

# THE NIH RECORD

Still The Second Best Thing About Payday

## Part Conference, Part Carnival

### Explore NIH's Scientific Diversity At Research Festival '98

From life's origins to cell suicide, the 1998 NIH Research Festival will cover a wide spectrum of scientific inquiry when it returns to the Natcher Conference Center the week of Oct. 6-9. The annual celebration of intramural research is sure to have something for everyone. Drop in on dozens of lectures, peruse over 450 posters, check out new postdoctoral jobs, learn about the Y2K bug, or just sit back and enjoy some live music at one of the lunchtime picnics. Plan to attend each day's activities by viewing the complete schedule at the Festival Web site, <http://silk.nih.gov/silk/fest98/>.

Part conference and part carnival, the festival's purpose is "to bring together the NIH intramural research community in all of

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### Wednesday Afternoon Lectures Return with Gusto

They're back—the Wednesday Afternoon Lectures have returned from summer hiatus with a star-studded lineup of scientific speakers. Next up is a talk Sept. 23 at 3 p.m. in Masur Auditorium by Charles Sherr, a Howard Hughes Investigator at St. Jude Children's Hospital in Memphis (see box, p. 4). This is the second of two consecutive NIH Director's Lectures.

WALS then takes another time-out for 2 weeks, resuming on Oct. 14 with Stanley Prusiner of UCSF, who will present NIA's Florence Mahoney Lecture: "Prion Biology and Diseases: A Saga of Skeptical Scientists, Mad Cows, and Laughing Cannibals." He will be followed by a special Thursday lecture Oct. 15 by J. Bruce Beckwith pre-

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U.S. Department of Health and Human Services National Institutes of Health

September 22, 1998  
Vol. L, No. 19

'A Lesson for My Kids'

## Marrow Donor Gives Chance at Health, Gains Perspective on Life

By Carla Garnett

Three years ago, Calvin Jackson thought it was probably a good idea to become a bone marrow donor. These days, just a short time since he donated, he says it's a great idea, and that he'd do it again without hesitation.

In 1996, Jackson, broadcast reporter for the Radio News Service in NIH's Office of Communications, was working on a story about bone marrow transplantation. While collecting information, he learned a lot about the promise of the therapy to treat serious and life-threatening disorders. He also found out quite a bit about how the transplantation process works. More complex than a blood transfusion, the two procedures are nevertheless similar in one fundamental



Calvin Jackson

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Raises \$6K for ALA

## NIDR's Shalizi Completes Cross-USA Bike Trip

By Rich McManus

Calculated at the grand rate of \$1.88 per mile, NIDR lab technician Ary Shalizi's summer labors—pedaling his bike more than 3,200 miles from Seattle to Washington, D.C., on a fundraising ride for the American Lung Association—weren't wildly lucrative (especially considering that his "earnings" were really payments to the ALA), but the journey's value to him can't be measured in dollars, or on an odometer. Though it wore him out to the verge of quitting, he stayed the meandering, cross-continental course and gained a new appreciation for the size of his country, and the dimensions of his own endurance.

"It was hard," he said a few weeks after returning to his job at NIH. "It was



NIDR's Ary Shalizi

SEE BIKE TRIP, PAGE 6



Dr. Peggy Zelenka, chief of the section on cellular differentiation in the Laboratory of Molecular and Developmental Biology, NEI, received the Alcon Research Institute Award for her outstanding contributions to vision research. The award recognized her recent work on the process of cell differentiation in the ocular lens. She will present a paper entitled, "The role of cyclin dependent kinases in lens differentiation," and will receive a cash award at the annual ARI scientific symposium in Ft. Worth in March 1999.

#### FESTIVAL, CONTINUED FROM PAGE 1

its scientific diversity," said Dr. Arthur Levine, NICHD scientific director and chairman of this year's organizing committee.

First on the agenda is the Office of Education's Job Fair for NIH postdoctoral fellows, running all day on Tuesday, Oct. 6. Now in its third year, the Job Fair always draws large resumé-toting crowds to meet representatives from outside organizations seeking to fill full-time positions. Contact Shirley Forehand (sf1t@nih.gov) for details.

The scientific program begins Wednesday, Oct. 7 with a "big bang," so to speak, launched by "The Origins of Life," a joint NIH-NASA plenary session organized by Levine. NIH director Dr. Harold Varmus chairs the program, which features an introduction by Dr. Daniel Goldin, administrator of NASA, and explores planetary evolution and its implications for prebiotic life, as well as the earliest events in both prokaryotic and eukaryotic evolution.

The morning schedule then breaks out into six concurrent mini-symposia packed with cross-cutting presentations. In concert with the lecture topics, a 3-hour poster session displays the work of hundreds of intramural researchers that afternoon.

#### Equipment Exhibit Returns

In between, hungry festival-goers can grab a bite to eat at a lunchtime picnic sponsored by the Technical Sales Association (TSA) while enjoying free musical entertainment provided by NIH employee-musicians. The TSA again hosts its popular exhibit on Thursday and Friday, uniting hundreds of scientific equipment manufacturers and vendors with product demos, sample give-aways, and free refreshments all under one huge tent in front of the Natcher Bldg.

Meanwhile, the cycle of lectures, picnics and posters continues over the next 2 days. On Thursday, Oct. 8, NEI clinical director Dr. Scott Whitcup chairs a second plenary session, "Insight from the Bedside: The Patient, Clinical Research and Scientific Discovery," highlighting the interaction between clinical observations and basic science discoveries that promote our understanding of health and disease. Friday's plenary session, chaired by Dr. Story Landis, NINDS scientific director, focuses on "Apoptosis," or programmed cell death, which plays a crucial role in normal development and has been implicated in a number of disease states.

In addition, special booths in the Natcher Center touch upon broad topics affecting NIH intramural researchers such as the risk posed by Year 2000 problems upon biomedical and laboratory equipment, the new Vaccine Research Center, and services by ORS and other groups. So mark your calendars and come explore the diversity of Research Festival 1998. For a program booklet or other details, call the Visitor Information Center, 496-1776. ■

#### First Public Service Emmy for Federal PSA

May I have the envelope, please? And the Emmy goes to—the National Institute on Aging and Vilsack Productions!

That was the exciting pronouncement Aug. 25 in New York City when the National Academy of Television Arts and Sciences presented NIA's television public service announcement *Looking for the*

*Fountain of Youth?*

with the Emmy for the best national public service announcement. This is the first time the Emmy in this category has been awarded to the federal government.

Attending the awards ceremony were Jane Shure, NIA's public information officer, and Roger Vilsack, president of Vilsack Productions. Also on hand was Ken Ryland, chief of the video section, Medical Arts and



Jane Shure, NIA information officer, and Roger Vilsack of Vilsack Productions hold Emmy for the NIA public service announcement *Looking for the Fountain of Youth?*

PHOTO: DARLEEN RUBIN

Photography Branch, ORS; the branch provided NIA with administrative support.

*Looking for the Fountain of Youth?* was produced to get the word out that substances such as melatonin, DHEA, and human growth hormone haven't been proven to extend life and may be associated with serious side effects. The PSAs were initially distributed in 1997 and will be re-released later this fall. ■

## NIH RECORD

Published biweekly at Bethesda, Md., by the Editorial Operations Branch, Division of Public Information, for the information of employees of the National Institutes of Health, Department of Health and Human Services. The content is reprintable without permission. Pictures may be available on request. Use of funds for printing this periodical has been approved by the director of the Office of Management and Budget through Sept. 30, 1998.

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## Turning Research Findings into Health Care Realities

How can we be sure that scientific discoveries important to health care are actually put into effect in our professional and personal lives? What is being done to touch the right bases, speed the process and evaluate the results?" To shed light on these questions, the National Institute of Nursing Research and the Clinical Center department of nursing recently convened the conference "From Scientific Discovery to Practice—What Does It Take to Bring Out Changes in Health Care?"

The morning session featured several nurse researchers funded by NINR who described their experiences translating their findings into practice.

The afternoon session was devoted to two panel discussions that identified barriers to use of research results in practice: Economics, specifically the issue of reimbursement, is of particular concern. Providers lack incentives for change, especially when payers will not reimburse them for new and untried approaches. Managed care organizations still take a short-term perspective that resists preventive and risk-reduction interventions. Furthermore, their payment codes do not adequately cover nursing and other services that are part of research projects.

Another obstacle is turf battles among disciplines. This can be alleviated through multidisciplinary

sufficient to ensure change. What has been helpful is to retrofit research findings and guidelines to make them the institution's own—then enlist the help of internal "champions." Kaiser of Northern California trains at least one person in each of its 17 hospitals to act as a local champion for change. Researchers can also encourage dissemination up front by including clinicians and voluntary agencies as collaborators on study design and as part of the research team. This "buy-in" effect is a critical element for influencing change down the road. There were also suggestions that federal government provide funding for diffusion of research and for mechanisms promoting use of research findings, possibly as an adjunct to research grants.

### Conference Broadcast Live on Video

The National Library of Medicine asked NINR to help test a new high-speed fiber optic video teleconferencing system, which enabled off-site viewers from the University of Texas Health Sciences Center to participate in the conference. Another innovation, a first for NIH, was live video streaming of the entire conference. Thanks to the Center for Information Technology, which made use of the NLM audio/video setup, computer users worldwide could access the video stream on the NINR Web site and view the conference live on their computer screens. Another first was archiving the conference at the NINR Web site for on-demand viewing.



Dr. Martha Hill (l) and moderator Dr. Clifford Goodman listen as Dr. Dorothy Brooten makes a point.

approaches that involve different professions and specialties working together.

The sanctity of randomized controlled trials (RCTs) may also hamper research. It was suggested that not all studies need to be RCTs. For example, some are conducted simply to confirm what is already known from 30 years of clinical experience and anecdotal evidence. Behavioral studies, in particular, can be complex, expensive and time-consuming. While RCTs are invaluable to produce good science, there needs to be greater openness to evidence from other methodologies such as meta-analyses, observational studies and retrospective chart audits.

To speed research into practice, the panels highlighted the importance of champions—advocates within institutions that push for innovations. Academic researchers are under pressure to move to the next study rather than spend time disseminating and implementing their findings. Moreover, guidelines from outside organizations have not been



NICHHD's Dr. Joseph Schech recently received the Henry and Lois Foster Award of the American College of Laboratory Animal Medicine at the college's 1998 forum in St. Charles, Ill. The award recognizes academic excellence in laboratory animal medicine, and goes to the person scoring highest on a certifying exam given by the college; Schech had the top score on both the 1997 written and practical examinations. He is a clinical laboratory animal veterinarian at NICHHD.



More than 800 NIH'ers and their families, as well as patients and families from Camp Fantastic, participated in the recent Orioles Bullpen Party, held prior to a game against the Seattle Mariners. Here the Oriole Bird mascot cavorts in the stands with (from l) Donald Orlic, Roxanne Fisher, Mario Chamorro and Bart Williams. R&W sponsored the annual event at Camden Yards.



NEI scientific director Dr. Robert Nussenblatt has been elected 71st president of the Association for Research in Vision and Ophthalmology (ARVO), a nonprofit, scientific organization of over 9,000 eye and vision researchers throughout the world. He was elected in 1994 as a trustee-at-large for ARVO's board of trustees, and elected president by the board at the recent annual meeting. His term runs through May 1999. While serving as president, Nussenblatt remains chair of ARVO's public relations committee. He came to NEI in 1977 and was instrumental in establishing the NEI Laboratory of Immunology. His work has led to use of new therapies for CMV retinitis, the common intraocular infection in AIDS patients, and therapies for patients with non-infectious uveitis.

#### LECTURES, CONTINUED FROM PAGE 1

presenting an NIH first: the Astute Clinician's Lecture—"The Link Between Teratogenesis and Carcinogenesis: Lessons from the Wilms Tumor Model." The following week continues the prion theme with Susan Lindquist of the University of Chicago presenting NIGMS' DeWitt Stetten, Jr. Lecture on Oct. 21: "Mad Cows Meet Psi-Chotic Yeast: The Expansion of the Prion Hypothesis."

The Wednesday Afternoon Lectures are NIH's premier scientific talks of campus-wide interest. The series includes the NIH Director's Lectures and several named lectures hosted by individual institutes or programs. Speakers for the series are nominated by researchers and scientific interest groups throughout NIH, with the final slate of lecturers approved by NIH Director Harold Varmus. The lectures are held at 3 p.m. in Masur Auditorium, with overflow seating, when needed, in Lipsett Amphitheater, also in Bldg. 10. The lectures are multicast over the NIH MBONE, permitting everyone with the appropriate software to view the lectures from their computer (software for this is available through CandyLan at <http://candy.lan.nih.gov/>). The lectures are also transmitted to off-campus NIH sites, including the NIEHS campus in Research Triangle Park, N.C., FCRDC, and Rocky Mountain Laboratory in Hamilton, Mont. Special accommodations for the lectures as well as other information about the series are available from Hilda Madine in the Clinical Center special events office, 594-5595.

Following the lectures again this year, attendees are invited to meet one another and the speaker at an informal reception held in the Clinical Center lobby area above the Visitor Information Center. These receptions are sponsored by NIH's institutes and centers. Adding to the festivities on many Wednesdays will be poster displays by winners of the Fellows' Awards for Research Excellence or by the NIH inter-institute interest groups.

Additional opportunities for interested scientists—including students and postdocs—to meet with the Wednesday speakers are available through the lecturer's host. Again this fall, the Foundation for Advanced Education in the Sciences has offered to support small informal lunches for students and postdocs with the WALS speakers in the Bethesda Room. Because the size of these lunches is limited, anyone interested in participating should contact the speaker's host well in advance. A complete schedule of speakers and hosts for the 1998-1999 WALS series is on the Web at: <http://www1.od.nih.gov/wals/WALS98.html>. The site includes links to most speakers' Web pages, which describe their research interests.

The October lectures will continue with a special Monday lecture (rescheduled from last spring) on

the 26th by Leon Rosenberg of Princeton presenting the Second James A. Shannon Lecture: "The Medical Research Enterprise—Only as Strong as its Clinical Links." Peter Mombaerts of Rockefeller speaks on Oct. 28. His topic will be "Targeting Olfaction."

#### Sherr To Give Director's Lecture

Dr. Charles J. Sherr will present "Integration of Oncogenic Signals by the ARF and p53 Tumor Suppressors," at the NIH Director's Lecture on Wednesday, Sept. 23.

His work has focused on retroviral oncogenes, growth factors and their receptors, and cell cycle control. In the late 1970's, he used then emerging recombinant DNA techniques to clone and characterize two retroviral oncogenes, *fos* and *fms*, and demonstrated in 1985 that the *fms*



Dr. Charles Sherr

oncogene encodes the receptor for colony-stimulating factor-1 (CSF-1). Subsequent work pinpointed mutations that converted the SDF-1 receptor to a ligand-independent oncoprotein. In 1991, using a screen for CSF-1-responsive genes, Sherr's laboratory discovered the mammalian D-type G1 cyclins and went on

to identify the cyclin-dependent kinases with which they associate, as well as a series of polypeptide inhibitors that negatively regulate their activities.

Sherr is a member of the National Academy of Sciences, has won numerous awards and is the author of more than 235 scientific articles. He joined the National Cancer Institute in 1973, becoming a member of the NIH staff in 1975 and head of the viral pathology section, Division of Cancer Cause and Prevention, in 1977. In 1983, he relocated to St. Jude.

#### Have Work-Related Pain?

Do you have work-related pain in your neck, shoulders, arms or hands? Do you work in an office environment, and are you between ages 21-65? If so you may be eligible to participate in a study of a new approach to reduce symptoms and improve function. Study involves six visits to Georgetown University Medical Center and is free. You will also receive up to \$100 for participating. If interested, call (202) 687-3076. ■

Modules, Forums, Science Series

## STEP Announces 1998-1999 Syllabus

The staff training in extramural programs (STEP) committee recently announced its continuing education activities for 1998-1999.

STEP will offer three training modules during the coming year, each exploring a topic for a full day. The first module, "Intellectual Property: Yours, Mine or Ours?" will be held Nov. 18. It will examine the challenges faced by industry, academia and NIH as they struggle to balance the rights to exploit data with the need to maintain open scientific dialogue. The second module, "Cosponsoring Research: Sharing Knowledge, Cost and Credit," to be offered Feb. 18, will explore the obstacles and incentives to funding research through collaborations between institutes, government agencies and foundations. The third module, "Making a Difference at NIH: Leading from Where You Are," scheduled for Apr. 28-29, will take place off-campus. This module will help individuals understand how they can contribute to the decisions made within their organizations with a goal of increasing job satisfaction and self-worth.

Advance registration is required for participation in all STEP modules. Register by submitting a training nomination using the NIH Integrated Training System. The nomination deadlines are: module 1, Oct. 19; module 2, Jan. 18, 1999; and module 3, Feb. 19.

In addition to the modules, STEP will offer the Forum series, which is designed to provide an opportunity for lively exchange of information on current issues of interest to the extramural community. The programs are generally 2-3 hours long, and don't require advance registration. Dates, times and locations will be announced in advance of the presentations.

Five forums are planned for the coming year. The first features Bruce Johnson, who returns with a new presentation (see sidebar). The next forum, "Rage: Steering Clear of Trouble," will address the apparent epidemic of aggressive behavior in our lives and give us some tools to deal with this behavior if it appears in the work environment. This will be followed by "Argument Culture: What's Your Point?" which will look at how we communicate with each other in the workplace. "Biodiversity and Human Health: Life in the Balance" will take the opportunity on Earth Day to look at the accelerating extinction of species both in the United States and around the world, and the potential effects on all of us. Finally, "Complex Traits: Genes, Environment, and Disease," will explore the interactions between multiple genes and environmental factors that increase our susceptibility to disease.

STEP will also continue the popular Science for All Series. These programs provide extramural staff with an excellent opportunity to learn about recent

scientific advances as they relate to contemporary health issues. Like the forums, these 2-3 hour presentations don't require advance registration. Dates, times and locations will be advertised at a later time.

Four presentations are planned for this year. The first in the series, "Gland Central Station: Is Your Thyroid Off Track?" will examine the consequences when your thyroid gland malfunctions and what can be done to treat patients with thyroid disease. The second presentation, "Life in the Extremes: Some Like it Hot" will explore the fantastic array of organisms living in extremely harsh habitats and how these organisms can contribute to medical progress and human health. The third presentation in the series, "Bioterrorism: Ready or Not?" will examine the potential threat posed by the use of biological agents by terrorists. The reasons behind the Presidential Bioterrorism Initiative and its possible effects on NIH will be discussed. The final Science for All presentation of the year will be "Holistic Medicine: Moving into the Mainstream." It will look at the motivation behind the increasing popularity of nontraditional approaches to health and their role in health care delivery in the United States.

More information on these activities can be found in the STEP catalog, which is distributed this month, and on the STEP home page.

The STEP training activities are developed by a committee of 25-30 experienced NIH extramural staff. Dr. Philip Smith, senior advisor in the Division of Diabetes, Endocrinology, and Metabolic Diseases, NIDDK, has been named chair of the STEP committee. Dr. Della Hann, chief, Interpersonal and Family Processes Program, NIMH, is serving as vice chair. The Office of Extramural Research sponsors the program. For a copy of the STEP catalog, call 435-2769.



Dr. Philip Smith

### Johnson Leads Off Forum Series

For the third year in a row, Bruce Johnson, president of Making It Clear Communications, will present a STEP Forum. This year's is titled "Increasing Your Confidence," and will be held Thursday, Oct. 8 from 9 a.m. to noon in Bldg. 1, Wilson Hall. The talk is designed to inspire the audience to lead more successful work and personal lives. The forum is free and open to all. Inform STEP of any need for sign language interpretation or reasonable accommodation.

### Biomedical Calendar Available

The 1998-1999 Calendar of Biomedical Meetings and Events, which includes meetings sponsored by NIH as well as those of major medical societies and biomedical research associations, is available from the Office of Communications, OD. To obtain a copy, call Betty Riley, 496-8855.

## BIKE TRIP, CONTINUED FROM PAGE 1

really a lot of fun, though. I'm really glad that I did it."

Stretching from June 15 to Aug. 1, the trek burnished the 23-year-old biologist in training (see story in *NIH Record*, June 16, 1998) and carved away some 7 pounds, but left him with more than a suntan and a sackful of great pictures. He has the satisfaction of having met a challenge that winnowed away dozens when the going got tough. And it got tough early.

"At the end of the first day, lots of people dropped out," he said. "The first day was really bad." Some of the 750 riders in what ALA dubbed The Big Ride evidently expected a serene summer outing, guessed Shalizi. But having to dodge traffic on I-90 out of Seattle then cross the Cascades in snow flurries and 34 degrees persuaded these folks to seek less taxing vacations.

Shalizi set a personal record on day 1, pedaling 85 miles. "It was really cold, wet and miserable at the end," he recalls, "but I wasn't sore. By the end of the third day, though, I was really sore and in a lot of pain. My body was not used to that kind of stress. I needed to get used to the shock. My arms took an unexpected beating—they absorb a lot of impact. I expected pain in my legs, but not my arms. At the end of the day, I couldn't fully bend them." Medical staff along the route dished out plenty of ibuprofen, he said.

"All in all, there wasn't that high an attrition rate—the vast majority finished the ride," he observed, but weather and injuries took their toll. "The worst weather was in the Rockies. It was really unpredictable. You'd go from beautiful clear skies to pouring rain in the space of an hour. At night it would go down to 40 degrees, and during the day it would be in the 80's, with pretty bad headwinds.

"We encountered either rain or snow at all the mountain passes," he continued. "At the Continental Divide, outside of Helena, Montana, a rainstorm spoiled one of the most spectacular views of the

whole trip. Then we hit a snowstorm—the first time in anyone's memory for that time of the year—and we blamed that, like all the bad weather, on El Niño."

Snow closed the route from the Divide into Helena, stranding 300 cyclists at the top. Shalizi was among those shivering at the summit, waiting for buses to take them to town. "We turned the Burger King in Helena into a massive triage station," he laughs. "They'll never forget us."

Shalizi said he rode solo for the first few days, catching up with others at pit stops strung out along the route.

"Who you rode with depended on when you got up in the morning," he explained. Riders would decamp anywhere from 6 to 8 a.m., rising from tent villages erected by tour organizers, who trucked supplies along the way.

In addition to camaraderie, the pit stops offered water, snacks (fruits and trail mix) and bike technicians to fix mechanical problems. "The pit stops were really useful from Seattle to Wisconsin," Shalizi said. "Out there, you could ride for miles and miles and not come across anything at all. When urban density increased as we got further east, you could bypass the pit stops because there were diners and stores nearby."

By intent of ALA staff, the entourage encountered media often during the journey. "There was something about us in the newspaper in every town," Shalizi said. "Out West, we made the front page. As we got closer to the East, the stories moved to the rear pages. We also made some local evening news broadcasts."

Unexpected pleasures along the route included both terrain and cuisine. In the former category, the Badlands of South Dakota stand out: "It took me completely by surprise to emerge from grasslands to this really sharp, peaked landscape, with amazing banding patterns on cliffs, and an incredible sense of three-dimensionality. It was out of this world. I just spent the day there. Of all I saw on the trip, that's what I'd like to go back to."

Shalizi also said that what he misses most about riding 80 miles a day "is the freedom to pig out without fear of gaining weight. It's surprising how palatable and inexpensive the food is in America's heartland. Wisconsin had the best food. I really like cheese, and the Chamber of Commerce in La Crosse



Shalizi displays the trail pack that included all his belongings for the 47-day trek.

*The Badlands of South Dakota were a place of unexpected beauty, said Shalizi. "Of all I saw on the trip, that's what I'd like to go back to."*



threw a dairy product feast for us.” Top meals of the tour were at a diner in La Crosse and at a bed-and-breakfast in Confluence, Pa., a town whose population was nearly doubled by the arrival of the group.

The riders had only 8 days off on their voyage; Shalizi said the night before a day off “was like Friday and Saturday night put together—it was everyone’s night to party.” A day out of the saddle meant “raiding the local bike store like locusts” in search of parts, or crashing for 3 hours at an air-conditioned theater, regardless of what was playing.

As the trip progressed, the urge to give in to heat (“our tents would turn to little solar furnaces by 8 in the morning”) or weather (including intense evening thunderstorms in Illinois and Indiana that left him in fear of tornados touching down on his pup tent)



“World’s Largest Prairie Dog” in South Dakota is appraised by the real thing (tiny, at right).

diminished with each mile. “I thought of quitting,” he admitted. “In the early days, there were mornings when I felt I couldn’t get on my bike again. But my goal wouldn’t let me quit. And other riders helped a lot. There was one who had only one leg, and he pedaled without a prosthesis. He inspired me

to go on. Six or seven riders had asthma, and one had survived a double-lung transplant. I thought if they could do it, I could. And the further I went, the less incentive there was to quit. I’d come all this way—why stop now?”

Shalizi was alarmed to learn that overnight encampments were not determined by the difficulty or distance of the ride separating them, but by wherever organizers could find an 8½-acre plot on which to bivouac. Ironically, the hardest stretch of the tour was also the longest—from Sheridan to Gillette, Wyoming. “It was a 120-mile ride, and there was as much vertical climbing as when we crossed the Continental Divide, although it was more gradual.”

The impediments of geography loomed as nothing, though, compared with the nastiness of urban drivers. Shalizi concedes that “in some areas, motorists were really good to us. They would give really wide berth. These tended to be in areas of low population density. The worst was Chicago, and outside Pittsburgh. They really didn’t care. They’d pass with 6 inches to spare, and some would yell at us.”

Shalizi met one driver broadside in Lorain, Ohio,

when a car turned abruptly in front of him halfway through a day’s ride. Luckily, both vehicles were moving slowly and Shalizi got away with a bruised knee and an undamaged bike. He did, however, crack his helmet and wind up in a hospital for x-rays. But he was released in time to start the next day’s ride. Others weren’t so fortunate. “A lot of people got hurt,” he reports. “There was a compound fracture, a couple of fractured and dislocated collarbones, and a lot of road rash.”

As the ride drew to a close, Shalizi was frustrated to be so close to home and a warm bed, yet so far. “Our last camp was in Frederick. The night before that we were in Rocky Gap, near Cumberland. If I had a car, I could have driven home, slept in a real bed, then come back in time to start the day’s ride. I got real impatient once we were in the same area code.”

The final day was a public relations stunt; any rider not within the D.C. border by 2 p.m. got picked up by a sag wagon and driven to the Mall, where the



A triumphant return home

entire group, outfitted in identical Big Ride T-shirts, pedaled a ceremonial mile past the Washington Monument to the Lincoln Memorial as the media gathered around.

Back home, Shalizi put the bike away for several days and caught up on his sleep. “I also had to adjust my eating habits back to normal.” He says his bike ride to work now takes about half the time it did before he left, and that he looks forward to riding some “centuries” (100-mile rides) with friends he made from Pennsylvania and New Jersey.

Above all, the Big Ride left Shalizi with the notion that this is a Big Country. “It was awe inspiring, the sheer magnitude of some of the farms we rode past. The scope of agriculture in this country is impressive. But it’s better to drive through a lot of it, I think,” he quipped. “I learned that nothing is really flat on a bike. It just looks that way from the air.” ■



Storm clouds gather over an encampment just east of the Continental Divide in Montana.

## MARROW DONOR, CONTINUED FROM PAGE 1

way: It takes two—donor and recipient—to tango, so to speak. For successful marrow transplantation, however, a person's genetic makeup is of paramount importance. The tissues of donor and recipient must be compatible in order for the transplant even to be considered.

Potential bone marrow donors volunteer to give blood samples that are tested, typed and kept confidentially on file at a national registry. Battling illness, potential marrow recipients hope to find a type match, first among their own blood relatives, then among the registry files. Complicating matters, however, is the fact that recipients are more likely to match donors belonging to the same racial and ethnic group. Chances of

finding a suitable match are small indeed, Jackson learned, but the chances of minorities finding a match are rarer still. What's more, far fewer members of minority groups take the steps necessary to become an eligible donor. According to the National Marrow Donor Program (NMDP), 3.2 million volunteer marrow donors were registered as of June 30. Caucasian donors make up more than 1,885,000 of the registered volunteers; African Americans account for over 255,700; Hispanics, more than 238,000; Asian/Pacific Islanders, more than 189,000; and American Indians/Alaska natives, just over 43,500. Donors of multiple ethnic origins and those of unknown race account for more than 646,000 of the volunteers listed in the registry. By June 30, NMDP had coordinated more than 7,200 unrelated transplants, 961 for minority patients.

"Recruitment continues to be a focus for the NMDP," reports Robyn Ashton, coordinator of NIH's Marrow Donor Center, one of nearly 100 donor centers in the NMDP network. "At any given time, about 3,000 patients are searching the NMDP registry for a compatible donor. At the NIH center, which is nearly 11 years old, we have facilitated 184 marrow collections/transplants. I have personally been involved in all but the first 12."

Digesting this, Jackson, an African American, decided to have his blood tested and placed in the registry. Months, even years went by. No one from the registry contacted him. Eventually, his impulsive decision faded from memory.

"A blood test,' I thought, 'that's simple enough,'" Jackson says, recalling his decision.

"At first—when I didn't hear anything back—I figured my blood must be so unique that it won't match with anyone," he continues, jokingly. "After awhile, I really forgot that I had given the sample. Then, late last fall, I received a call. 'You're a potential match,' they said. I didn't hesitate to say

I'd donate."

The next step after the initial blood sample is—another blood sample. This one would detect another level of compatibility between the two—tissue-typing or antigen matching; Jackson and the recipient matched six out of six antigens—a very rare occurrence. Then came a complete physical for Jackson. He passed, hale and hearty. Following that was the donor's last chance to change his mind.

"They sent me a detailed consent form," Jackson says. "They explained that after I signed it, they

would begin to give massive doses of chemotherapy to the recipient. It would leave him vulnerable to all kinds of diseases and infections. They would be basically destroying his immune

system, so they could replace it with mine. After the transplant, he would have my blood type, my allergies...luckily I'm pretty healthy and not allergic to anything. Although I had no intention of changing my mind, once they explained what the recipient was facing, I knew I had to go through with the donation."

The only thing left was the actual donation, a procedure done in an operating room. Jackson and his wife Patricia had already met with Ashton for a question-and-answer session about the procedure.

"My wife had more questions than I did," Jackson recalls. "I just wanted to do it and get it over with. I really wasn't that interested in knowing a lot of the details. We also talked it over with our three kids. We wanted to emphasize that even though I was going into the hospital, I was not sick. We told them that it was important sometimes to do things for other people without thinking about any reward. We used it as a lesson. As you would expect, they all reacted differently. My oldest, who's 11, said he was glad someone was doing it, but that he was glad it wasn't him! I had to keep reassuring my 9-year-old daughter that it wasn't going to be dangerous for me. My youngest son couldn't have cared less."

For Jackson, the hardest part was the wait to donate. His procedure was postponed twice—both times because the recipient contracted an infection, or was otherwise too sick to receive the life-saving marrow transplant. When Jackson was finally called for his visit to the hospital, he remembers being focused and having a little talk with himself: "I had been feeling sort of like a pregnant woman must feel in her tenth month," he jokes. "I was just ready for it to happen.

"Then I started to think more about the emotions that [the recipient] must be experiencing," he continues, sobering. "All I was allowed to know about him was that he was 45 years old and had

**"After it's all over, I'll still be healthy. Nothing will really change for me. But this man will still be fighting for his life. It gave me perspective."**



NEI clinical director Dr. Scott Whitcup has received the first Uveitis Study Group Prize for his research on ocular inflammatory diseases. The honor was presented by the International Uveitis Study Group Eye Foundation at the first Combined International Symposium of Ocular Immunology and Inflammation, held recently in Amsterdam. Whitcup was named NEI clinical director in January 1995, and is responsible for the intramural clinical research program. He is also director of the uveitis fellowship training program at NEI.

leukemia. None of his blood relatives matched his antigens as well as I did. At least one of his siblings had been tested and had not matched with him. 'I'm healthy,' I said to myself. 'No matter how this turns out, I'm going to be fine. I may have to reschedule a few things, put some other things on hold to do this—but after it's all over, I'll still be healthy. Nothing will really change for me. But this man will still be fighting for his life.' It gave me perspective."

Donor and recipient had exchanged anonymous letters just before the donation. The recipient expressed his deep gratitude to Jackson for making this sacrifice of time and convenience. In his note, Jackson told the man—whose name he doesn't know but whose life he may be saving—that he was happy to give him this chance at health and that he hopes all goes well.

In hindsight, Jackson recalls that the donation went smoothly. He was admitted to Georgetown University Hospital before dawn one morning, after spending the night in a downtown hotel. He was introduced to the anesthesiologist who would administer the epidural and monitor him throughout the hour-long marrow extraction. He remembers being wheeled into the operating room and coming face-to-face with the arched table upon which he would lie face down. The epidural did its job, numbing him from the waist down. Jackson recalls hearing muffled voices, then drifting off to sleep. Midway through, he thinks he heard the doctors tell someone to go inform Patricia that "we're halfway there."

Afterwards, Ashton—who was at the hospital throughout the procedure, even monitoring the marrow collection in the operating room—showed him his donation: 1,200 milliliters (just over 2 pints) of bone marrow. It looked like little more than 2½ plastic I.V. bags of dark red liquid, roughly the consistency of molasses. Jackson's part was over.

"I remember having a slight backache," he says. "That's about it. I also had to stay overnight in the hospital, due to a slight reaction to the epidural. However, the whole thing was not nearly as dramatic or as painful as I had imagined. I want to let people know that there is a tremendous need for more people to register. It is especially urgent for African Americans, because it is harder for Blacks to find compatible matches. I would definitely do it again."

For more information on becoming a bone marrow donor, contact the NIH Marrow Donor Program at 496-0572. ■

### Healthy Adults Needed

Healthy volunteers are needed for an NIH study of seasonal changes in vital signs. The study involves four brief clinic visits between September and March. No blood is drawn. Volunteers will be paid. For more information call 496-4168. ■

### NIH Celebrates Fire Prevention Week

On Tuesday, Oct. 6, NIH will commemorate Fire Prevention Week with a number of displays and demonstrations in front of Bldg. 1 from 10 a.m. to 2 p.m., sponsored by the Emergency Management Branch, Division of Public Safety, ORS. About 6,000 people perish in fires in the United States each year and 100,000 more are injured. Property losses from these fires are estimated at over \$10 billion annually. Education and awareness are the best defenses against this peril.

This year's theme is "Fire Drills: Your Great Escape." Everyone needs to be vigilant to identify potential fire hazards and correct them immediately. The good news is that most fires can be prevented.

NIH's observance will include an array of fire detection and suppression devices; demonstrations of fire, rescue and hazardous materials response vehicles and the equipment and protective clothing used on campus; and a variety of fire-safety and severe weather brochures and other emergency preparedness handouts. Police and crime prevention professionals will also staff displays. On hand for the day's activities will be specially trained dogs and their handlers from NIH, the Park Police and the Federal Emergency Management Agency who will demonstrate bomb detection and search and rescue techniques at 11 a.m. and 1 p.m. Also displaying their skill will be representatives from local bomb squads and staff from the Maryland Forestry Department.

There will also be a fire safety house, used to show children how to react in fires, and all children are welcome. Drawings for a number of door prizes such as fire extinguishers, smoke detectors, carbon monoxide detectors, home fire escape ladders, gift certificates and tickets to local sporting events will also be available. Winners need not be present to claim prizes. Special hosts will be Sparky the fire dog, Ronald McDonald and Smokey the Bear.

The winner of the 1999 Fire Prevention Week slogan contest will be announced during the day's activities; the winner's name and slogan will be featured on next year's posters. The 1998 winner was Danielle Warfield, who works in NIGMS.

O'Brien's Pit Barbecue Restaurant will provide food from 11 a.m. to 1 p.m. Remember, by participating in this event, you can learn about ways to protect yourself, your family and your coworkers from the tragedy of fire. Your presence will demonstrate your support for the fire fighters who may be required to risk their lives to protect the NIH community. In case of inclement weather, the rain date will be Thursday, Oct. 8. Contact the Emergency Management Branch, 496-1985, for more information. ■



NIAMS director Dr. Stephen I. Katz recently received the Scleroderma Foundation's Messenger of Hope Award for 1998. The award was presented for "outstanding leadership and personal involvement in convening the NIAMS workshop, Emerging Opportunities in Scleroderma Research" and for "bringing focus to scleroderma research by enhancing communication among researchers." Katz was honored at the foundation's annual conference in Houston.



Dr. Eugene Vigil recently joined the Center for Scientific Review as a scientific review administrator in the cell development and function initial review group. He will be responsible for review of applications for instrumentation grants, predoctoral minority (F31) fellowships, and other specialized grant programs. Previously, Vigil was at NIGMS, where he was program director of the Minority Biological Research Support Program. Prior to his appointment at NIGMS, he was a plant physiologist at the U.S. Department of Agriculture, where he studied the effect of drought stress on cotton seed and fiber maturity.

### NINDS Mourns Thomas Smith

Dr. Thomas Graves Smith, Jr., head of the sensory physiology section of the Laboratory of Neurophysiology, NINDS, died recently after suffering a stroke.

He received a bachelor of arts degree from Emory University in 1953 and a master's degree in animal physiology in 1956 from Oxford University's St. John's College, England, where he was a Rhodes scholar. He earned a medical degree from Columbia University College of Physicians and Surgeons in 1960.

After interning for a year at the Bronx Municipal Hospital Center, Smith joined NIH as a research associate in the NINDB (now NINDS)-NIMH spinal cord section of the Laboratory of Neurophysiology.

Later he left NIH to serve as a visiting research associate in the department of biology and research, laboratory of electronics, at Massachusetts Institute of Technology.

He returned to NIH in 1966 as a research medical officer in the Laboratory of Neurophysiology. He became head of the section on sensory physiology in 1970, the position he held at his death.

His early research involved classic descriptions of the electrical activity underlying circuits and networks in the cat spinal cord, which, at the time, represented the cutting edge of neurophysiology research. Next, Smith invented two-electrode voltage-clamp recording techniques to elucidate the ionic mechanisms associated with pacemaker activity in snail neurons. He was the first to apply

this technique to neurons cultured from the mammalian spinal cord, which are much smaller than snail cells. He showed how opioid peptides could modulate excitatory transmitter signals in mouse spinal cord neurons.

In 1979, Smith co-organized the country's first international symposium on the role of peptides in different functions of the central nervous system, and he coedited a volume summarizing the 3-day meeting.

Over the last 20 years, Smith focused on fractal analysis of central nervous system neuron and glial cell morphology *in vivo* and *in vitro*. He was the first scientist to apply such analytic techniques to resolve the "self-similar" changes in morphology that occur during cellular differentiation. At the time of his death he was completing the editing of a volume on fractals, which, with the help of his coeditor, Dr. G. David Lange, will soon be published. This book will serve as a fitting legacy of Smith's contributions to this area of research.

Among Smith's professional accomplishments are numerous articles dating back to 1957. He held memberships in many organizations including the American Association for the Advancement of Science, the American Physiological Society, the Society for Neuroscience (Potomac chapter) and the Federation of American Scientists. He also served as a consultant reviewer for several publications including *Brain Research*, *Journal of Microvascular Research*, *Nature*, *Physics Review A*, and *Science*.

He is survived by his wife Jodie Horn Smith.—Shannon Garnett

### New FY Catalog Coming Soon

The Division of Workforce Development, Office of Human Resources Management, is gearing up for the new fiscal year. Its FY99 catalog includes 32 new courses and offers a wide variety of training opportunities in supervision, administration, human resource management, communication, career planning, computer skills and quality of work life. Look for copies of the catalog soon. For information about other services, visit DWD online at <http://www-urc.od.nih.gov/dwd/dwdhome.html> or call 496-6211. ■

### Auditions for 'Messiah' Singalong

The NIH Community Orchestra-Bethesda Little Theatre production of the *Messiah* singalong, scheduled for Dec. 6, needs chorus members. Auditions will be held Monday, Oct. 5 at 7 p.m. in Masur Auditorium, Bldg. 10. For more information, contact conductor Gary Daum at (301) 897-8184 or visit the orchestra's Web site at <http://www.gprep.org/~music/nih>. Proceeds from the concert will benefit NIH charities. ■

Phyllomedusa bicolor, a tree frog found in the Amazon basin, secretes opioid peptides, among other substances, from the skin.



Dr. Larry Lazarus and Sharon Bryant at NIEHS are among those pursuing insights and benefits from these opioids. They, along with colleagues, have prepared and studied more than 300 different agonists and 100 antagonist compounds. The antagonists may be effective in treating addictive behaviors such as cocaine, alcohol and amphetamine dependency. The researchers also see a possible future for them in suppressing the immune system to help in organ donation.



### Stride Program Holds Ceremony

The Stride Program recently held its 1998 recognition ceremony and reunion, at which graduates Pamela Carter, computer specialist (CC), Janet Howard, writer-editor (NIAMS) and Camille Sookram-Peake, grants management specialist (NIAID), were honored.

Stride is a competitive, 3-year upward mobility program giving NIH employees in a one grade interval series an opportunity for career change and advancement. It provides a combination of on-the-job training, academic courses and selected short courses to prepare individuals for two grade interval positions. Stride is usually advertised in the spring. A technical advisory board consisting of senior level managers oversees the program.

Keynote speaker at the affair was Richard Sherbert, retired NINDS executive officer. He said the role of administrative staff at NIH is to find out what scientists need, know how to use policies and procedures to help rather than hassle them, and behave honestly, ethically and morally.

The Stride Program began in 1974. Alumni attending the ceremony hailed from 1979 to the present. They took advantage of the opportunity to network with other alumni and to reminisce about their experiences as interns. ■

*Dr. Maria Y. Giovanni, director of NEI's Fundamental Retinal Processes Program, received the 1998 Distinguished Federal Employee's Award from the Blue Cross/Blue Shield Federal Employee Program. This award recognizes workers who make substantial contributions to the agency and community. Her citation read, "Dr. Maria Giovanni has organized an annual Science Day at the Rosemary Hills Elementary School. The 650 students in Head Start, kindergarten and grades 1 and 2 are given the opportunity to tour 20 to 25 booths, which present hands-on science activities. Each year Dr. Giovanni plans and advertises the program, works with the teaching staff to prepare pre-Science Day in-class enrichment materials, and recruits volunteer scientists and parents to staff the booths. The program has been wonderfully successful at exposing students to the excitement of modern science."*



*Former NINDS Executive Officer Richard Sherbert addresses the Stride Program's recent awards ceremony and reunion.*



### CIT Courses and Seminars

All courses are on the NIH campus and are given without charge. For more information call 594-3278 or consult the training program's home page at <http://livewire.nih.gov>.

Introduction to HTML	9/24
Molecular Modeling Interest Group Seminar	9/24
Introduction to the Helix Systems	9/28
Getting Started with C	9/28-10/1
Parachute Startup for Windows 95	9/29
LAN Services and Email from Parachute	9/29
Creating Presentations with PowerPoint 97	9/30
Dealing with Difficult Customers	9/30
Advanced Presentations w/ PowerPoint 97	10/1
PC Hardware Concepts and Usage	10/1, 2
PC Hardware Troubleshooting	10/1, 2
Introduction to HTML	10/5
Fundamentals of Unix	10/5-8
Using Photoshop for Acquiring Scientific Images	10/6
An Introduction to S-PLUS 4.5	10/6-7
Cookbook Genetic Linkage Analysis, ab initio	10/7
Electronic Forms Users Group	10/7
Densitometric Analysis of 1-D Gels	
Using NIH Image	10/8
NIH Data Warehouse Property Management	10/8
NIH Data Warehouse Travel	10/9

### NIDCD Marks 10th Anniversary, Oct. 2

NIDCD will celebrate its 10th anniversary on Friday, Oct. 2 at the Natcher Conference Center, starting at 10:30 a.m. This year's event, to commemorate the founding of the institute, will open with an introduction by NIH director Dr. Harold Varmus. Four scientists representing significant areas of human communication research will present recent research and participate in a discussion moderated by NIDCD director Dr. James F. Battey, Jr. A celebration luncheon will follow at the Bethesda Naval Club.

Presentation topics include "Genetic Control of Olfactory Behavior and Olfactory Signaling" by Dr. Cori Bargmann, assistant investigator, Howard Hughes Medical Institute, University of California, San Francisco; "Brain and Language: A Comparative Approach," by Dr. Elizabeth A. Bates, director, Center for Research in Language, University of California, San Diego; "The Labyrinth of Genes for Hearing Impairment" by Dr. Thomas B. Friedman, chief, Laboratory of Molecular Genetics, NIDCD; and "Cochlear Implant Research: Past, Present, Future—Premises, Promises and Realities," by Dr. Bruce J. Gantz, professor and head, department of otolaryngology-head and neck surgery, University of Iowa, Iowa City.

For more information, call Gail Blatt, 496-7243, or visit <http://www.nih.gov/nidcd/tenanniv.htm> on the NIDCD Web site. ■

### Manchester String Quartet Enters 10th Season

The Manchester String Quartet will begin its 10th season at NIH on Monday, Sept. 28 at 12:30 p.m. in Masur Auditorium, Bldg. 10. The series is made possible by a grant from the Merck Co. Foundation. For more information, call Sharon Greenwell, 496-1776.

### Garden Club Meets, Oct. 1

The next meeting of the NIH Garden Club will feature discussion of common garden dilemmas. It will be held Thursday, Oct. 1 from noon to 1 p.m. in Bldg. 31, Conf. Rm. 7. You can submit questions in advance by email to [kh21k@nih.gov](mailto:kh21k@nih.gov). Garden Club meetings are open to all; check the club Web site for more information, <http://www.recgov.org/r&w/garden>.



When the Florida Emergency Management Agency requested assistance in extinguishing the brush fires running rampant through the state recently, the NIH Fire Department was ready to help. Fire fighters (from l) Lt. Trevor Forrester, Paul Donaldson, Lt. Christopher Mattingly, and Thomas Kellum volunteered through the Maryland Emergency Management Agency to assist in putting out the fires. On July 7, the group, joined by Southern Maryland fire fighters, drove to Florida in the NIH Fire Department's pickup truck. This "convoy" worked in the forests every day, while taking meals and resting in a shelter across the street from Daytona International Raceway. Despite intense humidity, the mediocre facilities of the local fire department, and the menace of dead, burned-out trees falling over, the volunteers' efforts were successful enough for them to return on July 16, 3 days earlier than originally expected, said team members.



The firemen worked hard to prevent scenes like the above. Many homes were lost as brush fires swept from woods to residential neighborhoods.



### 'Medicine for Public' Talks Mark 22nd Year

The 1998 Medicine for the Public lecture series, sponsored by the Clinical Center, is poised to begin its 22nd year. The lectures, free and open to the public, are held at 7 p.m. on Tuesdays in Masur Auditorium, Bldg. 10.

Oct. 6, **Imaging My Brain**—Dr. R. Nick Bryan, director of diagnostic radiology, will take you on a virtual tour of his own brain, highlighting how the latest imaging technology makes this possible. He will also show how these techniques have added to our knowledge of the aging normal brain as well as its diseases.

Oct. 13, **Environmental Risks for Disease**—Human health and human disease result from three interactive elements: environmental factors, individual susceptibility and age. The mission of the National Institute of Environmental Health Sciences is to reduce the burden of human illness and dysfunction from environmental causes by understanding each of these elements and how they interrelate. In his lecture, Dr. Kenneth Olden, NIEHS director, will discuss current research.

Oct. 20, **Medical Ethics in American Health Care**—This lecture will be presented by Dr. Ezekiel Emanuel, chief of the department of clinical bioethics. He will discuss important ethical issues facing our health-care system such as informed consent, euthanasia and the patient-physician relationship.

Oct. 27, **Childhood Hyperactivity: New Research**—Dr. Judith Rapoport, chief, Child Psychiatry Branch, NIMH, will present what researchers have learned in the last decade about childhood hyperactivity. She will also discuss how childhood hyperactivity is identified and diagnosed and current treatment options.

Nov. 10, **Kidney Cancer: Understanding How Genes Impact Cancer**—Dr. Marston Linehan, chief of the Urologic Oncology Branch, NCI, will explore the genetic basis of kidney cancer and what that implies for other forms of cancer.

Nov. 17, **A Smile for a Lifetime**—Life expectancy in 1900 was 45 years, and being toothless was a normal expectation. Today, thanks to dental implants and continued investment in science and technology, a "smile for a lifetime" is becoming a reality. Dr. Harold Slavkin, director of the National Institute of Dental Research, will examine today's research and tomorrow's possibilities.

For more information on topics or speakers, call 496-2563. The lecture series Web address is: <http://www.cc.nih.gov/ccc/98mfp/mfp98index.html>. ■