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NIEHS Spotlight

NIEHS Staff Honored: NIH Director's Award

By Blondell Peterson



Perry Blackshear (File photo)

Four NIEHS employees received the NIH Director's Award July 18 at Natcher Auditorium in Bethesda. They are Perry Blackshear, Thorsten Fjellstedt, Cindy Lawler and Kathy Odenwald.

The award is given to employees who exhibit superior performance or special efforts significantly beyond their regular duty requirements, but directly related to the NIH mission.

"I'm really proud of the people we are honoring here today, but also I'm very proud to work here," said Elias Zerhouni, NIH director. "I'm very privileged to be your director. More importantly I think it is telling that institutions know their best people and reward them, award them, congratulate them and recognize them publicly, are the ones that understand what true north is. I think you'll see this through all the awards that we are bestowing today on dedicated employees of this agency that have faced challenges and continue to do outstanding work and move us toward our ultimate goal of improving public health."

Blackshear, the only NIEHS individual award winner, was recognized for the "Discovery of Tristetraprolin family RNA-processing proteins, their role in regulation of inflammation via growth factors of TNF." His discovery of Tristetraprolin generated widely cited coverage in *Science* magazine.

Lawler was a member of the National Institute of Mental Health Studies to Advance Autism Research and Treatment Team. She was recognized "for scientific and programmatic contributions to research on autism."

Odenwald was selected as a member of NIH's Equal Employment Opportunity program restructuring team as part of the One HHS Initiative. The team was tasked with moving all 29 centers and institute EEO functions to one centralized office. That office is now called the Office of Equal Opportunity and Diversity Management.



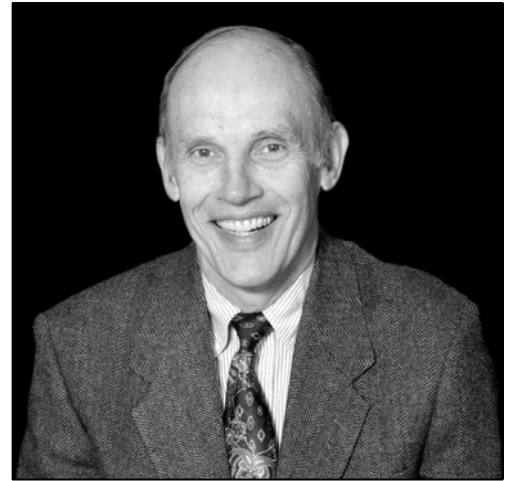
Cindy Lawler (File photo)



Kathy Odenwald (File photo)

“We also decreased the personnel size from 90 to 75 by the end of FY 2004 and aim for a decrease to 65 by the end of FY 2005,” Odenwald said. “I was honored to receive this award. I feel all the work, meetings and travels I did for this project was finally acknowledged and appreciated. NIH is truly a good place to work!”

Fjellstedt, now retired, was a member of the Office of the Director Roadmap Central Implementation Team. He received the award “for outstanding contributions in the development of policies and procedures underpinning Roadmap Central implementation.”



Thorsten Fjellstedt (File photo)

STP Young Investigator of the Year: Kennita Johnson

By Colleen Chandler

Kennita Johnson, who started working at NIEHS just 18 months ago, was selected for the Young Investigator Award at the annual meeting of the Society of Toxicologic Pathology in June.

Johnson, who attended the conference to present her research, said she let out a scream when she discovered the blue ribbon signifying the award on one of her posters.

Her poster, “The Evaluation of Cardiac and Other Soft Tissue Abnormalities in Rat Teratology Studies Using Magnetic Resonance Imaging (MRI),” looked at birth defects using non-invasive imaging techniques. That poster also resulted in a travel award and platform presentation at the June Teratology Society meeting. She is equally enthusiastic about her other poster, “Ultrasonic Analysis, A Tool for Early Detection of Cardiotoxic Lesions: Preliminary Findings.”

Johnson’s arrival at NIEHS and the Laboratory of Experimental Pathology coincided with a major emphasis on imaging. Until coming to NIEHS, Johnson had no experience in animal research, and lab chief Bob Maronpot said he wasn’t sure how it would work to add a postdoc with a physics background to a group of pathologists.



Kennita Johnson (Photo by Colleen Chandler)

He said it quickly became apparent that Johnson has a knack for communicating with scientists from different disciplines. Johnson became an integral part of the team, reviewing and modifying study protocols, participating in study management meetings, identifying unique ways to analyze and present imaging data, and taking a leadership role in all the lab's imaging efforts.

"I have been delighted with Kennita's interactions with our NIEHS staff in general, with LEP staff in particular, and with our research contractors," Maronpot said. "She has been extremely productive, working on cutting-edge rodent-imaging protocols where no two studies are the same. She has shown the potential for micro-x-ray, micro-CT, ultrasound, and MRI imaging modalities as tools for NIEHS researchers. All this in only 18 months."

Her work in the Laboratory of Experimental Pathology includes X-ray characterization of osteonecrosis and bone growth plate suppression, X-ray analysis of bones from mice exposed to potential endocrine disruptors, MRI images of liver vasculature from rats treated with acetaminophen, and micro-CT examinations of live rats for detection of pulmonary fibrosis.

Former NIEHS Director Ken Olden and Charle League, Summers of Discovery Program coordinator, recruited Johnson, who was a Meyerhoff scholar at the University of Maryland at Baltimore County. The Meyerhoff program is designed to encourage African-American students to pursue undergraduate biological science degrees.

Johnson completed her undergrad work at UMB, and then went to the University of Florida, where she earned a master's degree in medical physics and a doctorate in biomedical engineering. As she neared completion of her doctoral program, Johnson was invited to present at NIEHS. It was during that visit, she said, that she first learned that NIEHS conducts small animal imaging. It was at NIEHS, she said, that she discovered her love of research.

Johnson said LEP staff has been very patient and helpful, tutoring her in toxicology and pathology. She enjoys the intellectual freedom afforded at NIEHS, which allows her to develop her own style. Meanwhile, Maronpot says he is eagerly looking forward to Johnson's continued work in multimodality imaging.

DRCPT Focuses on Translation of Research

By Colleen Chandler
The NIEHS Division of Research Coordination, Planning, and Translation hosted a two-day retreat, recruiting a cross section of representatives from various Institute disciplines to discuss ways of ensuring the Institute's research has the greatest possible impact on public health and medicine.

The results of a study in 2000 showed it takes 17



(Photo by Lance Richardson for Image Associates)

years to turn 14 percent of original research into information that improves patient care.

DRCPT Director Allen Dearry said it was a chance for DRCPT staff to step outside their normal job-specific roles to take a more general, collective look at facilitating the translation of environmental health science. The retreat, he said, provided a focal point for an Institute-wide discussion of what it means to translate research and to take a closer look at how the Institute goes about it.

“Communication – whether it’s for dissemination, diffusion, or translation – is a key element of this process. We’ll be working to see how we can continue this dialog and how we can be more effective in assisting all of us at NIEHS in ensuring that our findings have the greatest possible impact in improving public health and the practice of medicine” Dearry said.

The first day of the retreat included presentations by David Abrams, director of the NIH Office of Behavioral and Social Sciences Research; Barbara Rimer, dean of the University of North Carolina – Chapel Hill, School of Public Health; Lisa Klesges, from the Mayo Clinic; Henry Falk, from the National Center for Environmental Health and the Agency for Toxic Substances and Disease Registry; Murray Mittleman from Harvard’s Beth Israel Deaconess Medical Center; and Fred Miller, head of the NIEHS Environmental Autoimmunity Group in Bethesda. About 30 people who attended the retreat were NIEHS staff members from divisions other than DRCPT.

“We were fortunate to have good representation from across the Institute and could therefore use this as an opportunity for crosstalk about translation frameworks, barriers, and prospects,” Dearry said.

Marian Johnson-Thompson Recognized for Diversity Efforts

By Blondell Peterson



Eugene Nester, chair of the American Academy of Microbiology, presents a plaque to Marian Johnson-Thompson for outstanding service as chair of the American Academy of Microbiology’s Committee on Diversity. (Photo provided by Marian Johnson-Thompson)

Marian Johnson-Thompson, director of Education and Biomedical Research Development, was recognized by the American Society for Microbiology for “outstanding service as chair of the American Academy of Microbiology’s Committee on Diversity 2002-2005.”

To get the initial appointment to

the committee, Johnson-Thompson had to demonstrate involvement in diversity activities from a broad perspective.

She served on the Committee on Equal Opportunities in Science and Engineering, a congressionally mandated committee that monitors diversity at the National Science Foundation. This 15-member committee consists of researchers and scholars from science, technology, engineering and mathematics. It consists of a broad, diverse group from academia, professional organizations, government and industry. The organization's most recent report to Congress is titled, "Broadening Participation in America's Science and Engineering Workforce."

"It's really important that our organizations reflect the diversity of the population," Johnson-Thompson said. "Unfortunately, we have a history in our country where this is not the case. We're slowly making progress." She noted that while women in graduate programs in science comprise almost 50 percent of those enrolled, women still have not broken the 'glass ceiling' in the field.

Johnson-Thompson implemented a listing of the number of participants in each category for underrepresented minorities in the Academy. "We are moving towards looking at the numbers as they existed when the Diversity Committee was initially established and what they are now," she said. "That data should be out within the next year."

Last year, Johnson-Thompson received the Alice Evans Award for her diversity activities promoting women in science. At NIEHS, she was also involved in establishing the first women's mentoring program for women scientists as well as postdocs. She said that program evolved into what is now known as the NIEHS Trainees Assembly."

Though she acknowledges some progress for women minorities in science, she expressed concern with the numbers for some minorities that are referred to as "underrepresented." Those include African-Americans, Native Americans and Hispanics. "If we look at the progress that we've made as it relates to underrepresented minorities, the numbers are extremely bleak," she said.

NIEHS Grantee is Finalist for Ford Foundation Award

By Blondell Peterson

NIEHS grantee Gary Grant is one of 29 national finalists for the 2005 Leadership for a Changing World award. Seventeen winners will be selected to receive \$100,000 to advance their work and an additional \$15,000 for supporting activities.

Winners will be announced Oct. 13.

Leadership for a Changing World is a program of the Ford Foundation in partnership with the Advocacy Institute and the Robert F. Wagner Graduate School of Public Service at New York University. The award honors people from areas that are not well-known outside of their local communities or career fields.

Grant said NIEHS funded his program beginning in 1996 through the Community Health and Environmental Reawakening and Community Health Effects of Industrial Hog Operations. "We give a lot of credit to NIEHS for stepping out into this arena of allowing communities to be the grant recipients in order to level the playing field between communities and researchers," Grant said.

“With CHER we are helping communities organize around issues of environmental justice and racism,” he said. “Mostly African-American communities are being impacted by corporate hog farms, cattle and landfills—and even now prisons. With the CHEIHO program we set up communities to do research.”

Both projects are run in conjunction with the School of Public Health at the University of North Carolina – Chapel Hill. Grant works out of an office in his hometown of Tillery, N.C.

He established the African-American Environmental Justice Action Network. He is the executive director of Concerned Citizens of Tillery. He held a leadership role in The National Black Farmers & Agriculturalists Association and the NC Environmental Justice Network. These alliances converted a potato-curing house into a health clinic and settled a \$2.4 billion nationwide class action civil rights suit against the U.S. Department of Agriculture. Organizations he worked with secured a statewide moratorium to stop the disproportionate placement of industrial swine operations and prohibited landfills and other polluting industries from entering low-income and African-American communities. They also increased public services, including the construction of a local fire department.



“I started working with a group of people who had from 3rd to 6th grade education. To watch them become empowered was rewarding. People who had never attended governmental meetings, not only attended but were able to speak forcefully to governmental representatives who were trying to shove something down their throats that was detrimental to their health,” he said.

In particular, one success story stands out greatly for Grant. Susie Weathersbee died in 2003 at the age of 103. She was 82 years old when she registered to vote. At 93, she addressed the North Carolina Department of Environment and Natural Resources. “To watch someone come from that kind of humble background to being able to stand up and say, I am a human being and I will not allow you to treat me this way any longer...is a most rewarding experience. It’s something to be proud of,” he said.

Grant said he was pleased with the outcome of the black farmer’s lawsuit because “it brought national attention to our own government’s discrimination against black farmers and their failure to address it even though farmers had been complaining for over 20 years.”

He terms the settlement, “a bittersweet harvest” because the farmers collected just under \$700 million of the \$2.4 billion that was awarded in the settlement. “But just the fact that it once again put black farmers on the radar screen, and helped to define the farmers as not being the stereotypical image that most people get when they hear the words black farmer is somewhat satisfying,” he said.

If he is selected as a winner, Grant said he will use the funds to stabilize the staff salaries in the program, hire a full-time employee to address the black farmer issue, and buy a new van for the program. He will then take a self-described “well earned break.”

Clinical Staff Hosts Public Health Officials from Kazakhstan

By Colleen Chandler

Two public health officials from Kazakhstan toured the NIH Clinical Center and met with Fred Miller, head of the NIEHS Environmental Autoimmunity Group, as part of a professional exchange program.

U.S. Embassy representatives in Kazakhstan selected the participants to look at environmental health based on interest by the U.S. government in supporting environmental health programs in Central Asia, said Elisabeth Wilson, State Department staffer who coordinates the program in Central Asia.

Yeldos Izatullayev, vice president of the Hospital and Clinical Division of Kazakh National Medical University, and Kazbek Tulebayev, general director of the National Center for Problems of Healthy Lifestyle in the Ministry of Health, were among 38 people nominated by U.S. Embassy representatives for exchange programs on a number of topics, including environmental health.

The visit to NIH was part of a three-week program sponsored by the U.S. Department of State's Bureau of Educational and Cultural Affairs. The International Visitor Leadership Program is one of several professional exchange programs that allows foreign officials to meet with a number of local, state, and federal officials to see first-hand how the United States deals particular issues.

Wilson said the two Kazakhstan officials were selected because their positions allow them to introduce new methods and practices to professionals, government and non-government organizations in public health and environmental management in their country. Kazakhstan is facing a number of environmental challenges such as water quality and environmental contaminants, a legacy of the Soviet system, she said.

The Department of State arranged meetings with U.S. officials that would expose the Kazakhstan officials to these processes:

- Ways of improving environmental management methods and reduce human health risks in polluted areas
- Promote responsible human health attitudes connected with environmental conditions through the introduction of socio-medical programs
- Minimize environmental policy expenditures in urban areas through environmental health risk management methods
- Promote public participation and resource optimization within U.S. communities through the dissemination of environmental health risk information.

Shyamal Peddada: American Statistical Association Fellow

Shyamal Peddada, of the Biostatistics Branch, was elected fellow of the American Statistical Association. Peddada and 55 other fellows will be honored at the annual Joint Statistical Meetings Aug. 7-11 in Minneapolis.

According to the ASA bylaws, no more than one-third of one percent of the total ASA membership can be elected fellows.





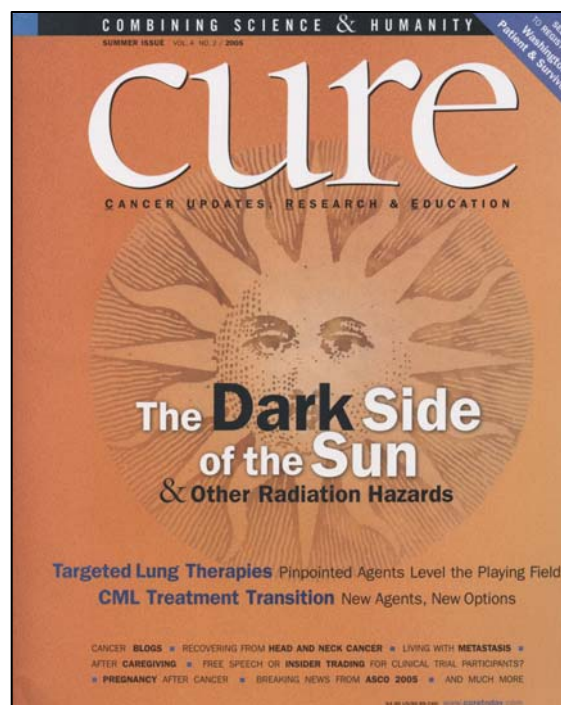
Science Notebook

Cure Magazine: NTP Research, Chris Portier and Ray Tennant

The cover of the summer issue of *Cure* magazine sports an article on radiation hazards. “The Dark Side of the Sun & other radiation hazards” extensively quotes Chris Portier, associate director of the National Toxicology Program. Ray Tennant, director of the National Center for Toxicogenomics, is quoted throughout a sidebar article on genetic interactions.

The cover story cites the 11th *Report on Carcinogens*, which included ionizing radiation as a known carcinogen, and discusses research on radon, electromagnetic fields, cell phones, UVC and CT scans. Portier’s comments are intertwined with those from other officials representing the World Health Organization, the American Academy of Dermatology, the Food and Drug Administration’s Center for Devices and Radiological Health, and industry groups.

The sidebar, “Genetic Interactions,” quotes Tennant on genetic predispositions to cancer, and how high doses of ionizing radiation carries with it a high probability of inducing tumors despite genotype.



CDC Report on Environmental Chemicals

From a CDC press release

The Centers for Disease Control and Prevention issued *Third National Report on Human Exposure to Environmental Chemicals*. The report contained some good news for public health officials: there is a significant decline in exposure to secondhand smoke, and children's blood lead levels continue to decline.

Researchers used biomonitoring of blood and urine to gauge exposure from all environmental sources.

Levels of cotinine, a marker of exposure to secondhand smoke in nonsmokers, dropped significantly since levels were first measured from 1988 to 1991. The third report shows that non-Hispanic blacks have

levels twice as high as those of non-Hispanic whites or Mexican-Americans, and children's levels are twice as high as adults' levels.

New data for 1999-2002 on blood lead levels in children ages 1-5 showed that only 1.6 percent of children had elevated levels. This percentage has decreased from 4.4 percent in the early 1990s.

The report suggests the need for more research on health effects of exposure to low levels of cadmium. Recent studies indicated that cadmium in urine as low as 1 microgram per gram of creatinine may be associated with subtle kidney injury and an increased risk for low bone mineral density. The report said about 5 percent of the U.S. population 20 years and older had urinary cadmium at or near these levels. Cigarette smoking is said to be the likely source for these higher cadmium levels. More research is recommended on the public health consequences of these levels in people in this age group.

For this year's report, CDC's Environmental Health Laboratory measured 148 chemicals - 38 of which have never been measured in the U.S. population. The report addresses phthalates as well as additional dioxins, furans, pesticides and herbicides. For many of those exposures, the report establishes the "95th percentile" ranges, or the levels at which 95 percent of the population has exposure below that level.

The Third National Report on Human Exposure to Environmental Chemicals and an executive summary are available online at : <http://www.cdc.gov/exposurereport>.

New Discovery May Help Doctors Treat Infertility

NIEHS researchers determined that fertility drugs may not work for women who lack the estrogen receptor beta.

According to a study conducted by Kenneth Korach, in the Laboratory of Reproductive and Developmental Toxicology, fertility drugs don't improve ovulation rates in mice that are genetically engineered to lack the receptor, one of two proteins that mediate the effects of estrogen hormones. The new data shows that this receptor plays a critical role in ovulation. It also suggests that women who do not have it may have more success with alternative fertility treatments. The findings are reported in the August issue of *Endocrinology*.

If the results of the study are found to be applicable to humans, a blood test will provide enough information to determine if a genetic mutation may alter the function of the receptor. The results of the blood test, in addition to information from other medical tests and evaluations, will help diagnose infertility and better determine treatment options.

More Than Half of U.S. Population Reacts to Allergens

New findings from an ongoing study show that more than half of the people in the United States tested positive to one or more allergens.

NIEHS researchers, including Sam Arbes and Darryl Zeldin, conducted the research as part of a large national study, the third National Health and Nutrition Examination Survey. Of people ages 6-59, 54.3 percent had a positive skin test response to at least one of the 10 allergens tested. The highest prevalence rates were for dust mite, rye, ragweed, and cockroach, with about a quarter of the population testing positive to each allergen. Peanut allergy was the least common, with only 9 percent reacting.

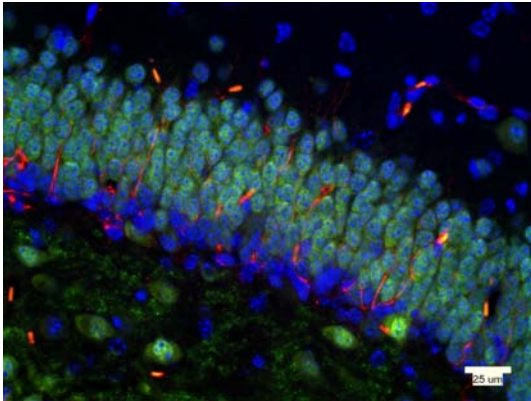
The new findings are published in the August issue of the *Journal of Allergy and Clinical Immunology*.

A positive skin test is a known risk factor for asthma, hay fever, and eczema. Approximately 10,500 individuals participated in the skin testing. The 10 allergens tested are: dust mite, German cockroach, cat, perennial rye, short ragweed, Bermuda grass, Russian thistle, White oak, *Alternaria alternata*, and peanuts.

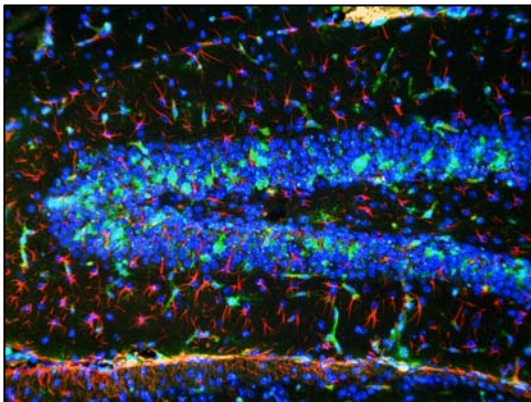
NHANES III is a nationally representative survey conducted between 1988-1994 to determine the health and nutritional status of the U.S. population.

Under the Microscope: Rob Wine's Research

The following photographs were submitted by Rob Wine, a biologist in the Laboratory of Neurobiology.

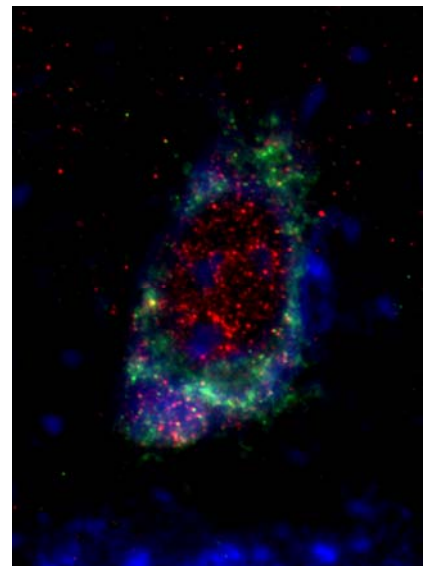


Given new information regarding the generation of new neurons as a repair mechanism of the adult brain, methods to identify and distinguish mature versus new neurons are being established. In this image of dentate gyrus granule cell neurons from normal mouse hippocampus, mature neurons appear green (NeuN), while recently generated immature neurons are labeled red (Nestin). The blue nuclear counterstain identifies all cells in the region.



Glial cells in the brain are capable of mounting a rapid and vigorous response to injury or inflammation. In this micrograph, reactive and phagocytic microglia, which appear green (lectin+) are removing dead neurons and mediating the inflammatory response. Astrocytes, which are labeled red (GFAP), are thought to play more of a protective, nurturing role in neuronal-glia interactions and are widely distributed throughout the hippocampus, primarily around unaffected neurons. Cell nuclei are stained blue.

Six hours after receiving a single dose of the hippocampal toxicant, trimethyltin, receptor mediated apoptotic death occurs in neurons in the hippocampus. These neurons express both active caspase 3 (green) and tumor necrosis factor receptor 1 (red). Nissl substance, enriched in neurons, is labeled blue.



Air Pollution Linked to Low Birth Weight, Premature Birth

A six-year study of more than 600,000 babies in Southern California revealed that pregnant women who were exposed to high levels of outdoor air pollution had a greater risk of low birth weight babies and premature births. Exposure to carbon monoxide and airborne particles yielded the greatest effects, according to the paper published in the August issue of *Endocrinology*.

These results suggest that the cumulative effects of these pollutants may impact fetal growth. Researchers know that babies born prematurely face a greater risk of respiratory distress, chronic lung disease, heart problems, bleeding in the brain, anemia, and retinopathy, an abnormal growth of blood vessels in the eye.

Effects of Carbon Monoxide and Particles on Southern Calif. Babies

	Low Birth Weight	Premature Births
High Exposure	30 per 1,000 births	107 per 1,000 births
Low Exposure	20 per 1,000 births	90 per 1,000 births

DETR Papers of the Month – June 2005

By Jerry Phelps

- 1) Cook JD, Davis BJ, Cai SL, Barrett JC, Conti CJ, Walker CL. Interaction between genetic susceptibility and early-life environmental exposure determines tumor-suppressor-gene penetrance. *Proc Natl Acad Sci U S A*. 2005 Jun 14;102(24):8644-9; and Walker CL, Stewart EA. Uterine fibroids: the elephant in the room. *Science*. 2005 Jun 10;308(5728):1589-92. Review.

Implications: Results from these findings indicate that reprogramming of genes during the developmental period as a consequence of an early life exposure to an artificial estrogen can interact with a preexisting genetic condition to increase tumor formation and the severity of the disease. This study differs from traditional carcinogenicity studies that have shown that environmental exposures lead to genetic mutations that are part of multiple events leading to carcinogenesis. If additional research confirms these results, this study's findings could have implications for other hormonally-mediated cancers such as those of the breast and prostate.

- 2) O'Neill MS, Veves A, Zanobetti A, Sarnat JA, Gold DR, Economides PA, Horton ES, Schwartz J. Diabetes enhances vulnerability to particulate air pollution-associated impairment in vascular reactivity and endothelial function. *Circulation*. 2005 Jun 7;111(22):2913-20.

Implications: These findings indicate that diabetics may be at higher risk for adverse cardiovascular events during periods of high particulate matter air pollution. In an accompanying editorial, Rajagopalan and colleagues suggest that particulates may have adverse effects by causing abnormalities in the generation of nitric oxide, a gas which relaxes smooth muscle cells found in the heart and arteries, enabling easier blood flow. Further research is necessary to confirm these results and to determine why diabetics are particularly sensitive. In addition to following their health care provider's recommendations on diet, exercise, and medications, diabetics should minimize outdoor physical activity on days with high particulate matter pollution.

- 3) Rieder MJ, Reiner AP, Gage BF, Nickerson DA, Eby CS, McLeod HL, Blough DK, Thummel KE, Veenstra DL, Rettie AE. Effect of VKORC1 haplotypes on transcriptional regulation and warfarin dose. *N Engl J Med*. 2005 Jun 2;352(22):2285-93.

Implications: These results suggest that individual genetic make-up could be a big factor in a person's response to warfarin and therefore the correct dose. Racial differences also seem to be

important in that Asian Americans generally had the low-dose genotype while African-Americans had the high-dose genotype. People of European descent generally fell in the middle. The authors conclude that genetic analysis of *VKORC1* “should be an essential component of prospective studies aimed at investigating the value of genotyping for warfarin therapy.”

- 4) Schriener SE, Linford NJ, Martin GM, Treuting P, Ogburn CE, Emond M, Coskun PE, Ladiges W, Wolf N, Van Remmen H, Wallace DC, Rabinovitch PS. Extension of murine life span by overexpression of catalase targeted to mitochondria. *Science*. 2005 Jun 24;308(5730):1909-11.

Implications: These results support the theory that free radical and reactive oxygen molecules generated in the mitochondria are very important in aging processes. It is too early to say that human lives could be extended by the administration of antioxidant compounds; however, this study has produced exciting results with implications for longevity, possible new treatments for aging related illnesses, and healthier aging.



After Hours

Miss Black Arizona: Brains and Beauty

By Colleen Chandler

Rachel Wilhite is nothing if not tenacious. She could probably glide through life on her good looks and cheerful disposition, but she'd rather use her intellectual abilities and her drive to get her where she wants to be.

A fourth-year doctoral student in epidemiology at the University of Arizona, she is spending the summer in North Carolina as part of the Summers of Discovery program at NIEHS. She is also the reigning Miss Black Arizona, and will compete in the Miss Black USA 2005 Scholarship Pageant in Washington, D.C., Aug. 7.

Wilhite's platform is a topic near and dear to her heart. It also reflects her professional ambitions: mentoring African-American girls through the promotion of mathematics and science education. She intends to ensure there is a steady supply of African-American women involved in science and math, and particularly in biomedical research.

Wilhite earned a bachelor's degree in statistics and mathematics from Xavier University, and a master's in public health with a concentration on biostatistics from the University of Arizona's Zuckerman College of Public Health. She is an adjunct professor at Pima Community College in Tucson.



Rachel Wilhite (Photo provided by Rachel Wilhite)

She is focusing on statistical programming, teaching herself statistical languages. She works in Darryl Zeldin's lab, where she is getting some hands-on experience that she says will help her become a better quantitative epidemiologist.

In her role as Miss Black Arizona, the 27-year-old Wilhite raised funds for the Children's Miracle Network hospitals in Arizona, including Phoenix Children's Hospital and Tucson Medical Center. She also appeared at Juneteenth celebrations in the state.

The winner of the national pageant receives, among other things, a \$5,000 scholarship. Four runners up will also receive scholarship money. The judging criteria for the national contest consist of a personal interview, an

on-stage question-and-answer session, fitness, talent and evening gown competitions. For the talent competition, Wilhite will play the piano. She is classically trained, but also plays the flute, piccolo, clarinet and oboe.

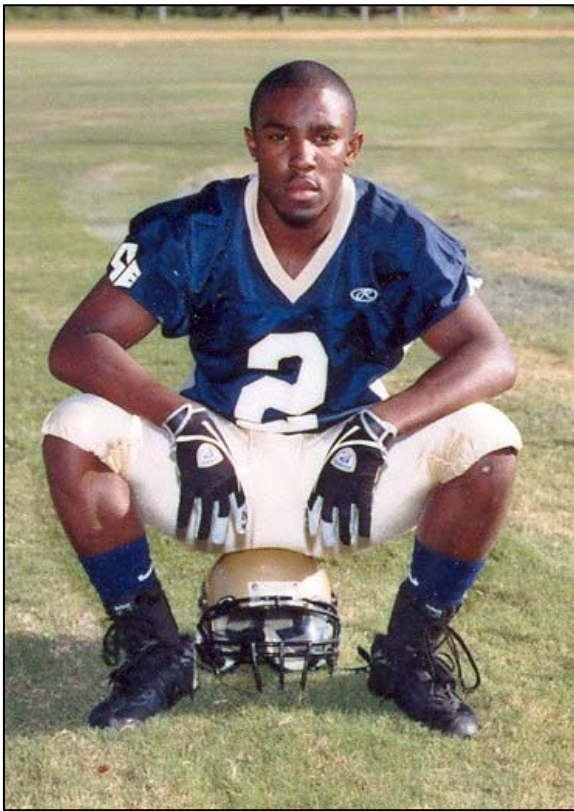
Wilhite said she first found out about the contest through a church bulletin. The scholarship money caught her eye. She had never before been in a pageant. She points out that the swimsuit competition is replaced with a fitness category in this pageant. She describes herself as naturally shy, but she comes across as warm, naturally friendly and unpretentious. She said it was a very humbling experience to compete at the state level. She learned a lot about black history in Arizona as part of that process. As for the competitive element, she said her biggest competition comes from within.

“I’m always trying to outdo me,” she said with a smile.

African-American women come in a variety of shapes and sizes, and while beauty is an element that should be embraced, there is much more to pageants than assessing beauty, Wilhite said. With a focus on health, fitness and education, the contests offer an opportunity to showcase African-American women at their best, she said.

She said she will find a way to give back to the African-American community, offering guidance and opportunities to others just as people did for her. That, she said, is the only way to change the existing structure of professional organizations to fit the demographic makeup of society. African-American women now know they can become doctors and lawyers, and Wilhite wants to make sure they also know they can also become researchers.

Colleges Scout Cynthia Radford’s Son



Devin Radford (Photo provided by Cynthia Radford)

Cynthia Radford said she was not surprised when colleges started scouting her linebacker son. What did surprise her was how soon they did. Virginia Tech, University of North Carolina, North Carolina State University, Clemson, University of Virginia and Wake Forest University have all been trying to convince Devin Radford that he should play for them. But Radford still has a year to go to finish high school.

After a summer of visiting college campuses, the 5-foot, 6-inch football player, a rising senior, has verbally committed to Virginia Tech for the fall of 2006.

Meanwhile, his mother beams.

“I just feel so blessed,” Cynthia Radford said. Virginia Tech has offered Devin a full scholarship in exchange for his football skills and maintaining a 2.5 Grade Point Average. Devin has always been a good student, his mother said.

According to an article in the *Fayetteville Observer* July 14, Virginia Tech was watching Devin because of his speed and versatility. Cynthia Radford said her son liked the Virginia Tech campus best, and feels it will be a good fit for him. He has wanted to go there since he was a child, she said.

CFC Adopts Debbie Garner's Theme for 2005 Campaign

Debbie Garner, editorial assistant in the Environmental Diseases and Medicine Program in the Laboratory of Respiratory Biology, has made more than the average contribution to the local Combined Federal Campaign.

Garner's suggestion for a theme, "Ordinary People Doing Extraordinary Things," was adopted for the 2005 CFC campaign. Her suggestion was combined with a second entry, which adds the phrase "One Contribution at a Time!" Garner and co-winner Erica Davidson from the VA Medical Center in Durham will be honored for their creative slogans at the CFC 2005 kick-off in September.

The theme will appear on marketing materials for the campaign, along with Garner and Davidson's names and places of employment.



Did You Know?

Daycare Center Opening Delayed

By Colleen Chandler

The new daycare center opening date was pushed back to September as construction teams work to complete the \$3.6 million facility. It previously was scheduled to open after the July 4 weekend.

Dona McNeill, administrative officer in charge of the NIEHS portion of the project, said she and other planners could have chosen a simpler design for the building and grounds. However, she is confident the new facility will be worth the wait. She said the facility is designed to stimulate a child physically, creatively and intellectually.

The flooring reminds you of a Family Circle cartoon that shows kids curiously meandering as they explore the environment around them. Instead of square tiles

aligned in a linear fashion, the floor of this building is made from large pieces of tile with colored circular patterns that seem to deliberately lead young minds from one location to another.

“The layout makes good sense,” McNeill said. Near the main entrance is a room for the smallest babies. Across the hallway is a room for older babies. Down the adjoining hallway are the toddler classrooms in



Dona McNeill in the new child care center on the EPA campus. (Photo by Colleen Chandler)

graduating age groups up through preschool. The open floor plan allows children to see into other areas, which will be more familiar to them when the time comes to move up.

McNeill said some modifications – like shatter-proof glass at a cost of about \$122,000 – were added to the original plans. Construction on the new home for the First Environments Early Learning Center began nearly two years ago. The daycare center now operates at the old NIEHS North Campus.

Besides the bells and whistles modern child care centers require – toy sterilizers, keypad front door access, state-of-the-art security and fire monitoring systems, and internet connections – the building is designed so it is easy to monitor what is happening in the classrooms. Frosted glass walls with circles of clear glass divide the classrooms from the hallways. The clear circles allow parents standing outside a room to see nearly everything happening inside the room. McNeill said each classroom will have a door leading to an outside play area. The exterior walls facing the outdoor play areas feature huge windows spanning nearly floor to ceiling. The building features high ceilings, using as much natural lighting as possible.

NIEHS and EPA share the daycare center, with the federal government providing facilities, equipment and utilities. McNeill and her counterpart at the EPA act as liaisons between the agencies' management and a five-member board of parents elected to set policy and govern operation of the daycare center. Fees paid by parents – as well as raised by them – cover other costs such as salaries, staff training and insurance. Staff turnover at the center has always been low, and all the lead teachers have college degrees, McNeill said.

The center has hired a cook from Whole Foods to prepare meals using more fresh foods. The daycare center will have a greenhouse and a garden. The cook will work with staff to plan the garden, making good use of the food produced there, McNeill said.

New Strategies in Playgrounds

By Colleen Chandler

When is a playground not just a playground? When it's an outdoor learning environment, of course.

In keeping with a tradition of staying on the cutting edge of early childhood education, the new daycare center that NIEHS and EPA share is taking shape as an innovative facility that promises to entertain, coddle and educate at the same time.

It will take several years for the landscaping to establish itself, but the outdoor play areas at the new First Environments Early Learning Center will stimulate kids' natural instincts to explore the world around them and will provide an exciting yet safe place to do it, said Dona McNeill, project officer for the new daycare center. McNeill and her counterpart at the EPA oversee the construction of the new center.

NIEHS and the EPA have called in Robin Moore, an expert on architecture, urban planning and old-fashioned playing, to help design a natural outdoor learning environment that will compliment the design of the building.

The outdoor learning environment will feature sensory paths, plants, water fountains and sculptures, seating rocks, semi-secluded privacy areas that teachers can easily monitor, and sculptures. The idea, McNeill said, is to stimulate children to be active and to be competent and confident outdoors.

Traditional linear paths were replaced in the planning stages with free-wandering paths and as many distractions as planners could come up with. The idea, McNeill said, is to maximize the social, intellectual and physical stimulation by creating an environment that invites kids to participate in the natural world around them. "The whole person is intrigued," she said.

The play areas will feature easily sustainable landscape, including native plants that were rescued from and will be restored to the construction site.

Child Care Subsidy Pilot Program Launched

NIH employees whose family income is less than \$60,000 have a new option to pay for child care. NIH is launching a pilot program to assist lower-income families pay for child care at licensed facilities.

A detailed description of the program, eligibility requirements, and complete application instructions can be found at <http://does.ors.od.nih.gov> or by calling the NIH Pilot Child Care Subsidy Program at 301-402-8180.

Zimbabwe: The House Munhumutapa Built

By Blondell Peterson

The Office of Equal Opportunity and Diversity Management sponsored a cultural mini-series July 13 at the Rodbell auditorium. The presentation was titled, “Zimbabwe: The House Munhumutapa Built.”

Virginia Ivanoff, an Equal Employment Opportunity specialist, said the purpose of the series is to expose NIEHS employees to the culture, history, language and customs of the Institute’s international scientists and to promote harmony through understanding.

“We have the usual barriers of gender, race, religion and so on among our fellow Americans,” she said. “Imagine trying to deal with someone for whom it is improper to shake hands with another gender, or understanding why men can’t shave. Only through learning about our different cultures and traditions, will we have a chance to not misjudge another.”

The speaker for this year’s presentation was Dr. Michael Madziva, LST, visiting fellow and resident of Zimbabwe.

The Munhumatapa were the local residents of Zimbabwe during the Iron Age. They built the Great Zimbabwe around AD300. Zimbabwe means “great houses of stone” in the Shona language.



Above, Michael Madziva, left, with Virginia Ivanoff, EEO specialist and EEO-Diversity Council coordinator. (Photo by Steve McCaw, Image Associates)

Below, Madziva holds an “Mbira,” a traditional instrument from Zimbabwe. (Photo by Blondell Peterson)



“From the lush, rolling hills of the Eastern highlands, to the deafening roar of the Victoria Falls, Zimbabwe encompasses a wide expanse of natural scenic beauty,” Dr. Madziva said. “This appealing facet is equally matched by the generosity and good-natured humor of the citizens. Despite the drudgery of day-to-day life, they continue to exhibit the spirit of resilience that will hopefully stand the test of time.”

Madziva played traditional music clips, one of which was reminiscent of Caribbean music. He also brought two traditional instruments that his grandfather taught him to play when he was a little boy. The “Hosho” is similar to the maraca, and is made from a dried gourd. The “Mbira” sounds and looks like a miniature xylophone.

Ivanoff said she was interested in Africa for this year’s presentation, and when she found out NIEHS had a researcher from Zimbabwe, she took the opportunity to introduce him through the series.

“I thought this would be a perfect time to understand a people and a country that currently are marred by bad press,” Ivanoff said. “Indeed we have discovered, through Dr. Madziva, a rich, ancient people with a noble history.”

Notes About Zimbabwe

- It was first occupied in 300AD in the Iron Age
- It is said to be the site of King Solomon’s mines
- In 1880 Cecil Rhodes (i.e. Rhodes Scholars) established De Beers diamond company
- Early successes included obligatory education to age 16 and a health care system that serves all citizens through an intricate referral process.
- Recent tribulations include a life expectancy of 35 years for men and women and an unemployment rate of over 70 percent.

Disability Advocacy Sub-Committee Formed

By Blondell Peterson

The Disability Advocacy Subcommittee, a new addition to the NIEHS Diversity Council, was established to monitor concerns and improve the working conditions for employees with disabilities. The subcommittee works in conjunction with the Disability Awareness Committee, which plans activities for Disability Awareness Month in October.

According to Gerard Roman, a diversity consultant with the NIH Office of Equal Opportunity and Diversity Management, NIEHS Disability Awareness Committee members change annually as Diversity Council members change. By contrast, Disability Advocacy Subcommittee members can serve as long as they desire. Membership to the disability subcommittee is open to any NIEHS employee interested in improving the work environment for people with disabilities.

The new committee is the brainchild of Clyde Hasty, a safety and occupational health specialist with the Health and Safety Branch. He made a presentation at NIEHS last October on safety and disability.

“While doing research for the presentation, I began to realize that it would be a good idea if we had a standing committee that would have an interest in disability issues,” he said. “I was starting to find issues out there. I thought it would be nice to have a committee that would have some input into the issues that confront people with disabilities, such as accessibility and evacuation concerns.”

The mission for the 16-member subcommittee is still being formulated. Alicia Moore, a biologist with the Environmental Toxicology Program, chairs the subcommittee. Ad-hoc members include Roman, Hasty and Carol Bennett, project officer for accessibility modifications. Bennett is an engineering technician with the Facilities Engineering Branch.

Roman, who worked with the Diversity Council and the Disability Awareness Committee since 2002, said there was tremendous interest from many employees in how to improve the work environment for people with disabilities. “This led to the planning of some major projects such as repaving of parking areas, relocation of parking spaces to provide greater accessibility, and the identification of accessibility barriers such as entrance doors to the buildings and the fitness center,” he said.

Bennett said she made a recommendation two years ago to get someone from the North Carolina Division of Vocational Rehabilitation to evaluate NIEHS facilities. The NCDVDR provided an engineer at no cost to the Institute. The engineer, who generated a report on accessibility, will return in August to assess the inside of the NIEHS buildings.

According to Bennett, several recommended modifications that were completed include:

- Automatic door opener installed between the E-F Module connector
- Accessible parking spaces moved closer to the front entrance at Bldg. 101 and management spaces moved to the other side of the parking lot
- A doorbell installed at the entrance door of Bldg. 102 closest to the accessible parking spaces
- Pull pressure adjusted on various doors throughout the Institute to ensure that they are in compliance with the Americans with Disabilities Act
- Other projects completed by the FEB that addressed accessibility issues include:
 - Locker rooms renovated to make them ADA accessible
 - Automatic door opener installed at the EEO entrance
 - Automatic door opener installed at the women’s restroom in B Module on the first floor of Bldg. 101
 - Automatic door opener installed at the men’s restroom in B module on the first floor of Bldg. 101
 - Modifications to various restrooms around the Institute to make them more accessible.

Projects in the planning stage are:

- Install automatic door operators at the Library and the Fitness Center
- Install railings by the exterior walkway and replace the tile with concrete at the E-F connector.
- Renovate the health unit to make it more accessible.

In addition to serving as ad hoc members of the disability committees, Bennett said she and Hasty attend the annual Assisted Technology Expo in Raleigh to look at new technologies and see if there is anything that they can incorporate at NIEHS.

Employees who are interested in joining the subcommittee or who would like to relay disability concerns can contact the OEODM at 541-2475 or e-mail Virginia Ivanoff at Ivanoff@niehs.nih.gov.

Weekly e-mail: New Source for Event Info

Gone are the individual all-hands e-mail announcements about upcoming scientific seminars. Instead, a single e-mail will serve as notification of scientific events each week. As part of an initiative by NIEHS Director David Schwartz, a weekly e-mail now goes out to all Institute employees. It goes out each Thursday, and lists NIEHS-sponsored scientific events for the upcoming week.

To be included in the announcement, events must be listed in the Master Calendar, which can be accessed online at <https://apps.niehs.nih.gov/events/>. The web site includes links to the conference room scheduler and a listing of off-site events. It allows users to search the database for specific events. Events can be added and modified from this site as well.

OM Workshop: Personal & Organizational Change

By Blondell Peterson

The Office of Management sponsored a workshop July 21 at Nottingham Hall for federal staff and contractors affected by A-76 efforts. The workshop was titled, "Understanding Personal and Organizational Change."

Dan Grandstaff spoke about coping skills for personal change, while Sharon Gazda discussed coping skills for organizational change. Both presenters are from the NIH Transition Center.

Sara Sutphin, NIH Transition Center manager, said the transition center mission consists of "multiple pieces." The pieces are designed to help people:

- Cope with the process
- Understand the process
- Prepare for the competition that sometimes conveys with the new structure
- Redeploy to other NIH positions if necessary due to restructuring

The center aims to retrain and redeploy NIH employees affected by A-76, she said.

Sutphin said the center offers courses, sessions and workshops in Bethesda and Rockville. However, center staff was not able to do much outreach at NIEHS until Dona K. McNeill, an administrative officer in the Office of Management, contacted them. McNeill said she got positive feedback from NIEHS employees who participated in transition center programs through videoconferencing. She facilitated the workshop based on that feedback.

"In North Carolina, I'll make sure that the folks here get services that they specifically need that may be somewhat different than the ones at NIH," said McNeill. She and Sutphin are setting up additional sessions customized to the needs of NIEHS staff and based on feedback from managers.

A-76: What is it?

By Colleen Chandler

The A-76 program, as it is commonly called, refers to the competitive sourcing activities outlined in the President's Management Agenda, Competitive Sourcing Initiative. One of the goals of the program is to outsource activities to the private sector when it is more economical to do so, according to the NIH A-76 web site.

The process begins with the Office of Management and Budget, which reviews activities and determines which ones can be provided by commercial sources. The OMB list is forwarded to Congress for additional reviews and public comment.

NIH 2003 and 2004 competitions included visual and medical arts, logistics-supply warehouse, clinical center materials management, NIEHS logistics, freight forwarding, information technology help desk operations, information technology telecommunications and extramural activity support.

Most of these activities were kept in-house. Areas under study so far to date in 2005 include: administrative support to environmental security, website development and maintenance, training functions, patient care unit clerks, library technicians and medical/dental equipment repairs.

So far, NIEHS officials said, only two studies of the 2005 activities have been completed.

The term 'streamlined' typically applies when the function is performed by no more than 65 people. In most cases, a comparison is made without a formal competitive acquisition to determine whether or not the service could be provided commercially at a lower cost than in-house. That process allows the government agency to revise, or streamline, its operation to reduce cost. A standard review involves the release of a statement of work and solicitation of bids from private enterprise and the government agency. In a standard review, the lowest bidder is selected to provide the service if the bid is 10 percent or \$10 million less than the government bid.

Commit to SmartCommute for Chance to Win

Could you use a week-long vacation somewhere – anywhere – in the continental United States? Don't miss the opportunity to register for this and other prizes offered by SmartCommute.

The SmartCommute Challenge runs Aug. 14-Sept. 30, and is open to anyone working in Wake, Durham or Orange counties. The organization's purpose is to promote alternative modes of transportation instead of each person driving his or her own car to work each day.

In exchange for promising to try carpooling, vanpooling, biking, walking, telecommuting or riding the bus, you can win a pair of roundtrip tickets and a week's hotel stay in the continental U.S. Other prizes include an iPod mini, a bike, and a laptop.

Pledging also makes you eligible to receive a free green wristband with the slogan "One Less Car Today." The wristband not only announces your support for cleaner air and reduced traffic congestion, it also entitles you to discounts and promotions at participating merchants throughout the Triangle.

To register or to see a list of participating merchants, go to www.smartcommute.org.

Up and Coming

- The Office of Management will host a retirement planning seminar for employees under both the CSRS and FERS retirement systems. The seminars for both systems begin **Aug. 2** with presentations on tax and financial planning. CSRS employees will return **Aug. 3** while FERS employees will return **Aug. 4** for specific retirement planning information about the respective plans. Sessions run from 9 a.m. until 4 p.m. in Nottingham Hall, conference room 204A. Attendance at the seminar requires supervisory approval and a training nomination. For more information, contact Cynthia Radford at 541-1806.
- The NIEHS Work Life Center career counselor will be available to meet with interested employees on **Aug. 9** and **Aug. 23**. To schedule a confidential session, call the NIH Work Life Center at (301) 435-1619.
- James Andrews, president NC AFL-CIO, will speak on Civil Rights and the Labor Movement **Aug. 26** at 2:00 p.m. in the Rodbell Conference Room, 101-B.

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