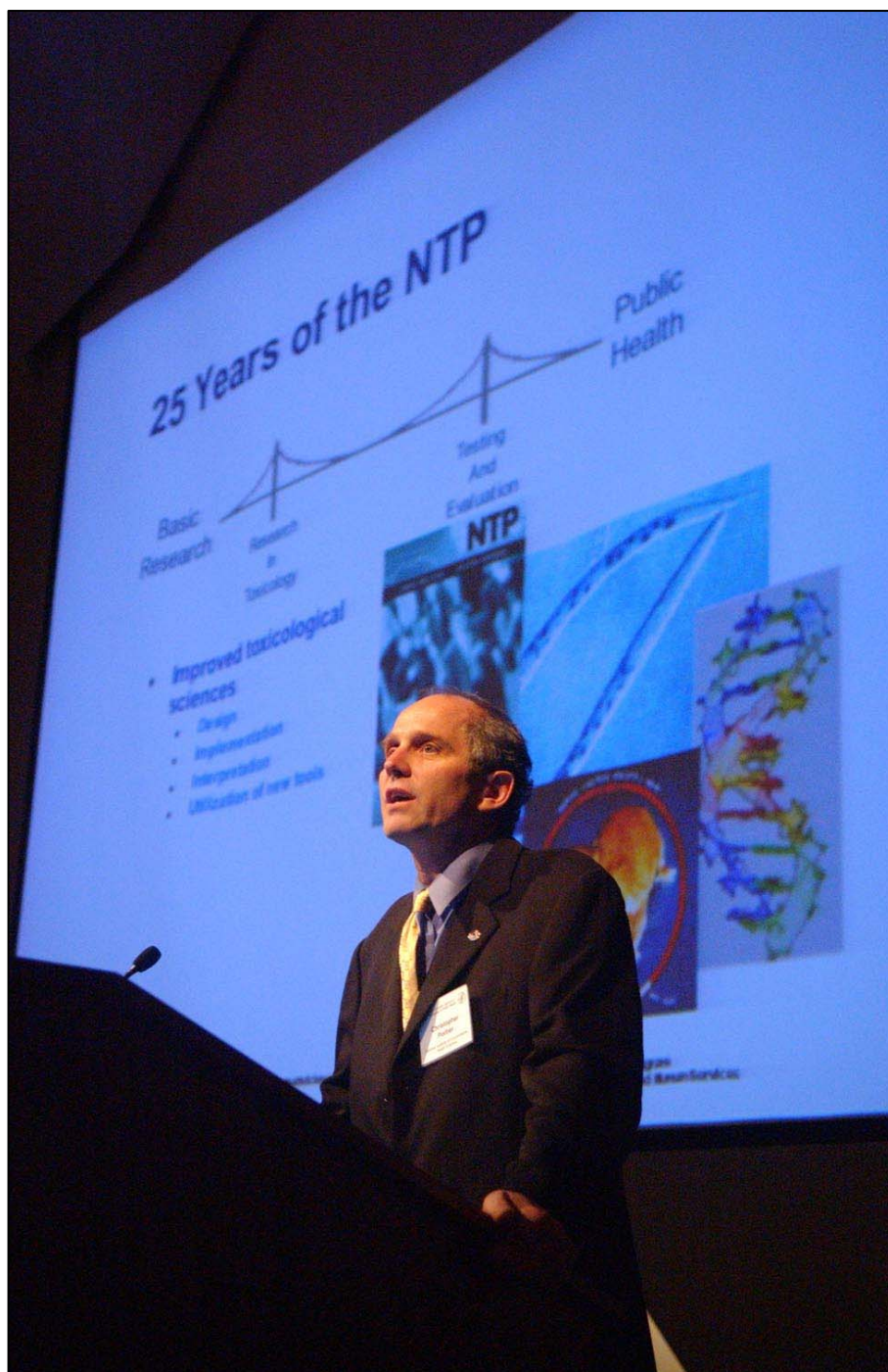


NIH Director Elias Zerhouni chats with Sam Wilson, deputy director of NIEHS, at the NTP celebration in Washington, D.C.

Notable National leaders in health and science, including NIH Director Elias Zerhouni, gathered in the splendor of the historic NAS building in Washington, D.C. on May 9-10 to recognize the numerous contributions of the NTP and to discuss future directions.

“The NTP serves a critical role for our Nation,” said Zerhouni, during his opening remarks for the symposium. “It provides a venue where a consolidated approach to testing can occur. It exemplifies the best way to meet interdisciplinary needs.”

Zerhouni proudly rattled off some impressive statistics regarding the media and public’s interest in the work of the NTP, particularly the most recent Report on Carcinogens (ROC), which he stated had more than 1 million website hits within two days of its release and was covered in more than 200 press stories. The ROC, which biennially lists all substances known to cause cancer, is just one of many reports the NTP regularly releases.



Chris Portier, director of the NIEHS Environmental Toxicology Program, talks about the history and accomplishments of the National Toxicology Program.

Zerhouni, as well as other speakers, including a former Associate Director of NTP, George Lucier, talked about the promise of what they termed “predictive toxicology” - being able to predict whether a chemical might be a toxicant based upon studying its metabolism or knowing whether it affects expression of specific genes or alters specific cellular processes such as cell growth or apoptosis (cell death). “The NTP has the ability to tell us more about the role of genes and environment, and to predict how genes will respond to various chemicals,” said Zerhouni. “The future of the NTP is very bright,” he added.

Other speakers including, Bernard Goldstein, a Dean at the University of Pittsburgh, praised the work of the NTP, especially its role in primary prevention. “There is no way we can even put a number on how many lives the NTP has saved since its inception in 1978.” He cited the Ames test, which is widely used to detect possible chemical mutagens as a life saving device that also exemplifies how NTP uses alternative to animal testing to conduct its studies.

“Reducing, refining and replacing animal testing with alternative methods,” is a high priority for the NTP, said Portier, the NTP Associate Director at NIEHS, as he discussed the NTP’s “Roadmap for the Future.” The NTP Roadmap is a result of a yearlong process involving input from leading researchers from many fields who worked together to develop a strategy that takes advantage of new technologies. In addition to developing improved testing methods for the more than 80,000 chemicals now available in commerce, the NTP is a leader in examining safety issues related to herbal medicines and supplements, nanotechnology, and cell phone radiofrequency transmissions. “These are emerging areas that the NTP is at the forefront in addressing.”

“A Roadmap for the Future” can be found at the NIEHS/NTP website <http://ntp.niehs.nih.gov/index.cfm?objectid=B4DA3C38-F1F6-975E-7168BAC6475F1E5B>.

Two NIEHS Grantees Elected to National Academy of Sciences

Dr. Michael Karin, Professor of Pharmacology at the University of California in San Diego and Dr. Mary-Claire King, American Cancer Society Professor, at the University of Washington in Seattle, both NIEHS grantees, was recently elected to the National Academy of Sciences.

During the business session of the 142nd annual meeting of the Academy, 72 new members and 18 foreign associates were chosen from 14 countries in recognition of their distinguished and continuing achievements in original research. Membership in the Academy is one of the highest honors bestowed upon a U.S. scientist or engineer. The recent elections bring the active membership to 1,976.

“In the last 20-something years my major interest has been in studying how cells respond to a variety of extracellular stimuli including environmental toxins, environmental stress as well as more physiological stimuli like cytokines and polypeptide hormones and so on,” said Karin.

“NIEHS has been very, very helpful and very important in my work,” he said.

“It’s not only the support, it’s the interaction with NIEHS and people there have driven me to look at some new questions and how the environment affects our physiology at the molecular level by trying to understand how genes are regulated,” Karin said. “NIEHS has not only provided me with the funding to ask the questions, but also the material which led to the questions. Sometime it’s even more important to have good questions than to have the funding for them.”

Dr. Karin has recently discovered a link between inflammation and cancer. “That’s the latest hot thing in the lab right now and I am very enthusiastic about it because I think even though people have suspected a link between inflammation and cancer, exactly how it occurs has not been understood, he said. As we are understanding more and more about it, at least I am coming to the realization of how important it is in tumor promotion, tumor progression. I believe this area of investigation will provide us new approaches in the very near future.”

Dr. Karin gave a heads up on his newest paper. “We have a new paper coming out which shows that chemical carcinogenesis depends on inflammation,” he said. “It should be out July and it has been supported directly from the Superfund,” Dr. Karin said.

Dr. King was elected to the Academy for her studies of the genetics of complex human conditions. Her primary areas of interest are breast and ovarian cancer and inherited deafness. Her approach is to apply human genetics and genomics to identification and characterization of critical genes in informative families and populations. Because these conditions are not purely genetic, her group also studies the interaction between genetic and environmental influences on human traits. Her lab also applies genomic sequencing to the identification of victims of human rights abuses.

King travels extensively as an advocate for breast cancer research. She discovered that mutations in a single gene, BRCA1, cause breast cancer in many high-risk families. The discovery changed the way people think about human genetics. Before this discovery the widespread view was that diseases like breast cancer are caused by multiple genes interacting with environmental factors.

NAS is a private, non-profit, self-perpetuating society of distinguished scholars engaged in scientific and engineering research, dedicated to the furtherance of science and technology. The National Academy of Sciences was signed into being by President Abraham Lincoln on March 3, 1863, to investigate, examine experiment and report on any science or art subject by request from any government department. To initiate key studies and projects, the Academy relies on private funding from individuals, companies, foundations and other philanthropies.

(At press time, Factor was not able to get an interview with Dr. Mary-Claire King)

Familiar Face? It's John Grovenstein on the Cover of Red Hat's Course Catalog

Red Hat's newest course catalog features John Grovenstein, NIEHS information technology specialist, on the cover.

Grovenstein is a Red Hat Linux Certified Engineer. That is a professional certification granted only after passing rigorous hands-on testing at Red Hat. To pass, candidates must score at least an 80 percent in three areas: a written test, a troubleshooting test that requires fixing four broken servers, and finally, setting up a server from scratch, given some very strict guidelines. More than half the people who take the test fail in each class, and each class has people who have tried and failed before. With such high standards, Red Hat has honored NIEHS by selecting one of our brightest to feature on the cover. In total, there are three such certified engineers, called RHCEs, at NIEHS, and they all work in DIR.



Triangle Postdocs Flock to 8th Annual NIEHS/NTA Career Fair

By Colleen Chandler

When it comes to training postdocs, the objective at NIEHS is an idealistic, unselfish one.

It is that puritanical drive for perfection and objectivity in science that drives the NIEHS training program, according to members of the NIEHS Trainees Assembly.

While some postdocs who train at NIH institutes and centers do

accept jobs with their training institutes, the offer to train them

is not tied to any such obligation, said Deborah Swope, director of the Office of Fellows Career Development at NIEHS.

“Fellows are not trained at the NIH to move into specific positions or institutions, such as government or academia. The program is not designed to ‘replace’ our PIs, but to train good solid scientists for the next stage of their careers,” Swope said.

Statistics show that only a small number of postdocs stay in government. Fewer than 15 percent of United States postdocs get a tenure-track position within six years of earning a doctorate, and only half of those will be tenured, Swope said.

Swope’s office works with the NIEHS Trainees Assembly to plan and fund an annual career fair that is open to postdocs across the Research Triangle. The 8th Annual NIEHS/NTA Career Fair on April 29 was held at the Sigma Xi Center in Research Triangle Park.

For the last two years, NIEHS placed third in a list of best places to work for postdocs surveyed by *The Scientist*. Swope attributes that fact to a “coming together” of many institute program in a cooperative spirit to ensure the program provides a quality experience for postdocs. Part of that experience, she said, is exposing them to a wide range of career options.

Swope said there is a distinct need for well-trained and independent scientists in peripheral fields such as policy, intellectual property, and grants and research administration. “If we are to maintain high



Bill Schrader, center, deputy scientific director, with Chris Gunter and Michael Walker at the NIEHS/NTA Career Fair April 29 at Sigma Xi in Research Triangle Park. The fair was open to postdocs throughout the Triangle.

standards in all areas of scientific employment, then the NIEHS and other institutions need to make fellows aware of other options and any additional skill sets they may need to successfully compete for, acquire, and do well in these positions,” Swope said.

NIEHS Goes All Out for Health Week

With more activities than ever before, NIEHS went all out to encourage physical fitness May 9-20. This year featured several new events like the [football throw](#) and a BoSu ball workout as well as the old favorites like the Rogathon, the [Rat Race relay](#) and [Bureaucratic Runaround](#). New education seminars included a presentation on [sleep disorders](#) and one-on-one nutritional assessments. A chiropractic assessment provided information of the benefits of proper spinal alignment, while the Health Fair offered a variety of information booths for health screenings such as cholesterol and glucose levels, body fat analysis, smoking cessation, fat and sodium content in prepackaged and fast food, and bone density testing.



Above, Durham Regional Hospital staff checks cholesterol and blood glucose levels at the Health Fair May 18. Below, chiropractor Sandra Childers checks to see if Sarah Harrison's shoulders and hips are level and if her weight is evenly distributed on both feet.



Health Fair



Aurora Cupul Uicab gets a bone-density test at the NIEHS Health Fair. A number of health screening services, including bone-density testing, were offered free of charge to NIEHS employees and contractors.



Durham County Health Department registered nurse and licensed dietician, Casey Wardlaw explains fast-food facts with a visual display of vials of fat showing how much fat is in fast food products.

Rogathon Top Finishers:

David Dunson 18:02
Becky Bowles 22:46

Rogathon Age Winners:

Females

Under 20, Emily Bell 23:20
20-30, Liz Frederick 24:05
30-40, Destiny Matthews 31:05
Masters, Stephanie London 30:10
Grand Masters, Barbara Hindenach 26:06

Males

20-30, Daniel Bow 21:41
30-40, Scott McCulloch 21:08
Masters, Donald Cozart 24:13
Grand Masters, Tom Kirby 21:51
Great Grand Masters, Ralph Wilson 28:13



Starting lineup for the annual Rogathon, so named for avid runner and senior researcher, Walter Rogan.

Relay Races



Bureaucratic Run-Around

*The Transducers, from the Laboratory of Signal Transduction, the reigning Institute champions, won the **Bureaucratic Run-Around** race again. They retain bragging rights for virtually “smoking” the other teams with a new Institute record 4 minutes and 46 seconds.*

Teams and their times:

The Transducers
(Becky Boyles, Nick Lu, Jeremy Smyth and Gerd Heimlich)
4 minutes and 46 seconds.

The Dynamics
(Tom Kirby, Keith Merritt, Scott Gabel, and Scott McCulloch)
5 minutes and 11 seconds

"Eat Our DERT"
(Jerry Phelps, Brenda Weis, Chip Hughes, and Liam O'Fallon)

5 minutes and 22 seconds



The Rat Race

The Photo Finishers won the Rat Race winning team was the Photo Finishers. They also won last year's Rat Race. Second place was a tie between the Wheelers & Dealers and the HSB Running Rebels. The anchors for both teams respectively (Stella Seiber and Paul Johnson) crossed the finish line at the same time.

Teams and their times:

The Photo Finishers (Lois Wyrick, Brian Mills, Wayne Sutton and Steve McCaw)
1 minute 15 seconds

Wheelers & Dealers (Jeff Tucker, Alex Merrick, Kim Goulah, and Stella Sieber)
1 minute and 22 seconds

HSB Running Rebels (Vee-Vee Shropshire, Denise Warren-Hinton, Bill Steinmetz and Paul Johnson)
1 minute 22 seconds

Jump Rope

According to organizer Diane Crawford, nobody jumps like Nori Nakamura, who claimed the championship in individual and musical jump rope activities.



Above, Double Dutch winner April Parker shows how it's done, while A'tondra Carree (left) and Stephanie Bullock-Allen turn the ropes.

(Photo on the left) Individual Jump champions with number of non-stop jumps:

- Nori Nakamura, 258 (right)
- Akef Rahman, 68 (center)
- Kim Goulah, 56 (left)

Musical Jump

- **1st place**- Nori Nakamura
- **2nd place** - Akef Rahman
- **3rd place** - Kim Goulah

3-on-3 Basketball

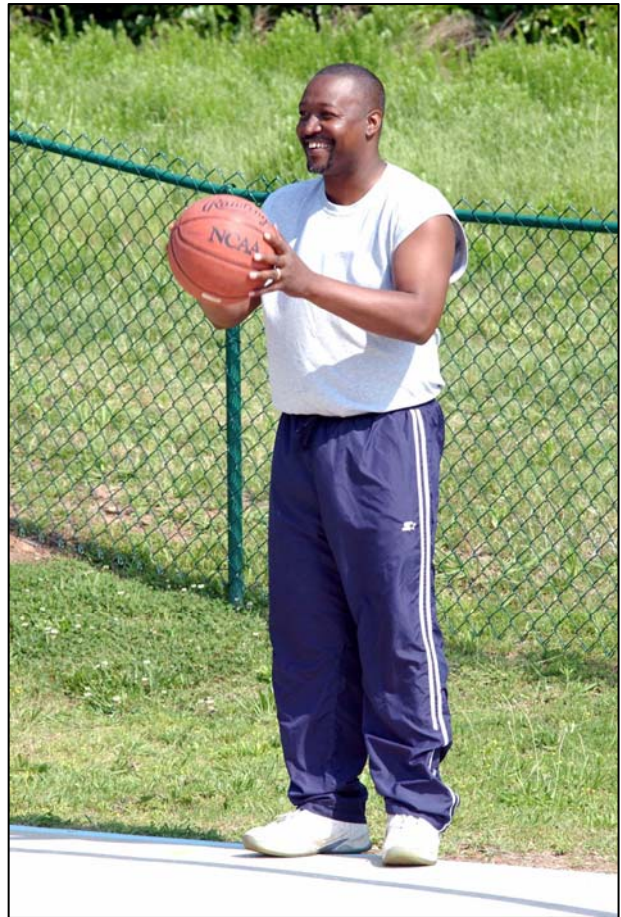
First place: Eric Potts, Gordon Caviness, AG Carrington

Second Place: Darrell Leathers, Markese Leathers, Tyson Holiday

Basketball Shootout

Adjusting to the strong winds, A.G. Carrington scored 14 points in the final round to claim the Basketball shootout championship. He edged out Anthony Lockhart with 13 and Gordon Caviness with 11. Top scorer in the qualifying round with 13 was Junguo Zhou. Other finalists were Eric Potts, Markese Leathers, and Ransom Holliday.

The women's tournament was won by Jackie Locklear, ahead of honest scorekeeper VeeVee Shropshire in second and Grace Liao in third. A total of 20 people participated in the two tournaments.



A.G. Carrington won the NIEHS basketball shootout for the sixth time in the past nine years



Football Throw Champs

*1st Place:
Anthony
Lockhar*

*2nd Place:
Eric Pott*

*3rd Place:
Gary Bird*

Table Tennis



*1st place - Joe Hensley
2nd place - Wei Qu
3rd place - Joe Zhou*



Science Notebook

Microarrays: One Step Closer to Personalized Medicine

By Blondell Peterson

Dr. Brenda Weis, NIEHS Toxicogenomics Research Consortium TRC Coordinator, received national media coverage as spokesperson for the TRC microarrays study conducted by 64 renowned scientists. NIEHS Director, Dr. David Schwartz is one of the authors featured in the paper publication on Nature.

The study brings us one step closer to personalized medical treatment—that is medical treatment tailored to each person’s unique genetic make-up and medical condition. Microarrays are gene chips that allow scientists to see how differences in gene expression are linked to specific diseases. Improving and standardizing microarray experiments will also allow earlier detection of diseases like cancer.

Weis was a featured speaker on a National Public Radio morning edition broadcast May 4 with Nell Boyce. The story was called, “Improving Gene Chips.”

It focused on the fact that when results were compared from seven labs that used the same chip, and scientists got the same results only 20% of the time, it was cause for concern. Researchers then found that this happened because each lab had its own way of doing things.

In the interview Weis said, “When labs were told to carefully follow the exact same set of procedures, we were able to achieve a very high level of consistency across the labs up to the high 90s percent.”

In addition to NPR, Weis was quoted in the May 6 edition of “Harvard Focus,” which reaches 15,000 researchers and physicians. The front page of the May 6 issue can be found online at <http://focus.hms.harvard.edu>, or you may link directly to the story at http://focus.hms.harvard.edu/2005/May6_2005/comp_bio.shtml

WTOP, a popular Washington, DC radio station for traffic, weather and news featured Dr. Weis also.

“The Scientist” will feature a story on this study, which will include remarks from Drs. Schwartz, Weis and others.



Brenda Weis

NIEHS-Funded Study: People with Diabetes More Susceptible to Cardiovascular Damage from Pollution

Researchers at the Robert Wood Johnson Health & Society Scholars program at the University of Michigan concluded that people with diabetes may be more susceptible to cardiovascular damage from pollution. They found that the ability of blood vessels to control blood flow was impaired in diabetics on days with elevated levels of particulates from traffic and coal-burning power plants.

Among the particulates researchers looked at are sulfate particulates, which are mainly generated in coal-burning power plants, ultra-fine particles and black carbon soot, which are generated from diesel- and gas-powered engines.

The study findings were published in the April issue of the journal *Circulation*.

DETR Papers of the Month - April 2005

- 1) Weil M, Bressler J, Parsons P, Bolla K, Glass T, Schwartz B. Blood mercury levels and neurobehavioral function. *JAMA*. 2005 Apr 20;293(15):1875-82.

Implications: The current blood-mercury standard established by the EPA for children and women of childbearing age is 5.8 micrograms/liter, which is higher than the average level for this study's participants. The researchers are quick to point out that this study should not change standards of mercury exposure and consumption, which are currently under debate. Current standards are meant to protect infants and children whose brains are still developing and possibly susceptible to low levels of mercury. However, these findings do suggest that a threshold level of mercury exposure may exist. Further research will be necessary to confirm these results and to determine in any change in current standards is warranted.

- 2) Cai S, Xu Y, Cooper RJ, Ferkowicz MJ, Hartwell JR, Pollok KE, Kelley MR. Mitochondrial targeting of human O6-methylguanine DNA methyltransferase protects against cell killing by chemotherapeutic alkylating agents. *Cancer Res*. 2005 Apr 15;65(8):3319-27.

Implications: These results suggest a potential strategy for reducing the harmful side effects of chemotherapy by making healthy cells more resistant to alkylating drugs. They imply that it may be possible to engineer such cells and introduce them into patients prior to beginning chemotherapeutic regimens. They suggest that DNA repair enzymes such as MGMT are promising focuses of such strategies and that mitochondria, as well as nuclei, are equally important targets of these enzymes.

- 3) Unsal-Kacmaz K, Mullen TE, Kaufmann WK, Sancar A. Coupling of human circadian and cell cycles by the timeless protein. *Mol Cell Biol*. 2005 Apr;25(8):3109-16.

Implications: While there is still much to be learned about the function and control of Timeless protein, these results prove that it indeed acts in the control of the circadian clock and cell cycle by interacting with circadian clock proteins and playing an important role in the DNA damage response. Therefore, it is a molecular link between circadian rhythms and the cell cycle.

- 4) TM Burbacher, Shen DD, Liberato N, Grant KS, Cernichiari E, and Clarkson T. 2005. Comparison of Blood and Brain Mercury Levels in Infant Monkeys Exposed to Methylmercury or Vaccines Containing Thimerosal *Environ Health Perspect*: doi:10.1289/ehp.7712. [Online 21 April 2005]

Implications: The authors conclude that knowledge of the fate and transport of methylmercury is not a suitable surrogate for risk assessments for exposure to thimerosal. Therefore, additional research is necessary to fully characterize the biotransformation of thimerosal so that a meaningful interpretation of any developmental effects from immunization with thimerosal-containing vaccines can be determined.

- 5) Kegler MC, Malcoe LH. Anti-smoking socialization beliefs among rural Native American and White parents of young children. *Health Educ Res.* 2005 Apr;20(2):175-84.

Implication: The study's findings indicate that methods to promote anti-smoking socialization beliefs of parents with a high school education or less may be important in preventing children from beginning to smoke in low income rural communities with high smoking rates. Although limited in size and scope, this study provides evidence that future research should focus on methods to increase parental anti-smoking communication of beliefs and whether these methods will result in decreased rates of smoking onset.



After Hours

Making it Work: NIEHS Staffers Find Ways to Stay Active

Where there's a will, there's a way.

For VeeVee Shropshire and Denise Warren-Hinton, exercise is not a chore. For these two, it is not only an important part of their daily lives, but a pleasure, a reward they give themselves.

Both women work in the Health and Safety Branch, and both women say they will gladly do whatever it takes to fit exercise into their busy schedules. The point, they say, is to be active, whether that means going to the gym or taking the stairs rather than the elevator.

They simply find a way.

The women get together for Pilates 2-3 times a week. Shropshire's exercise routine also includes running 2 ½ miles a day and walking about a half a mile a day, lifting weights at the gym and using a stairmaster.

Warren-Hinton, who spent 20 years in the Air Force, said she got used to exercising in the military and just continued it when she retired a few years ago.

"It makes me feel good. If I'm stressed, once I work out I feel great,"



Top photo: Denise Warren-Hinton, on the right, safety and occupational health specialist, with the Barbara Sossamon, nurse at the NIEHS health unit, watch the runners participating in Health Week events.

Right: Vee Vee Shropshire tries her hand in the Basketball Shootout during Health Week. Shropshire and Warren-Hinton participate in a number of activities to stay healthy. They run, walk, lift weights, do Pilates and participate in organized exercise classes as well as make day-to-day decisions like parking in the far end of a parking lot and taking stairs instead of the elevator.



Warrant Hinton said. She said she likes working out with weights because it increases strength and contours her body. She was certified a personal trainer for a few years.

Shropshire said her fitness routine developed slowly over a number of years. As she felt better, she added more activities and moved the levels up notch by notch. She went from walking to jogging. She added more rigorous exercise classes like a boot-camp style class at the gym.

“We should all take time out of our busy schedules to exercise. Every little bit helps. Exercising makes you feel good about yourself and definitely makes you look a whole lot better,” Shropshire said.

Shropshire and Warren-Hinton offered these tips:

- Start slowly
- Find a workout partner, and make sure it is someone who is motivated to exercise
- Set a time every day to exercise
- Make exercise a habit by doing it at the same time every day
- Utilize the NIEHS Fitness Center. It is open from early morning to early evening to enable before or after work workouts.
- If you don't feel like working out, tell yourself you won't do as much. Chances are good once you get going you will do more than you thought you could.
- You don't need special equipment to exercise. Walk, run, play games

The decision to be active is one that pays multiple dividends when it comes to physical and mental well being, Shropshire and Warren-Hinton said. Overall health improves, you have more energy and enthusiasm and a more positive outlook on life, they said.

“It keeps us young,” they added.



Did You Know?

What to do when a Reporter Calls

Don't feel pressured to give an immediate answer to any question. Reporters expect professionals like you to be busy, so it's OK to get answers to reporters through follow-up calls. This gives everyone time to prepare a clear and concise response. Be polite, but don't be pushed. Here's how...

1. Get the reporter's name and telephone number:

"May I please get your name?" (It's OK to ask for the correct spelling)

"And, what is your telephone number?"

2. End the call:

*"Thanks for your call, someone from our communications office will get back to you"
(reporters are accustomed to this response)*

OR

"Thanks for your call, I'm in the middle of something now, but I'll get back to you."

OR

"OK, let me pull together some information and I'll get back to you."

3. Call NIEHS Office of Communications and Public Liaison (OCPL):

Christine Bruske (Director, OCPL) 541-3665

Robin Mackar (DIR, NCT, NTP) at 541-0073

John Peterson (DERT) at 541-7860

4. OCPL staff will contact the reporter, identify what information is being requested, and will prepare a list of questions the reporter intends to ask.
5. OCPL staff will identify the news organization (i.e. CNN, Washington Post or Garden Lovers Newsletter) to determine appropriate person to respond to inquiry.
6. OCPL staff will determine the timeframe for response and if the reporter is working on deadline.
7. OCPL staff will contact the appropriate researcher (which may be you) and will schedule a return call to the reporter:
8. The communications staff is here to help NIEHS leaders, researchers and program administrators formulate a clear, concise response to questions from news reporters. Sometimes, OCPL staff will answer questions from reporters.
9. OCPL staff will search for the resulting news story and will provide it everyone involved in responding to the reporter's call.

Polishing the Image: Must-Dos for Today's Professionals

By Colleen Chandler

Your appearance says a lot about you, and presenting a professional image can mean more self-confidence and more positive interactions with coworkers and bosses, says Bev Dwane, a Durham-based image consultant. An estimated 93 percent of communication is nonverbal, and of that, 58 percent is based on how you look. Your image, she said, is the equivalent of a billboard of yourself – an element of the impression you have on others that you have full control over.



Bev Dwane, image consultant, laughs with the audience as they list those things they notice first about a person they meet.

Dwane, who came to NIEHS April 27 as part of presentation sponsored by the EEO and the NIEHS Diversity Council for clerical and administrative employees, described four levels of business casual dress:

Top Drawer Casual is casually elegant, with a jacket as the pivotal piece. The outfit is always coordinated around the jacket. It is appropriate when giving a presentation, meeting with the media, attending a board or client meeting, facilitating a class or at an interview requiring casual attire. Clothing should be tailored jackets or blazers, sweater coats or jackets, dress pants and skirts, pant suits or solid dresses.

Basic Biz casual does not involve a jacket. It is a coordinated and neat look, often with dress pants or well pressed casual pants, sweaters, sweater sets, blouses, and long skirts. Tops are generally collared or more than one layer. It is appropriate for established casual workdays.

Weekender Casual, according to Dwane, is not appropriate for work attire, and includes jeans, cords, shorts, sports or workout clothes, or beach wear. Other items that are never appropriate for work attire include torn or stained clothing, tight or revealing clothing, romantic flora dresses or blouses, sheer or semi-sheer fabrics, Lurex, satin or sequins, overly lacy fabrics, metallic fabrics, clothing that bares the midriff, sandals or open-toed shoes, and shirts more than 2 inches above the knee.

After-Hours Casual is reserved for business casual dinner or cocktail parties. Clothing is generally darker colors with accessories.

Dwane said there are some basic rules that apply to all modes of casual dress in the workplace, such as:

- Clothing should always fit well, neither too snug nor too loose
- Personal grooming must be meticulous
- Multiple earrings, bracelets and rings are not acceptable
- Quality, not quantity, is important in purchasing wardrobe items

She said that creating a workable wardrobe need not be expensive. A few basic “old faithfuls” like coats, boots, shoes that are not replaced often, paired with “team players” or capsules of clothing that can be mixed and matched to create a number of outfits. Pieces should be made of the same type of fabric, of a color that enhances your coloring and similar in style, Dwane said.

Loretta Moore Retires



After 10 years in the Laboratory of Reproductive and Developmental Toxicology, and a total of 22 years of federal service, Loretta Moore retired. Her colleagues teased her about having a larger-than-life smile on her face for several weeks before her retirement party April 27.

Loretta Moore with Ken Korach at her retirement



Cued Speech at NIEHS

By Blondell Peterson

The Office of Equal Opportunity and Diversity Management sponsored a cultural education program on cued speech recently and will also offer a 4-week American Sign Language class beginning June 2.

Many of us are familiar with American Sign Language, but maybe not so familiar with cued speech. This is a more tailored form of speaking with the hands, a combination of hand placement at different areas of the face, lip reading as words are spoken and shapes created with the hands. In ASL, an entire sentence or phrase may be communicated with one or two signs, but with cued speech, each word is communicated just as it is spoken in a sentence.



Barbara Dietz uses cued speech with her daughter, Jennifer, who lost her hearing at age 3.

The phonemically-based system uses eight hand shapes in four locations near the face to supplement the information available on the lips during speech.

“With cued speech you say everything as if you are talking like a hearing person,” Barbara Dietz, Program Specialist, LRDT said. “With sign language, you have signs for words that can be said out of context. You don’t get all the verbs and tenses that you do with cued speech.”

Dietz’s daughter Jennifer recently graduated from college, and has been “cueing” since she was five years old. Jennifer lost her hearing at the age of three because of congenital progressive deafness.

“I see cued speech as a tool for English while I see ASL as a visual language that helps better visualize words to those who cannot hear,” Jennifer said. “For example, with cued speech, I can see the actual language itself. I can see the flow of English and how it should be said in order,” she said. “With ASL, you have to guess the sign because one word can have so many signs and meanings to it. I tend to get confused and the flow of English is not right. But that is my opinion. It may differ with others who grew up with ASL but still have good English.”

Dietz said she had never heard of a hearing child going deaf and it was a lot to deal with having no experience. There was no history of deafness in either hers or her husband’s families.

Living in southern Florida, Dietz said Jennifer participated in a program for deaf children that was of little help. Her hearing loss was so severe that the hearing aids, at that time, were not adequate. After a year and a half, the family moved to Virginia where an audiologist said Jennifer needed more than just oral classes. She suggested either sign language or cued speech.

Dietz does not discount American Sign Language, but said her family chose cued speech because it was best for her child. “She needed more than an oral program,” she said. “We didn’t want sign language—only because we knew our daughter. If she could make one sign for ‘airplane,’ she wouldn’t try to sign vowels and consonants for the entire sentence. So we went looking for a cued speech program.”

According to Dietz, in a matter of four or five weeks Jennifer was starting to talk again and understanding what they cued. “It took us [adults] about six weeks to learn the basics of cued speech,” she said. “It takes a bit longer to then put it all together so you can talk with it, but Jennifer was young and smart and she picked up on it quickly.”

Jennifer has said, for example, if you want to say, “I need to go to the store to get milk” with ASL you might actually say, “milk store go” therefore you have to figure out the context. With cueing, you can say, “I need to go to the store to get milk.”

“It’s like when you have a new baby and you’re trying to teach it to talk, you have to put those pieces in there,” Dietz said.

Dietz said another phenomenal thing about this system is that you can cue more than 55 language, dialects and accents such as New York or a southern drawl. “It’s just applicable to however you speak,” she said. “The thing is, words have to be said and cued simultaneously. The words meet and Pete look the same on the lips. When you add the consonant hand signs for the “M” or the “P” sound, you have two different words. I’m not saying this happens overnight. It’s just like teaching a child to walk or a different language. It takes a lot of years of input and repetition.”

Why Do We Sleep?

By Blondell Peterson

Does your battery run down midafternoon? Do you find it hard to focus during the day? Do you find yourself reaching for chocolate or a caffeinated beverage? Chances are, like 72% of adults, you are sleep deprived because of a sleep disorder.

Dr. Bradley V. Vaughn, Associate Professor of Neurology, UNC, conducted a sleep disorders seminar as part of the NIEHS Fitness Week activities. Attendees filled the room to capacity and were jokingly challenged, by Dr. Bradley, to stay awake during the post-lunch presentation. At the same time, he continually illustrated

through examples, that many of those attending the seminar had undesirable sleep patterns or lifestyle habits that contribute to sleep deprivation.

“The common question that I get,” said Dr. Vaughn, “is why do we sleep?” “We sleep to improve our ability to perform while we are awake,” he said. “If you are not sleeping, you are not going to have the best performance during the day. We sleep to be awake.”

He gave an example through a video from the inside of a cab driver’s cab. The driver, although he survived, was thrown around the inside of the vehicle and landed in the back seat with both feet in the air, as epithets were heard throughout the thrashing. This happened all because he fell asleep while driving. According to Dr. Vaughn, about 15 to 25 percent of automobile accidents occur because the drivers are either inattentive, asleep or drowsy, and sleep related accidents cost us 150 billion dollars a year.

He cited several major accidents that were attributed to lack of sleep. The third mate who was steering the ship that ran aground onto a reef in the Exxon Valdeese accident admitted to being awake over 24 hours. The Chernobyl accident occurred at 1:23 a.m. The engineer who made the decision to launch the Space Shuttle Challenger amid concerns that the “o” rings might not tolerate extreme cold, did so at 5:20 a.m. and admitted to sleeping less than three hours per night for the three weeks prior to that decision. In the Three Mile Island disaster, the critical decision that led to the meltdown occurred at 4 a.m. for a crew that was working on their second week of third shift work.

The majority of deep sleep is in first half of the night and the majority of the dream sleep is in the latter half of the night. This evolution is one of the reasons that four 1 hour naps do not equal four hours of continuous sleep. “If you think you are going to catch up on your sleep by taking a series of naps, you’re wrong, because you are not allowing this evolutionary process to take place,” he said.

About one in three people have a complaint with their sleep to the degree that they will bring it to the attention of their physician. According to the National Sleep Foundation, 72% of individuals will describe a problem with their sleep. One in six people say they have trouble performing during the day because of sleepiness. We are now getting into the range where it’s normal to have a problem with your sleep.

There are currently 117 different recognized sleep disorders. Sleep debt is the major reason, for excessive sleepiness during the day. Other reasons are disruption of sleep, trouble with the brain or a problem with the body clock. “We have an inherent body clock because we live in a world that rotates, so we perform best during daytime and sleep best during night time. If that clock gets out of whack with the rest of the world, we can have a problem with how we perceive ourselves during the day.”

According to Vaughn, 17 to 18 hours of continuous wakefulness is equivalent to having a blood alcohol level of .08 which in this state is legally intoxicated. Long periods of wakefulness impair the ability to think and perform. Not only does it have an affect on performance, but it also has an incredible affect on the rest of the body. “How many of you gained 10 pounds in the last 15 years?” he asked. Of those of you who have your hands up, how many sleep less than 7 hours a night? Guess what, you accelerated your weight gain--just by shortening your sleep.” Even an hour short of sleep per night will increase ghrelin and decrease leptin. Leptin is the hormone put off by fat cells that tells the body it does not need to eat. Ghrelin tells the body to eat. When you eat high caloric food when you are sleep deprived, you will gain weight. One hour per night will result in a five pound weight gain on the average for every six months.

“If you need 8 hours of sleep and only get 7, after the first night, you only lost an hour. After a year, you’ve lost 365 hours and after 10 years, you have lost 3,650 hours. “How many of you think you’re going to pay off 3,650 hours in a weekend?” he asked. “It ain’t gonna work.” Vaughn said this is very similar to borrowing money from a bank. If you owe a big debt to the bank, you will cut corners to pay the bank back. Falling asleep (at stoplights, reading, driving, during conversation, during sex) at inopportune times are indications that you are sleep deprived and your brain is trying to pay off the debt.”

News Faces

Pinkney Wilder III

Pinkney Wilder III, administrative technician in the Laboratory of Signal Transduction, started at NIEHS April 3. He came to NIEHS from North Carolina Central University, where he worked as the assistant ticket office manager. Pinkney served 27 years in the U.S. Army, culminating with a tour in Iraq, supporting Operation Iraqi Freedom from February 2003 to January 2004. He retired in February 2004 as a sergeant major.

Pinkney earned an Associates Degree in mid-management from Central Texas College, in Killeen, Texas and a bachelor's in public administration from Roger Williams University located in Bristol, Rhode Island. He and wife Carmen Maria have two children, 4-year-old Tyrese and 15-year-old Chaniqua. His hobbies include fishing, bowling and traveling with his family in a recreational vehicle.



Up and Coming

- “Environmental Solutions to Obesity in American’s Youth Conference” will be held June 1-2 at the Washington Convention Center, Room 203 A/B, 801 Mount Vernon Place, NW, in Washington, D.C. The meeting is sponsored by NIEHS. To register, or for more information, go to: <http://www-apps.niehs.nih.gov/conferences/drcpt/oe2005/index.cfm>.
- EEO will sponsor a course on American Sign Language. The classes begin **June 2**, and will meet weekly from 8:30-10:30 a.m. in conference room 101C. The class is open to everyone. There is no cost to attend, and textbooks will be provided. To register, <mailto:ivanoff@niehs.nih.gov>.
- “Speaking Skills for Scientists” will be offered for current fellows **June 8** from 9 a.m. until noon in conference room 101C. Registration is required. For more information or to register, <mailto:pdoffice@niehs.nih.gov>.
- “Conflict Resolution and Negotiation for Postdocs” will be offered June 30 from 9 a.m. until noon. The featured speaker will be Kevin Jessar, the NIH ombudsman. For more information, contact: <http://www4.od.nih.gov/ccr/>.


eFactor
Your On-Line Source for NIEHS News

The e-Factor, which is produced by the Office of Communications and Public Liaison at the National Institute of Environmental Health Sciences, welcomes your comments and suggestions. The e-Factor is published as a communication service to employees of NIEHS.



- [Christine Bruske](#), Director of Communications
- [Colleen Chandler](#), Editor