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environmental exposure to what the effects are, which will then allow us to determine if the effects are harmful.”

In the article, Newbold cited particular concern for developmental exposure of the fetus and young child. She said the protective mechanisms that adults have, such as DNA repair, the immune system, detoxification enzymes, liver metabolism and the blood/brain barrier are not fully functional in the fetus or newborn. Newborns may be exposed to endocrine disruptors during critical states of development and suffer permanent consequences. Some of these may not be detected until later in life, she said.

Korach said in the article that the past three years have seen significant advances in “epidemiological evidence and the development of animal models” to help scientists understand how endocrine disruptors work. However, he noted that scientists have not done enough research on looking at combinations of chemicals and the body’s reaction. Most people are not exposed to only a single chemical, he said.

Promoting Alternative Transportation Earns TTA Leadership Award

By Colleen Chandler



NIEHS Transshare program coordinator Dick Sloane holds a trophy given to NIEHS for leadership in promoting alternative methods of transportation. (Photo by Colleen Chandler)

International Airport and Research Triangle Park. The train is expected to be running in late 2008.

Carpooling is the leading method of alternative transportation, followed by telecommuting, then buses, vanpools, biking and, finally, walking.

A 2004-2005 survey of nearly 14,000 employees in Durham County showed between 15 and 20 percent are getting to work by another means of transportation instead of each person driving his or her own car to work, according to TTA. Officials say that each week in Durham County, the total mileage saved through alternative commuting is 400,000 miles, the same distance as driving from Durham to Los Angeles and back 43 times.

NIEHS was honored July 29 by the Triangle Transit Authority with a leadership award in the large company category.

The NIEHS Transshare program provides up to \$105 per month in fare subsidies for buses and vanpools. NIEHS has a formal telecommuting program, encourages carpooling through the TTA rideshare matching, and provides bike racks, showers and lockers for cyclists. Vanpoolers and carpoolers are also entitled to use prime parking spaces.

According to the TTA, NIEHS increased its alternative commuting from 15 percent to 19 percent over the last year.

TTA plans to implement a 28-mile rail transit system with 12 stops in Durham, Research Triangle Park, Cary and Raleigh, and shuttles linking Raleigh- Durham

Familiar Faces in Commuter Places

See NIEHS Faces on SmartCommute Posters

By Blondell Peterson

Four NIEHS employees are poster models for the SmartCommute Challenge, a triangle area initiative to promote alternative transportation to automobiles. Belinda Wilson, Dick Sloane, Xuefei Wu and Liya Qin are seen throughout the triangle on a poster encouraging Research Triangle Park employees to take the SmartCommute Challenge. Taking the challenge means you will commute by alternative transportation at least once by Sept. 30.

Julie Woosley, director of SmartCommute of RTP, said 130 NIEHS employees pledged last year. That was a 17 percent pledge rate, the highest among large companies with 500 or more employees.

“We did an onsite at NIEHS last year, and Dick Sloane rallied his fellow employees to sign up and we had a great response,” Woosley said. “Dick is a wonderful transportation coordinator because he’s so energetic, incredibly knowledgeable, and infinitely helpful and he also really walks his talk. He’s a regular alternative commuter himself, and has been for years.”



According to Sloane, SmartCommute started as a small effort in Research Triangle Park in 2000. He got involved in 2001. A part-time employee was hired in 2002. Today there is a full-time employee, interns and a committee. This year SmartCommute is combined with the Triangle Transit Authority and involves Orange, Durham and Wake Counties. Approximately 90 employers and several television and radio stations are publicizing the SmartCommute Challenge.

Anyone who takes the challenge is eligible to win a grand prize of two round-trip airline tickets and a week-long hotel stay anywhere in the 48 continental United States. Other prizes include a laptop, an iPod Mini, and a bicycle. Get the full details at www.smartcommute.org.

NIEHS contributed \$1,500 to become a gold sponsor of the event. Sponsors help to expand the campaign with prizes for employees who take the Challenge or donate cash or services to help with marketing and advertising.

“I am impressed with the willingness of NIEHS employees to try a new way of getting to work,” Woosley said. “They really seem to understand that each person’s actions can make an impact, and are willing to go a

little out of their way to make a difference. Perhaps it's because of the work they do at NIEHS, they understand how environmental systems can be impacted by human behavior as well as how human health can be impacted by the environment, and they really want to be a part of the solution. I commend them for their participation last year and challenge them to beat their own record this year!"

NIEHS-Funded Research Graces the Cover of *Science News*

By Colleen Chandler

Five years ago, NIEHS decided to commit \$6.6 million to research on red-tide toxins. That research is making quite a splash in the biomedical research community.



According to a cover story in the July 22 issue of *Science News*, the latest findings have been presented in more than a dozen papers and presentations. Perhaps the most visible result of red tide is in the numbers of dead manatees and dolphins showing up on beaches where red tide blooms are evident. Among the surprises researchers found: red tide toxins can be beneficial to human health.

The toxin, it turns out, actually turns the water greenish-yellow or brown, not red. But it is the invisible, airborne irritants that most affect people.

Principal Investigator Dan Baden heads the Center for Marine Science at the University of North Carolina at Wilmington. He and his team have been studying red tide and the process that produces toxins, called brevetoxins, through photosynthesis. The toxins kill fish, contaminate shellfish, and irritate the respiratory system of mammals, including humans.

Baden and his team have discovered that neurotoxicity is not the only way red tide can cause health problems. The *Science News* articles said red tide creates between nine and 13 toxins. Waves release the toxins in the water, turning the coastal waters into toxic soup, the article said.

However, an unexpected surprise came when researchers discovered potentially helpful effects of the toxins. They are now focusing part of their work on harnessing these toxins to treat lung diseases. One of the toxins may aid in the treatment of cystic fibrosis by clearing mucus from the lungs.

Baden presented his research at the Society of Toxicology Meeting in New Orleans in March. Brevetoxins accumulate in rodent cerebellums, which control cognitive function, breathing and muscles, he said. If the toxins have the same effect on manatees, that could explain their disorientation and seeming inability to swim out of the toxic water. Tainted fish are probably the reasons dolphins are dying, researchers speculated. Even low levels of the toxins can kill fish.

Labor Movement and Civil Rights, Intricately Intertwined

By Colleen Chandler

James Andrews, president of the North Carolina AFL-CIO, is a war veteran. Besides the time he served in the military, which resulted in a Purple Heart, he is a veteran of a different kind of war – the American civil rights movement. Civil rights issues and unions issues are based on the same principles and face the same challenges. They are inextricably intertwined, he said.

Andrews served as outreach director for the state AFL-CIO, then as secretary-treasurer for 13 years. He was the first African-American to be elected as full-time president in the history of the AFL-CIO in the United States. He still holds that position. Andrews was at NIEHS Aug. 26 to make a presentation, “The Labor Movement and Civil Rights.” The NIEHS Diversity Council, the American Federation of Government Employees Local 2923, and NIEHS sponsored the presentation.

AFGE is one of the unions under the umbrella of AFL-CIO, a voluntary federation of national and international labor unions. The AFGE Local 2923 and the North Carolina AFL-CIO sometimes join forces to coordinate legislative policy, political activity, member education and other shared interests, said Bill Jirles, vice president of AFGE Local 2923. Jirles said there are about 200 members of AFGE Local 2923. Professionals, supervisors and confidential employees are ineligible to join under the current agreement, Jirles said.

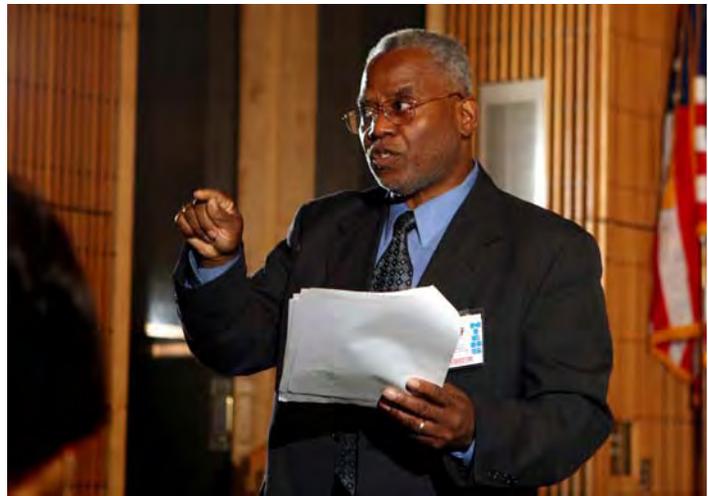
In his presentation, Andrews said organized labor and civil rights have always operated hand-in-hand. Just as organization and solidarity gave the civil rights movement collective power, they also fuel the labor movement, he said. Martin Luther King Jr. said, “What affects one, affects all.” That message, Andrews said, was right at the time, and it is right today.

Andrews recited the following list of basic needs from a King speech:

- Decent wages
- Fair working conditions
- Livable housing
- Old-age security
- Health and welfare measures
- Conditions in which a family can grow
- Education for children
- Respect in the community

Those needs still apply to both civil rights and organized labor, he said. Andrews quoted Samuel Gompers, the first president of the AFL when asked what labor unions want: “We want more schoolhouses, less jails; more books, less arsenals; more learning, less vice; more leisure, less greed; more justice, less revenge. In fact, more of an opportunity to cultivate our nature to make manhood more noble, womanhood more beautiful and childhood more happy and bright.”

As the global marketplace develops, Andrews said, both civil rights and organized labor movements will need to become global issues. But, he said, there is still plenty of work to do at home, since there are new ways to



James Andrews, president of the North Carolina AFL-CIO, speaks to NIEHS employees Aug. 26. Union membership in North Carolina is at 2.7 percent, the lowest in the nation, Andrews said. (Photo by Steve McCaw, Image Associates)

deprive people of their rights – both civil and in regards to union membership – today that did not exist in the late 1950s or early 1960s. There are still places in the United States, where employees are intimidated into rejecting union affiliation.

For Labor Day, Andrews asked that people reflect on the sacrifices and contributions made, including the ultimate sacrifice of death for doing what the law says they have a right to do. He urged people to find something to do that will contribute to the collective power of organized labor. It is, after all, labor unions that gave us the Labor Day holiday, he said. For more information, or to find out if you are eligible to join AFGE, contact Jirles at 541-2637.

Summer Student Aims High, Plans to Give Back to her Community

By Colleen Chandler

Karla Hernandez-Cruz knew for a long time what she wanted to do. When asked, she does not hesitate: “Go to medical school and get a Ph.D.”

She intends to be a pediatric endocrinologist. The 22-year-old is a senior, majoring in biology at the Universidad Metropolitana in Puerto Rico.

Hernandez-Cruz started building a foundation in biomedical research when she did her first internship at the University of Rochester in 2003. That was the summer following her freshman year. In 2004, her sponsor at the Universidad Metropolitana told her

about a program that would allow her to come to NIEHS to work. When she heard the term ‘environmental health sciences,’ she said, she thought of field biology and collecting water samples. But she applied anyway. With help from Gerard Roman in the Equal Employment Office, she got a foot in the door. After a phone interview, she landed a position for the summer 2004 in Retha Newbold’s lab. She said she was pleasantly surprised to discover what NIEHS does



Karla Hernandez-Cruz, right, with Retha Newbold, center, and Lisa Banks, left. (Photo by Colleen Chandler)

Last year, Hernandez-Cruz learned lab techniques used to study reproductive toxicity and endocrine disorders. She presented posters and won awards from the Endocrine Society and the Society for Advancement of Chicanos and Native Americans last year. She will present a poster again at the Endocrine Society at the end of September.

As a kid, Hernandez-Cruz spent five summers at a camp in Puerto Rico run by the Comité de Educación y Bienestar para Niños y Adolescentes con Diabetes. There, kids with type 1 diabetes learned how to control their sugar and measure insulin. She also learned to accept their condition. The director of that camp made a deep impression on the young Hernandez-Cruz, who now also volunteers her time to work with kids who have type 1 diabetes.

Hernandez-Cruz is the first person in her family to go to a university, and the first person in her household to graduate from high school. She has a strong sense of patriotism, vowing to do all she can to improve public health in her homeland.

The Universidad Metropolitana participates in the Model Institute of Excellence Program funded by the National Science Foundation. NIEHS provides assistance through its discretionary funds and gives opportunities for minorities at the university as well.

Hernandez-Cruz is something of a pet project for Newbold, who makes a point of recruiting women into science careers. Lisa Banks, a biologist in Newbold's lab, is also from Puerto Rico and she makes a point of recruiting Hispanics. Banks, whose first language was Spanish, quickly became a mentor and sometimes translator for Hernandez-Cruz. Newbold said women and Hispanics are seriously underrepresented in science. Hernandez-Cruz said Banks is like her "mentor, sister, mom, and friend." Newbold agrees. Part of a researcher's responsibility when sponsoring a fellow is to look after them, she said.

"She is really dedicated to the project, and to science," Newbold said. She marvels at how Hernandez-Cruz has matured since last years. Newbold and Banks are trying to figure out a way to bring Hernandez-Cruz back next year as well.

Poster Session Concludes Summer Program

Most of the 67 participants in the 2005 Summers of Discovery program displayed research posters for NIEHS staff on July 27. The majority of the participants in the poster session and the Summers of Discovery Program are undergrad and graduate students, but there were six college faculty members, a middle-school teacher and six high-school students.

The program, which started in 1989 by Mike Hogan, underwent major changes after Hogan retired. Charle League took over coordination of the

program, and the number of slots dropped from 120-125 to about 65. The idea, League said, was to provide a better mentoring experience by lowering the quantity and increasing the quality. The scope of the program, which previously spanned into administrative support areas, was also reduced to focus solely on lab research.

The annual program includes weekly seminars by NIEHS researchers, who talk about their work, networking luncheons and computer skill seminars. This year, League brought in another speaker to tutor the group on poster presentation, answering questions about their posters, and appropriate dress for poster presentation.



Karla Hernandez-Cruz, left, with her mentor and sponsor, Retha Newbold, discuss Hernandez-Cruz' poster. The student, who is from Puerto Rico, just completed her second summer of research in Newbold's lab. (Photo by Steve McCaw)

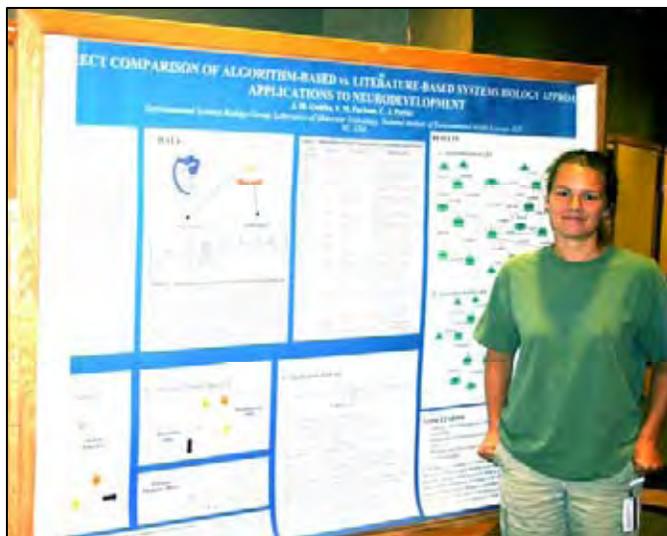
Julia Gohlke Receives James C. Bradford Memorial Student Poster Award

Julia Gohlke received the James C. Bradford Memorial Student Poster Award in the postdoc category at the 45th annual Teratology Society meeting in June. The award included \$250 and a plaque. Gohlke is a post-doctorate candidate in the Environmental Toxicology Program.

“It’s very motivating and reassuring to be recognized so early on!” Gohlke said.

Her poster was titled “Direct Comparison of Algorithm Based Versus Literature Based Systems Biology Approaches Application to Neurodevelopment” “and

looked at different computational approaches for analyzing gene expression or microwave data.



Julia Gohlke displays her winning poster. (Photo by Blondell Peterson)

Ray Tennant Receives Toxicology Forum Award

By Blondell Peterson

Ray Tennant, director of the National Center for Toxicogenomics, received the George H. Scott Memorial Award on July 12. The award was given at the Toxicology Forum’s 31st Annual Summer Meeting in Aspen, Colorado.

Tennant was honored with a slide presentation on his work in cancer biology. Tennant is chief of the Laboratory of Environmental Carcinogenesis and Mutagenesis at NIEHS. He focuses on transgenic mouse models for carcinogenesis and mutagenesis; the role of cell proliferation, mutation and gene expression in skin carcinogenesis; and the role of UV-induced DNA damage and immune suppression in skin cancer. He had a major role in developing the world’s largest database on mutagens and carcinogens.



Raymond Tennant receives the George Scott Award from Dr. David Longfellow, President of The Toxicology Forum. (Courtesy Photo)

Tennant’s pioneering work with transgenic mice and knockout mice lead to new models for carcinogenicity testing, which are used internationally. It is also recognized as a major advance in the assay of chemical carcinogens.

Tennant said he was surprised and grateful to receive the award, which was given to Gerald Wogan of MIT in 2004. Wogan is a scientific advisor to NIEHS. “I have great respect and admiration for the previous recipients and I’m pleased to be included among that group,” he said.

The award is named after George H. Scott, an early member of the Toxicology Forum board of directors.

NIH Hosts Health Symposium at BIG National Training Conference

By Blondell Peterson

More than 5,000 federal employees attended the 27th Annual Blacks In Government National Conference in Orlando, Fla. Aug. 1-5. A highlight of the week-long conference was the Health Symposium on Aug. 3 sponsored by the NIH National Center on Minority Health and Disparities. The theme was "The Health Status of the African American Community."

Marian Johnson-Thompson, director of Education and Biomedical Research Development, was the moderator

for the first panel, "The Impact of the Environment on Human Health." Topics for discussion were asthma,

neurodegenerative diseases, breast cancer, lupus and obesity. Kay Johnson, NIH Black Employment Program Manager, was the moderator for the second panel, "Health Disparities in the African American Community."

Annette Rice, BIG past president, said attendees asked if stem cells would ever be used for treatment of Parkinson and Alzheimer's disease. The response from the panel was that it is not legal.

The following topics were discussed, and the following tips offered by panelists:

- Diabetes. Type 1 requires medication, while Type 2 can be controlled with diet. People with both types should be under a doctor's care. Factors that influence diabetes are genetic but lifestyle is the primary factor. Blood sugar should be checked regularly.
- Lupus. There are several diseases that may surface prior to being diagnosed with Lupus. They include: Hepatitis C, Celiac, Hemochromatosis, Aneurysm, Lyme disease, Hypothyroidism, Polycystic Ovary Syndrome, Clamydia and Sleep Apnea.
- Obesity. Parents should get involved with school programs and boards, monitor food children are eating at home and at school and people should be aware of and measure body fat and start exercising. They should also check body mass index

Other questions pertained to how to get treatment on a fixed income or with no income. Rice said experts on the panel cited instances where they personally referred patients in order for them to be given treatment by a physician. The general consensus was that we have a health care system that needs fixing.

Johnson-Thompson said participants appeared to find the event extremely informative because they asked many questions relative to their own health and the health of their family members and friends. They said most of these questions were not answered by their health care providers, or the answers provided were not



Edward Treadwell, professor of medicine at East Carolina University, answers questions about lupus. Marian Johnson-Thompson moderates the discussion. (Photo by Veronica Godfrey)

understandable. “This panel of experts did a superb job in answering questions and clarifying issues,” Johnson-Thompson said. “It was clear, in the case of NIH employees, that though they worked in an environment where important public health information is developed, this information is not available to the average employee.”

A third panel’s topic was “U.S.-Mexico Border Health Initiatives.”

Kimberly Peterson, BIG president said the conference was well attended. “The BIG conference offered over 100 career-enhancing workshops, and all the military branches held day-long forums. It is a perfect forum for new health initiatives,” she said.

Central Storage? What’s That?

By Colleen Chandler

Most computer users just want their computers to work properly. They’re not so concerned about what makes computers function. But if you do much business traveling or telecommuting, central storage is a function you will want to know about since it allows you to access your data from home, from your work PC or from a laptop. A feature of this new program will also automatically synchronize versions of data files or documents to ensure you are working on the most current version.

Right now, central storage is only available for PCs.

NIEHS computer will begin moving people’s individual files and data from the hard drive on their PCs to a central server at NIEHS. The central server is more secure than individual desktop computers because the server has more tools in place to control unauthorized access. central storage will also improve the reliability of backups, and will allow users to restore their own files if they should become corrupted or damaged.

Peter Nowak, the Lockheed-Martin team leader in charge of the project, said participation is completely voluntary, and anybody who wishes can opt out by going to <https://apps.niehs.nih.gov/centralstorage/index.cfm>. User directories will be established for participants, and their computers will be configured to save their work on the network instead of their hard drives. The user will work with computer support staff to copy data and files onto the server. The session will probably take 30-40 minutes.

Participants in the central storage project will not be able to access their data when the network goes down. However, full network outages are rare, and the server that will be used for central storage data has an average operational uptime of 99.91 percent over the last five years.

One server is dedicated to central storage now, but additional storage capacity will be added as more space is needed, Nowak said. Users will start with 4Gb of storage space, but can upgrade to 8Gb in needed. People who need more than 8Gb of space will be handled on an individual basis.

For laptop users, the Offline Folders feature of central storage will allow them to access their data from any computer connected to the NIEHS network. When the user with this feature opens a file, a copy is automatically made on the hard drive of the laptop via the network connection. If the network connection goes down, these users can continue working on their files, which will be copied on their hard drives. As part of the Offline Files feature, the network will automatically synchronize versions of a data file or document to ensure that the latest version is saved back to the server. An additional safety feature allows users to override the synchronization capability to direct the server to save a specific version, Nowak said.



Science Notebook

Zeldin Labs Move toward Bench-to-Bedside Goal

By Blondell Peterson

Research efforts in the Molecular and Cellular Biology and Environmental Cardiopulmonary Disease groups are rapidly moving toward the bench-to-bedside goal according to translational investigator, Darryl Zeldin, who heads both groups at NIEHS.

“Our goal is to do mechanistic basic research, but we always try to think about how we can apply what we learn to humans to better understand human disease,” said Zeldin, a senior scientist.

He went on to say that the goal of the clinical program is to try to develop novel ways of thinking about treatment and prevention

by understanding basic concepts. “We’re constantly trying to go from the lab bench to the bedside. We make basic observations in cellular systems or animal models, and then apply what we have learned to develop new ways to treat or prevent disease,” he said.



Darryl Zeldin (Photo by Blondell Peterson)

Zeldin said sometimes scientists work the other way around as well, and start with the patient. “We often take patient samples back to the lab to analyze them in an attempt to understand disease pathogenesis,” he said. “So we constantly go from bench to bedside and back to bench.”

Zeldin wears the hat of a clinical researcher and a physician. He is on staff at Duke University Medical Center and sees patients two months out of the year in intensive care or on the consult service. Working primarily at the Veterans Administration Health Center, he heads a team of residents, interns, medical students and fellows. Modestly, he claims, “They do all the work. I get to come in every morning and make sure they are doing a good job and pat them on the back.”

Zeldin said most of his clinical time is spent talking to families and focusing on the big picture, letting his team deal with the details. By noon each day, he is back in the lab at NIEHS. “My lab doesn’t shut down when I go to the clinic,” he said.

Zeldin's largest study so far is the multimillion dollar asthma study. Recruiting and enrollment started in January and will last until 2008. Labs are analyzing dust samples and blood antibodies while the Centers for Disease Control administers the questionnaire from mobile trailers across the country. The data generated will be released in 2-year blocks. For more information on this study, visit Zeldin's asthma research website is located at <http://www.niehs.nih.gov/airborne/>

"We're working closely with Stephanie London in the epidemiology branch to incorporate a genetic component to this study," he said. "We hope to get DNA from a significant number of these individuals so that we can look at asthma and allergy genes and how that relates to the exposures and disease outcomes," he said. "It's a resource we're creating here, not just for ourselves, but for other scientists."

According to Zeldin, research that began 12 years ago to understand the role of certain types of fatty acids in cardiovascular disease has moved toward the clinical component.

"We've now identified polymorphisms or variations in the human gene and shown that they are functionally important," he said. "More recently we have shown that these polymorphisms may be risk factors for heart disease and stroke."

Zeldin's group will release two papers in the next few months that will show relationships between polymorphisms and the genes in this particular pathway and cardiovascular disease risks. "These genes are turning out to be heart susceptibility genes," he said.

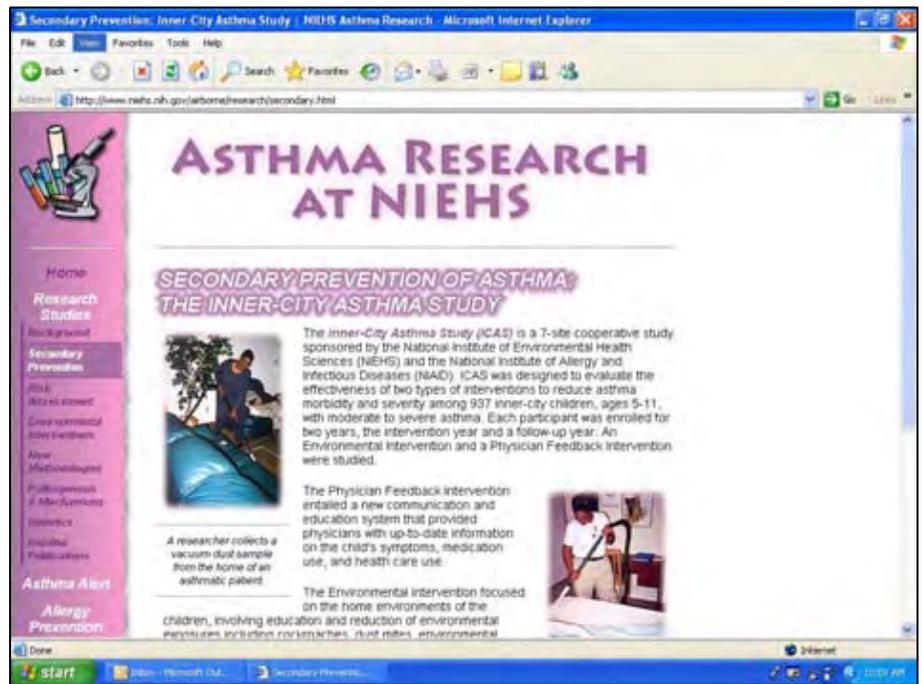
"That project is a good example of something that started here at NIEHS," Zeldin said. "We worked on cells, cloned genes and developed transgenic animal models to determine the functional importance of those genes. Only more recently have we been able to translate what we did to human studies where we can look at the association between variation in these particular genes and cardiovascular disease risk. Our long term goal is to use this information to develop novel therapies for heart disease."

EHP Credibility Reflected in Climbing Numbers

By Colleen Chandler

The numbers are speaking loud and clear. Editor-in-Chief Tom Goehl and his crew in *Environmental Health Perspectives* exerted a lot of effort over the past four years to improve the journal's credibility and to establish it as a top-notch journal. The numbers reflect their success.

The journal's Impact Factor rose climbed to another all-time high last year at 3.92, and the Immediacy Index rose to 1.202. In addition, EHP is cited in the popular press an average of six times per day. Since open access was implemented at the end of 2002 to allow everyone electronic access to the journal, the average monthly hits more than tripled, jumping from 197,340 to 622,090.



Based on the Impact Factor, EHP ranks in the top two environmental science journals and among the top five public health journals, Goehl said. Goehl served as science editor for the journal from 1994 until 2001, when he became editor-in-chief.

Both the Impact Factor and the Immediacy Index come out mid-year, usually in June. The Impact Factor is based on the number of times EHP is cited by authors in research articles that appear in other journals. Over the past four years, the Impact Factor has gone up 30 percent, or an entire point.

The Impact Factor and the Immediacy Index are based on averages over different periods of time. The 2005 Impact Factor reflects an average of citations in 2002 and 2003. The Immediacy Index, as the name suggests, is based on more current information, reflecting the frequency of citations during the previous year. The 2005 Immediacy Index indicates every article in EHP was cited 1.2 times in other journals in 2005. The 2004 Immediacy Index was .8, and the highest it had been before that was .5.

Goehl attributes the increasing numbers to the quality of the articles. "Success builds on success," he said. The number of manuscript submissions to EHP has doubled over the past four years, going from about 600 submissions to about 1,200 submissions annually. The rejection rate is 80 percent. EHP also has a quick turnaround time compared to other journals. It publishes manuscripts online within 24 hours of acceptance while many journals publish a year or longer from the date of acceptance, Goehl said.

The printed version is distributed in more than 190 countries and has a circulation of about 5,000 copies. Complimentary copies of EHP are provided to institutions in developing countries, and EHP publishes a Chinese version quarterly. The Chinese edition is distributed to about 35,000 readers.

The electronic version, available at <http://www.ehponline.org>, has more than 150,000 individual users each month. The content is fed into PubMed Central, the digital archive of the National Library of Medicine. The average number of monthly visitors during the past year is 174, 748, according to Paul Cardullo, who manages the site.

Besides manuscripts that target the research community, EHP's environmental news section targets the general public and policymakers. EHP is also involved in a number of international outreach projects to support developing countries in their efforts to improve the scientific and medical capabilities. Capacity building, as it is called, includes sharing information. For example, EHP provides its content for translation and use in partner journals in those countries. EHP is involved in journal capacity building on four continents: North America (Mexico), South America (Brazil and Chile), Asia (China), and Africa (Ghana, Mali, Malawi, and Uganda), Goehl said. EHP staff mentors editors from those countries and provides technical training

Uncle Sam Needs YOU

More Research Veterinarians Needed for Public Service

By Colleen Chandler

Reports are calling for executive-level coordination of veterinary research to overcome gaps in information sharing among federal agencies. To compound the problem, the supply of veterinarians appears to be shrinking just when the need for them is exploding, the reports said.

Smack dab in the middle of the issue is Bill Stokes, chief veterinary officer for the Public Health Service and director of an NTP council on use of alternatives to animal research.

As the chief veterinary office for PHS, Stokes advises the Office of the Surgeon General and the Office of the Secretary on the need for veterinarians in any federal agency, the appropriate use of those veterinarians, when and where they should be deployed for Public Health Service emergencies and disasters.

In July, the National Academies' Research Council released a report detailing gaps and overlaps in the U.S. animal health system and potential threats from emerging diseases and bioterrorism. There are not enough research veterinarians, whose roles are to both protect human health and animal health, the report said. It also questioned the ability of the United States to respond to or even research deadly diseases that could sweep the nation via animals.

Another report, "Animal Health at the Crossroads: Preventing, Detecting, and Diagnosing Animal Diseases," went a step further. Based on joint research from the American Veterinary Medical Association and the World Veterinary Congress, it called for widespread information sharing and consolidated oversight among federal agencies dealing with animal diseases.

Seventy-five percent of new diseases are transmitted from animals to humans, and veterinarians are crucial in preventing, controlling and diagnosing them, Stokes said. With the avian flu, for example, the mortality rate is about 50 percent. Other examples of diseases that spread from animals to humans are anthrax, SARS, corona virus, West Nile virus and monkey pox. Bioterrorism agents, if released, could show up in animals first, Stokes said. Issues that veterinarians deal with are global health issues; climate change and the effect on ecosystems change the distribution of zoonotic diseases, or diseases originating in animals, he said.



Environmental health science is heavily dependent on the use of animal models, and veterinary pathologists are a necessary component. At NIEHS, there are a number of veterinarians involved in supporting, carrying out and overseeing National Toxicology Program studies, Stokes said. Researchers have to have a good understanding of the mechanisms in the whole animal to identify critical events that lead to toxicity. Developing new tools means better screening tools or batteries of system, he said.

Stokes said it takes at least eight years of college to become a veterinarian, plus another three to five years for a doctorate. The demand for veterinarians in private practice is increasing, Stokes said, while the role of veterinarians in public health is becoming increasingly important. To recruit more people into, not only veterinary science but public service, Stokes said there are several issues that must be addressed. To provide a sufficient quantity of board-certified veterinarians, there must be a sufficient number of veterinary schools, sufficient opportunities and funding for specialized training, and enough incentives such as student loan repayment.

Stokes is the executive director of the Interagency Coordinating Committee on the Validation of Alternative Methods, or ICCVAM, which is administered by the NTP Interagency Center for the Evaluation of Alternative Toxicological Methods, or NICEATM. Both groups evaluate new and revised test methods for U.S. agencies. Both ICCVAM and NICEATM were initiatives implemented to meet the requirements of the NIH Revitalization Act of 1993.

Tox Town Adds US Mexico Border Neighborhood

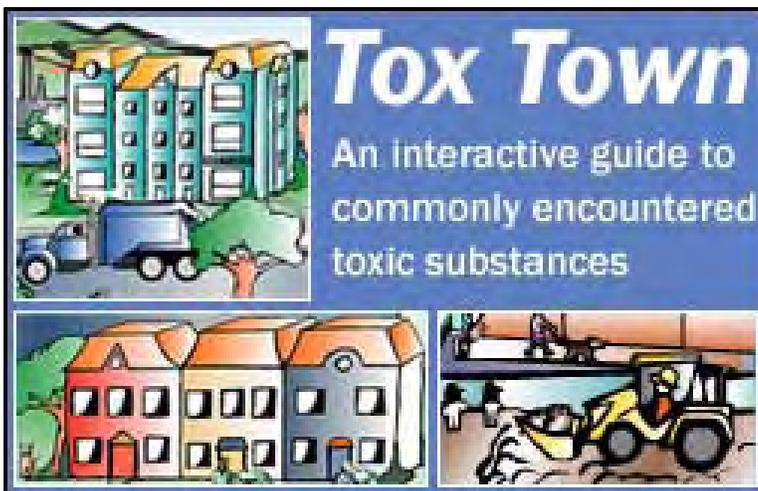
By Blondell Peterson

Tox Town is an interactive website created by the National Library of Medicine to introduce visitors to environmental health risks associated with toxic chemicals encountered in everyday life. Visitors to the site view information on communities by moving their computer mouse over drawings of cities and towns.

The newest neighborhood at Tox Town is the U.S. Mexico Border.

“We added the Mexico Border scene because there are a lot of unique environmental health issues along the border that people outside that region are generally completely unaware of,” said Cindy Love of the Specialized Information Services Division at NLM.

Things to explore on the Mexico Border page include an auto shop, “tienda” (corner store), “maquiladora” (factory), crop fields, storm water and sewage systems illegal dumps and tire piles. It also includes a “colonia” which is a border community that lacks paved roads, running water and waste disposal, and which is home to more than 400,000 people in Texas, New Mexico, Arizona and California.



The U.S.-Mexico border region is the area within 62 miles on either side of the international border. It extends approximately 2,000 miles and runs through the Mexican states of Baja California Norte, Sonora, Chihuahua, Coahuila, Nuevo Leon and Tamaulipas. The area is home to 12 million people live in the region, but the population is expected to increase to 24 million by 2025.

In addition to the U.S.-Mexico border page, a farm scene is under consideration as well as an arctic village scene and a generic sea shore town. The website address is http://toxtown.nlm.nih.gov/index_content.html.

A Customized Approach: “Of Mice and Tickler Databases”

Sharon Hite, of the NIEHS Computer Technology Branch, gave a web-based presentation Aug. 24 on custom uses of SiteScape. More than 60 members of the SiteScape client community – twice the usual participation – tuned in for the “webinar.”

The presentation, “Of Mice and Tickler Databases,” discussed some of the applications Hite has developed for NIEHS users and the process she used to develop them.

SiteScape Enterprise Forum is a web-based platform that combines project management, knowledge management, and document management with workflow, team collaboration, and access control to address a number of needs. Since the product is completely web-based, it works equally well for Windows, Mac, and Linux users. NIEHS has several groups using SiteScape for both the standard features and customized applications.

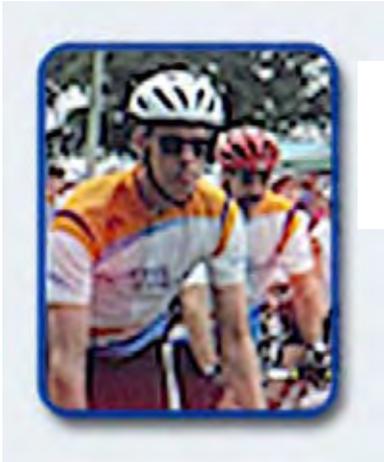
The majority of clients use the SiteScape customizations team or contract with one of the business partners to produce applications that go beyond the standard functionality. Hite's presentation showed that users willing to take the time to understand the product can write their own custom applications. She also highlighted some best practices for developing and using those applications.

Hite is well-known in the SiteScape community for her work in customization. She spoke at last year's user conference and was asked to speak again at this year's conference. She is a member of the Client Advisory Board, which oversees the client community and advises SiteScape on future directions for the product. She has written white papers on developing integrations with other products, such as Crystal Enterprise and ColdFusion. After she wrote a paper on incorporating an open-source rich-text editor in SiteScape that would allow Mac and Linux users to make entries in rich text, the company included that editor in the next version of their product. Many more of her suggestions have been incorporated in the current version or in the upcoming version.

Papers of the Month – July 2005

By Jerry Phelps

- 1) Johnson J, Bagley J, Skaznik-Wikiel M, Lee HJ, Adams GB, Niikura Y, Tschudy KS, Tilly JC, Cortes ML, Forkert R, Spitzer T, Iacomini J, Scadden DT, Tilly JL. Oocyte generation in adult Mammalian ovaries by putative germ cells in bone marrow and peripheral blood. *Cell*. 2005 Jul 29;122(2):303-15.
Implications: The researchers have not yet determined whether oocytes derived from germline stem cells can undergo fertilization and subsequently develop into viable offspring. However, the results do prove that bone marrow and peripheral blood are sources of the germline stem cells and can sustain oocyte production into adulthood. Much additional research is needed, but if adult oocyte production is also possible in humans, it could have major implications on the treatment of infertility and other disorders such as osteoporosis.
- 2) Engel SA, Olshan AF, Savitz DA, Thorp J, Erichsen HC, Chanock SJ. Risk of small-for-gestational age is associated with common anti-inflammatory cytokine polymorphisms. *Epidemiology*. 2005 Jul;16(4):478-86.
Implications: These results are somewhat paradoxical in that decreased production of interleukin-4 caused both increased risk for spontaneous pre-term birth and decreased risk for babies small-for-gestational age. However, increased production of anti-inflammatory cytokines increased the risk of small-for-gestational age. These data suggest that maintaining the proper balance of pro- and anti-inflammatory cytokines is crucial for good pregnancy outcomes and deviations in either direction may increase the likelihood of pre-term birth or low-birth weight babies.
- 3) Lillard-Wetherell K, Combs KA, Groden J. BLM helicase complements disrupted type II telomere lengthening in telomerase-negative *sgs1* yeast. *Cancer Res*. 2005 Jul 1;65(13):5520-2.
Implications: These results are somewhat paradoxical in that decreased production of interleukin-4 caused both increased risk for spontaneous pre-term birth and decreased risk for babies small-for-gestational age. However, increased production of anti-inflammatory cytokines increased the risk of small-for-gestational age. These data suggest that maintaining the proper balance of pro- and anti-inflammatory cytokines is crucial for good pregnancy outcomes and deviations in either direction may increase the likelihood of pre-term birth or low-birth weight babies.
- 4) Choi DK, Pennathur S, Perier C, Tieu K, Teismann P, Wu DC, Jackson-Lewis V, Vila M, Vonsattel JP, Heinecke JW, Przedborski S. Ablation of the inflammatory enzyme myeloperoxidase mitigates features of Parkinson's disease in mice. *J Neurosci*. 2005 Jul 13;25(28):6594-600.
Implications: The authors of the study point out that the exact mechanisms by which the telomere lengthening occurs and the role the helicase plays in these pathways are still unknown. The study does show that BLM is an important component in maintaining telomeres and sheds light on the cellular mechanisms leading to Bloom's syndrome.



After Hours

Beth Mahler Reaches Out to Mentally Ill

By Blondell Peterson

Ask any Club Horizon staff or club member if they know Beth Mahler, and you will likely hear, “No, I don’t believe I do.” But ask what kinds of things volunteers have done there, and most folks will tell you volunteers painted the entire 5,500 square feet of the club last year. Beth Mahler, a contractor in the Laboratory of Experimental Pathology, and her 17-year-old son, Charlie Gaul, are the phantom volunteers who did the painting. Like so many other things she does for the clubhouse, she said, she did it because “it just needed to be done.”

Club Horizon is a non-profit prevocational day program for adults with persistent mental illness. The members of the club are learning to get their lives back on track after a diagnosis. The clubhouse has a snack bar, thrift shop, laundry room, TV room, full kitchen, dining area and several social areas. Members handle the daily operation of the clubhouse in all these areas with minimal assistance from the five- person staff.

When asked what kinds of other things Mahler does to help the club, she and Sue Kavelak, a senior volunteer, broke into hilarious laughter. Kavelak and Mahler are next-door-neighbors and “laugh a lot.” The joke is that Kavelak is a master at acquiring volunteers—for anything the club needs. Mahler got involved with helping the clubhouse when she asked Kavelak what she was doing for the weekend. The rest is history so to speak.

After the laughing friends composed themselves somewhat, Kavelak chimed in, “She is a wonderful volunteer. Beth will do anything for anybody at anytime. If she is your friend and she believes in what you are doing, she will literally help you day or night. She’s raised a wonderful son and he is very similar in that good-natured gentle way of helping others. It’s very refreshing. You don’t see that too often nowadays.”



Friends and neighbors Sue Kavelak, left, and Beth Mahler “laugh a lot.” (Photo by Blondell Peterson)



*Mattie Sanders sets the table for lunch
(Photos by Blondell Peterson)*



Trey Ball relaxes in the reading area at Club Horizon.

Mahler modestly admitted to collecting everything from food to furniture when she is notified of a need. She said the greatest short term need is a commercial kitchen. To celebrate its one year anniversary, Club Horizon will host a huge yard sale, bake sale, craft fair and pancake breakfast on September 10 at the site. The clubhouse is located at 101 B Forest Drive in Knightdale. Donations of items other than clothes will be accepted through September 2. Once again, Mahler volunteered to pick up any items for the sale.

Ron Blankenship, the club administrative assistant, said most of the 100 volunteers don't work in the club house itself because the members run it. "Where we need volunteers is out in the community doing the grunt work like getting ready for the yard sales and making contacts with folks to let them know we are here. We need board members –professionals in the social and business community who are willing to invest some time."

According to Kavelak the long term need is to purchase the entire 10,000 square foot building where they currently rent 5,500 feet to have room for expansion. The cost is approximately \$800,000. "In eastern wake county the demographics tell us that there are about 140,000 people with mental illness," she said. "Because the state is going to mental health reform and closing Dorothea Dix Hospital in 2007, we have to have community services to help our people get well."

"Quite frankly this place was built on the backs of the volunteers," Blankenship said. "This place was not nice looking. Little over a year ago, they came in and painted. We had a volunteer that strung the wires. We can also use volunteers that have talents for an infrastructure." Financial contributions are welcome as well. All contributions whether monetary or in-kind are tax deductible.

"I'm a bookkeeper by trade, and I have invested in this because I have seen the good that it has done in the one year that we have been here," he said. "I've seen people come out of their shell. They are interacting. We have folks going to work through our transitional employment program."

According to C. Manay Gunter, the executive director, temporary employment is needed. "Basically we go in and learn the job and then we train the member. The employer has no direct responsibility for training. It's a win-win situation. If the member needs to be out for a doctor's appointment, one of the staff members does the job."

"They need computers," Mahler said. "The members get help with writing resumes. We try to get the department of commerce and businesses in the local area to give them jobs. We have a library, so books are welcome donations."

“Just in our little cul de sac, we’re all involved,” Mahler said. “We want to help because the members smile and they are so happy. Sometimes you do things for people and they say ‘gee thanks.’ The members at Club Horizon really appreciate everything you do for them and give them.”

“This is Beth,” Kavelak said. “She always makes time for others in her life. She’s a fantastic volunteer and a fantastic person and an even better neighbor. I’m only saying that because I like your lasagna,” she jokes. “She makes a killer lasagna!”

Man About Town: John Schelp

By Colleen Chandler

John Schelp, it seems, is everywhere you look in the media lately.

Aug. 27, it was the Durham *Herald Sun* Grit Award. In July, it was a listing in *Towerview*’s “10 people to watch” and the cover of the real estate section of the *News & Observer*. As if that’s not enough, he was named “Tarheel of the Week” in March 2003 by the *News and Observer*, and along with other members of his housing association, got another Grit Award in 2000.

Schelp is shown in the July 30 edition of the *News & Observer* sitting on the steps in front of his Durham home, which was constructed from a catalog kit sold by Sears, Robuck and Co. Everything for the house, with the exception of bricks and mortar but including light fixtures and doorknobs, were delivered by rail for construction on-site. The house is now adorned with a plaque from the Historic Preservation Society of Durham. But it was Schelp’s own digging through historical records that nailed down the home’s history. It was built by Mamie Norwood in 1928.

According to local historians, Sears catalog homes were very high quality, but not many are found in the South, since building materials and cheap labor made it at least as affordable to hire locals to build such homes.

It was Schelp’s suggestion to a Durham official that landed him the 2005 Grit Award. Schelp was on jury duty at the Durham courthouse when the idea struck him. As fellow jurors, about 200 of them, planned to go to lunch, the jury clerk was only able to suggest one

restaurant – the diner in the basement of the courthouse. Jurors are allowed e-mail access, and from the jury room, Schelp e-mailed the executive director of the Convention and Visitor’s Bureau. He suggested maps of

ADVERTISING SUPPLEMENT OF THE NEWS & OBSERVER/THE DURHAM NEWS

Real Estate DURHAM

newsobserver.com/realestate

RATES	
Year	Percent
2003	7.0
2002	6.5
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Coastal Resort Property for Sale...582
 Condos/Townhouses for Rent...555
 Condos for Sale...515
 Farms and Acreage...399
 Historic Homes...511
 Homes for Sale...502
 Houses for Rent...560
 Lake Resort Property for Rent...574

Lake Resort Property for Sale...584
 Lots for Sale...310
 Lots for Rent...323
 Manufactured Homes for Rent...536
 Manufactured Homes for Sale...538
 Manufactured-Home Lots/Spaces...539
 Mortgage Lenders...534
 Mountain Resort Property for Rent...573

Mountain Resort Property for Sale...583
 New Homes for Sale...501
 Office/Condo Rent-Sale...393
 Office Space for Rent...394
 Office Space for Sale...595
 Open Houses...504
 Other Resort Property for Rent...575
 Other Resort Property for Sale...585

Real Estate Loans...58
 Real Estate Management Services...58
 Real Estate Wanted...58
 Rentals to Share...58
 Rooms for Rent...52
 Roommate Wanted...52
 Townhouses for Sale...52
 Wanted to Rent...52

John Schelp's historic home on Rosehill Avenue in Durham was originally ordered from a Sears catalog and dates back to 1928.
 PHOTO BY TERRY DAVIS FOR THE DURHAM NEWS

Mail-order pride

restaurants that could be posted in the jury rooms that would likely generate a good bit of business for downtown restaurants. Sure enough, a brochure entitled “Get Seated for Lunch: A Downtown Durham Dining Guide for Jurors,” listing 40 restaurants within a reasonable distance to the courthouse has been created. Schelp said that the jury clerk will also include information about the listing in her orientation for jurors, and a link to the list of restaurants now appears on the jury room computer screensavers.

Towerview, a monthly publication of the *The Chronicle*, an independent daily newspaper at Duke University, listed Schelp as “The Boy Next Door,” or number 10 on a list of people to watch. The July 20 publication praises Schelp for his drive and commitment to improving his community for the people who live there.

Schelp is president of the Old West Durham Neighborhood Association. It was his actions in that capacity that earned him the first Grit Award in 2000. After receiving an e-mail from a man in another state hoping to find information about an ancestor believed to be buried in Durham, Schelp began digging into public records to find out information about the Erwin Mills Cemetery adjacent to his neighborhood. As he located the cemetery, he and his newfound friend organized a cleanup to remove debris that had piled up in the abandoned cemetery that served as the final resting place for many employees of Erwin Cotton Mills.

The *News & Observer*, March 3, 2002 edition, named Schelp Tar Heel of the Week for his community activism. But activism may not be the correct work. It’s more like proactivism. Schelp gets involved in the process, using his knowledge of how government works and what documents and records are available as public resources. He’s clearly not shy, and when it comes to safeguarding his community’s well-being, he does not hesitate.

Among the victories, he has led his neighbors in creating an identify for – even naming and posting a sign with the name – the Old West Durham Neighborhood and creating a web site to tout its history, events, and to create awareness of upcoming issues. The web site started out as a source of information for the neighbors, but Schelp said he gets e-mails from people all over the country inquiring about availability of houses in the neighborhood and asking for information about the area. Schelp has received a variety of local and state historical awards for the site, even a “local legacy” award from the Library of Congress. Schelp will receive another award Oct. 8 in Ashville from the North Carolina Historical Association.

Schelp served as chairman of the NAACP’s community committee. He and two other white people were featured in *The Crisis*, the NAACP’s national magazine, fall 2003 issue, for his role as second vice president of the Durham branch. He also thwarted city plans to build asphalt plants in poor Durham neighborhoods, and successfully influenced businessmen and developers to modify their construction plans so their projects would better blend into the existing community architecture. Among those project was the construction of an apartment complex that has the highest density in the Triangle. He rallied members of the community to challenge attempts by Duke University to expand retail businesses on campus. Those businesses would have been exempt from property taxes. Schelp said he believes those businesses belong in Durham instead of on campus. While it is not yet a done deal, Schelp is confident he has achieved his objective.

Schelp said his interest in such projects started some 20 years ago as a Peace Corps volunteer in the Congo. For him, he said, seeing that kind of abject poverty created a very clear sense of right and wrong. Schelp has been at NIEHS since 1991. He is currently special assistant to the director of DRCPT. He has a bachelor’s degree in political science and French from St. Lawrence University and a master’s degree in public administration from the University of North Carolina – Chapel Hill.

NIEHS in the Community

Durham's "Back to School Youth Fair"

By Colleen Chandler

Three NIEHS employees, all sorority sisters, got involved in the "Back to School Youth Fair" in Durham because they wanted to touch the lives of underprivileged children. They rounded up a group of NIEHS staffers who were also willing to volunteer their time and expertise, and spent a day showing kids that science is all around them in their daily lives.



*Some of the NIEHS staff who volunteered to help kids learn about science with hands-on activities at the Durham "Back to School Youth Fair", from left: Keith Holloway, Sharon Beard, Marian Johnson-Thompson, Undi Hoffler, Joan Pakenham, Elena Braithwaite and Mark Melton.
(Courtesy Photo)*

The NIEHS budget for these types of activities is small. NIEHS provided glassware, which was returned after use, brochures, key chains, but by far the biggest contribution was the expertise and interest of NIEHS staff.

Sharon Beard, industrial hygienist in DERT, Joan Pakenham, health scientist in DIR, and Marian Johnson-Thompson, outreach coordinator at NIEHS, are members of the Durham Alumnae Chapter of Delta Sigma Theta Sorority, Inc. The sorority's Science & Everyday Experiences, or SEE program, and several other organizations sponsor the annual "Back to School Youth Fair" each year in Durham. The event has grown every year since it was first held in 1999. This year, it was held Aug. 6 at Hillside High School, where the women were able to set up in the school's labs. Between 350-400 kids participated.

Working as part of the sorority's Science in Every Day Experiences program, or SEE, the women spent countless hours planning, finding sponsors, purchasing supplies and equipment that were not donated, setting up equipment and organizing volunteers. Beard chairs the Durham SEE and Pakenham serves as co-chair. Johnson-Thompson chairs the National Advisory Board of the national SEE program.

"By this introduction [to science], they begin to see it as natural and not a remote discipline that's difficult and hard to master. It also helps them to be more scientifically literate and for some, it may be an introduction to the interest in science as a career option," Johnson-Thompson said.

The three women recruited volunteers from NIEHS: Michaela Jones, a summer intern from the University of North Carolina at Chapel Hill who is working with Johnson-Thompson; Elena Braithwaite and Undi Hoffler, both Intramural Research Training Award fellows; Mark Melton, a biologist and assistant professor at St.

Augustine's College who also brought his son, Mark Jr.; and Keith Holloway, a computer support specialist. Elliott Gilmer, otherwise known as the sound man who sets up microphones and other audio/visual equipment, volunteered to cook lunch for the kids.

The back-to-school fair features a variety of educational activities for the kids, including a science session where they can experience science firsthand. Using materials commonly found around their home or school, the experiments were designed to show that science is a part of everyday life, and understanding basic scientific principles is not only important in their everyday life, but interesting and fun as well.

The kids were divided into groups by age. Pakenham took one age group, Beard another, and Johnson-Thompson, working with a local physician, took the last age group. To reduce the size of each session, kids were again divided into smaller groups and rotated into the various activity sessions held throughout the day. One of the day's sessions was science, and the science program leaders got together to plan and rehearse age-appropriate science activities for each group.

Leaders of the experiments led five to six sessions with different kids throughout the day.

Kids in the oldest group led by Pakenham learned about electricity and circuits, the difference between simple and complex circuits and how to generate power from fruit. Beard's group learned that if you put Vaseline on a balloon, then carefully put a wooden skewer in it, the balloon will not pop. They also made mucous, which kids call "slime."

"It's wonderful to see the kids' eyes light up," Pakenham said. "I always think, this may be the spark that interests them in science." She said that besides the supplies and the fun of learning about science, the fair also exposed kids to good role models in the community, which has more subtle effects on the kids' development. Johnson-Thompson said these kinds of activities ensure these kids, when they become adults, understand the mission of NIEHS and, as taxpaying citizens, support it.

At the end of the day, the kids all received book bags filled with school supplies, including things like rulers and protractors. Local businesses donate supplies and services such as breakfast and snacks and school supplies. Durham police sent a representative to talk to kids and parents about safety and gangs. Johnson-Thompson secured a grant from the Burroughs Wellcome Fund and Delta Research and Education Foundation, which were combined with assistance from a number of other organizations, including Delta Sigma Theta.

Contract Specialist Catches Big Fish – Or Does She?

Jennifer Smith, a contract specialist in DERT's Research Contracts Branch, shows off her latest catch from the family pond in Alabama. Co-workers insist she didn't really catch the fish, but rather, talked it out of the water. (Courtesy photo)





Did You Know?

Kelly Godfrey & Hearing Dog "Panther" On the Prowl

By Blondell Peterson

When Billy was 7 years old, he fell and hit his head on the corner of a bed. He cried for twenty minutes. His mom was in the kitchen, but didn't hear him. She could only read lips....



(Photo by Steve McCaw)

Seven years later – Billy is 14. Fortunately, there are no physical or emotional scars left from his fall. And, if there is a sound in the house or danger, mom now has an extra set of ears by the name of "Panther." The mixed lab, flat-coat retriever is the newest addition to the family. Panther is her hearing dog. Mom, better known to NIEHS employees as Kelly Godfrey, a supply technician in the Inventory Management Unit, is seen from time to time in the Rall Building with Panther in tow.

Godfrey has 80 to 85 percent hearing loss and can hear only with the help of hearing aids. "Panther lets me know when there are sounds like my name, smoke alarms, oven buzzers, door bells, knocks at the door and alarm clocks," she said. "We really need to work on the telephone a little bit more but I'm not worried about it. I'm close enough to my desk phone to hear it." Panther alerts Godfrey by touching her leg with his paw.

Besides Billy's fall, another incident happened in 1998 that made Godfrey think of getting a hearing dog. Billy had another dog at the time. Billy let the dog out early one morning, and forgot to unlock the door as he went out with the dog. Billy was locked out of the house in the rain and Godfrey was asleep. Finally when she got up, she found Billy outside drenched and crying. She didn't have her hearing aids in.

After being on a waiting list for almost two years, Godfrey was notified by Dogs for the Deaf that Panther was on his way from Oregon.



Panther “paws” Kelly when he hears a knock at the door. (Photo by Blondell Peterson)

signal to follow him. “I knew the alarm clock didn’t go off,” she said. “I went ahead and followed him. He kept looking at the oven. I said, ‘Panther the alarm clock didn’t go off.’ But I went ahead and praised him and gave him a treat.” She went back and sat down, but Panther pawed her again. “I thought what’s going on?” she said. “So, I followed him and then I realized it was the parmesan cheese container sitting on top of my flat top stove. The stove was on. The container was melting and he smelled it. I praised him and gave him another treat. He was not trained for that. Not every dog can do that. They are only trained for certain sounds.”

Godfrey said Panther carries his certified hearing dog license in his orange vest and a green book of each state’s legal rights for hearing dogs when he’s out in public. There’s only been one incident when a restaurant owner didn’t want to admit Panther. A bystander helped explain that Panther is allowed anywhere in public while he is working.

When Godfrey says the word “free” it means Panther can play or do whatever he likes. Although friendly, Panther is so disciplined that he will not go off duty or even eat until he hears the word “free.” Even when Gus and Gracie, the cats, are eating his food, he won’t budge until he gets the word.

Chinese Brush Painting

By Blondell Peterson

The Rall Building cafeteria was decked out with a festive and rather colorful eastern atmosphere for six weeks beginning July 13 in recognition of Asian Pacific Heritage Month. NIEHS employees took advantage of a Chinese Brush Painting class sponsored by the Diversity Council.

The giggling and raucous laughter didn’t give it away, but a nutshell Chinese history lesson was taking place during the fun



Janet Guthrie enjoys painting picture perfect chrysanthemums. (Photo by Blondell Peterson)

painting class. Each subject in Chinese brush painting has a meaning.

Bamboo is hollow inside and symbolizes being open minded, accepting new ideas and accepting criticism that can lead to growth. Plum blossoms grow wild in the countryside and symbolize just being you. Orchid blossoms are the first flowers to bloom in the springtime in China. They symbolize that no matter what kind of condition you are in you can overcome it. The chrysanthemum means long life.

Ellen Ko, art instructor at North Carolina State University and the Cary Jordan Arts Center, taught the class how to paint a different brush stroke each week for four weeks. On August 4 the pupils put all the brush strokes together to paint chrysanthemums. In the following class, they painted Iris flowers.

Crystal Hager-Braun, a scientist in the Laboratory of Signal Transduction, said it's all in how you load the colors on the brush. "This is how I keep my sanity, by being an artist. I'm just

doing it for fun," she said. The fun paid off when she sent an original painting to her uncle for his birthday. She painted it at 3:30 in the morning and sent it to Germany.

Michael McLaughlin, a computer hardware support specialist, said he took the class "to relax" and his bamboo paintings are "proudly displayed" on his refrigerator at home." He said his 12 and 14-year old daughters couldn't believe he painted them.

"I'm enjoying the class," said Janet Guthrie, a program analyst in the DRCPT. "She's an excellent instructor. This helps us exercise whatever part of the brain it is that we don't use in clinical stuff. I've always been interested in Asian art, so it's been fascinating trying to do it myself. You can't beat the price and we get a lesson in culture as well."

"Usually Chrysanthemums are brought to a funeral in western culture. In Asian culture they mean life," Guthrie said.

Ko patiently guided each student while she laughed along with the rowdy ones. The drama was fine with her since she has a degree in broadcast journalism as well. She also encouraged those who claimed to have "no artistic talent" including a certain writer who shall remain nameless.

Joan Roberts, a chemist and physicist in the Environmental Toxicology Program, said flatly, "I can't paint. I have absolutely no artistic talent," as she painted picture-perfect chrysanthemums with stems and leaves. "She just did this to my brain," Roberts said. "NIEHS should remember that this will expand our creativity in the laboratory. I don't know anything about art and Ms. Ko changed my life. Look what I'm doing! It's wonderful. It's inspiring the creative brain so we can go back to our labs [and excel]. It's for the good of the Institute."



*Ellen Ko shares brush stroke tips with Janet Guthrie and Joan Roberts.
(Photo by Blondell Peterson)*

Former Summer Student Receives Davidson Institute Fellowship

A Michigan teen who spent last summer working at NIEHS was named Davidson Institute Fellow.

John Zhou, 17, of Northville, received a \$25,000 biology scholarship, according to the local Michigan newspaper and a story picked up by the Associated Press. The Davidson Institute for Talent Development is based in Reno, Nev. It is a nonprofit group that awards scholarships to gifted students across the country.

Zhou is a rising senior at Detroit Country Day High School in Beverly Hills. His interest in science stems from his childhood, the newspaper reported. His grandfather died of lung cancer and Zhou intends to pursue cancer research.

30 Years: David Brown Changes Direction

With 30 years under his belt, David Brown retired from the Public Health Service. David Schwartz, NIEHS director, Sam Wilson, deputy director, Anne Sassaman, DERT director, Chip Hughes, Worker Education and Training Program director, and Allen Dearry, DRCPT director, spoke about Brown's contributions to NIEHS.

Former NIEHS Director Ken Olden, who was unable to attend, sent comments that Schwartz read at the retirement party. "David has the rare combination of compassion, temperament, intellect, and people skills that is so needed in an agency dedicated to health and human services. I will always be indebted to David for his invaluable advice and support as part of the leadership team during much of my tenure as director." Olden said in his written statement.

Brown has accepted a position as director of Scientific Research Program Development at the Center for Health Research at Constella Health Sciences in Durham.



Above: NIEHS Director David Schwartz, center, presents David Brown with a Public Health Service retirement certificate commemorating his 30-year career. Brown's wife, Gwen, was by his side at the retirement party July 29 in the cafeteria.



Left: Goodies galore appeared on the buffet table, and colleagues praised Brown's achievements. NIEHS officials showed up to tout Brown's work as a vital part of the leadership team.

(Photos by Steve McCaw, Image Associates)

NIEHS Town Hall Meetings Scheduled

NIEHS Director David Schwartz will host a series of town hall meetings for NIEHS staff to voice opinions, ideas and priorities.

- DIR – **Sept. 2** from 10-11 a.m. in 101 BC
- OM- **Sept. 12** from 10-11 a.m. in 101 BC
- DERT – **Sept. 29** from 2-3 p.m. in East Campus Conference Room 3162
- NTP – **Sept. 30** from 2)30-3 p.m. in 101 ABC
- OD/DRCPT – **Oct. 3** from 10-11 a.m. in 101B

If you cannot attend the session for your division, you may attend another session.

Up and Coming

- The NIEHS Fitness and Wellness Program is taking reservations for a horseback outing **Sept. 10** for NIEHS employees. If at least 10 people sign up, the cost will be \$17 per person. If less than 10 sign up, the cost will be \$20. No riding experience is required, and family members are also invited. Riders will meet at 11 a.m. at J&H Stables on Ebenezer Church Road in Raleigh for a one-hour ride on the trails of Umstead Park. The deadline to sign up is **Sept. 8** at noon. To register, contact staff in the NIEHS Fitness Room.
- The NIEHS Work Life Center career counselor will be available **Sept. 14** and **Sept. 27** for private, confidential career consultations. To book a session, contact the NIH Work Life Center at (301) 435-1617
- “Introduction to Radiation Safety at NIEHS” will be offered daily **Sept. 13-15** from 1-4 p.m. in conference room D450. The nine-hour course is required for people who will use radioactive material at NIEHS. A refresher course, required every two years for active radiation workers, will be offered **Sept. 21** at 10 a.m., also in conference room D450. The refresher course is required for new employees who will work with radiation at NIEHS but who have previous training. To register for the training or to get additional information, contact Bill Fitzgerald at 541-0325.
- “What Does Retirement Mean to Me?” will be held **Sept. 15** from 2:30-5 p.m. in Nottingham Hall, conference room 204AB. The seminar will cover topics like: What do I want from retirement?; How will I spend my time?; What are my personal interests?; What support resources are available?; How will my retirement affect others in my life?; Are there alternatives to retirement? For more information, contact Cynthia Radford at 541-1806. To register for the course, contact A'tondra Carree at 541-7883.
- The NIH Ombudsman Kevin Jessar will be at NIEHS **Sept. 20-22** to meet confidentially with NIEHS staffers. The ombudsman in an informal and neutral resource to help people address work-related issues, including inter-personal tensions, mentoring relationships and scientific collaborations. To schedule an appointment, call Jessar on his private line at (301) 594-9550. For more information, go to <http://www4.od.nih.gov/ccr/>.

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