Spudich Discusses Myosin, Movement in Stetten Lecture

By Alisa Zapp Machalek

For nearly 30 years, Dr. James A. Spudich has examined the molecular basis of movement. He is interested in cell motility, division and muscle contraction. In other words, he seeks to understand what makes life go.

Spudich, a professor of biochemistry and developmental biology at Stanford University School of Medicine, is the featured speaker for this year’s DeWitt Stetten, Jr. Lecture, sponsored by the National Institute of General Medical Sciences. The lecture, part of the NIH Director’s Wednesday Afternoon Lecture Series, will be held on Wednesday, Oct. 20 at 3 p.m. in Masur Auditorium.

Several dozen of the roughly 150 graduate students on campus heard Gottesman report that initiatives are already under way to create and staff an Office of Graduate Studies, renew the mentoring role of senior scientists, focus more strongly on the desires of the students than on the needs of particular laboratories, craft new curricula that take advantage of NIH’s unique strengths, create home-grown thesis committees on campus, and, perhaps most suddenly, transform the Nobel Terrace portion of the Visitor Information Center in Bldg. 10 into a social center.

Customers Remain Content, Loyal

Drought Year Produces Mixed-Bag Reviews at Farmers Market

By Carla Garnett

At a little past 2 o’clock on a recent Tuesday afternoon, business seems to be booming at the NIH Farmers Market, held weekly during the growing season until 6 p.m. on a small patch of lawn at parking lot 41B. The long tables are filled overflowing with every fruit and vegetable from arugula to zucchini, with tempting displays of fresh herbs and flowers and baked goods thrown in for good measure. Dozens of pleased patrons wander from one set of baskets to another, picking out goodies and collecting tips from...
Auditorium, Bldg. 10. It is entitled "Single-Molecule Biomechanics and the Myosin Family of Molecular Motors."

Spudich's group focuses its attention on myosin, a protein motor that generates mechanical force and movement by harnessing the energy of ATP. To study myosin's mode of action, the researchers use two experimental systems: mammalian muscle and the slime mold Dictyostelium. Each system enables them to examine different aspects of myosin's functioning.

Skeletal muscle is the most highly organized contractile apparatus of any cell type. To study muscle contraction at a molecular level, Spudich's group developed in vitro assays for ATP-dependent movement of purified myosin on actin filaments. He is able to observe the interaction of individual molecules of actin and myosin using an optical tweezer (laser trap) technique developed in collaboration with Nobel laureate Dr. Steven Chu.

Soil Amoeba Is a 'Shape-Shifter'

But most of Spudich's work is done using the slime mold Dictyostelium, a soil amoeba that is an expert shape-shifter. The slime mold can exist as a single-celled organism; a motile, multicellular, slug-like creature; or a globular mass of spores supported by a long, slender stalk. It also exhibits all the behavior of nonmuscle mammalian cells. By studying Dictyostelium, Spudich was able to provide genetic proof that myosin is required for cell morphogenesis and cytokinesis.

Spudich has published more than 180 articles in scientific journals and has served as editor on a number of these journals. His most recent article, entitled "Myosin-V is a processive actin-based motor," was published in the Aug. 5, 1999, issue of Nature. He is currently associate editor of Molecular Biology of the Cell, and he has edited the Annual Review of Cell and Developmental Biology since its inception in 1994.

He is a member of several scientific societies, including the National Academy of Sciences. Most recently, he was appointed to lead Stanford's new Bio-X interdisciplinary initiative, which is designed to "foster the coming together of leading-edge research in basic, applied and clinical sciences to enable tomorrow's discoveries and technological advances across the full spectrum from molecules to organisms."

NIGMS has supported Spudich's research since 1977 and has provided him with a MERIT Award since 1991.

For more information or for reasonable accommodation, call Hilda Madine at 594-5595.
Mikulski Visits NIA in Baltimore

U.S. Senator Barbara Mikulski (D-Md.) toured three laboratories and held a press conference recently at the National Institute on Aging Gerontology Research Center in Baltimore. She spoke with investigators about Alzheimer’s disease, the Baltimore Longitudinal Study of Aging research on the cardiovascular system and about using cDNA arrays in genetic studies.

“I am impressed by the advances that NIA scientists have made in Alzheimer’s and aging research,” she said. “One of the first things we need to do is find treatments and ultimately cures for many of the diseases that plague our senior citizens.”

Following the tour, Mikulski met with Marie Kroen, a 100-year-old resident of the Johns Hopkins Geriatrics Center, and her daughter-in-law and caregiver, Hazel Kroen. Marie, who lived alone until she was 99, reminisced with Mikulski about growing up in Baltimore’s Highlandtown where she shopped in the Mikulski family’s small grocery store (long since closed) on Eaton Street, a few steps away from the senator’s childhood rowhouse.

A press conference followed where Mikulski announced her stand on two issues in the aging arena—an additional provision for caregivers in the Older Americans Act and her intention to propose doubling NIH’s budget, over the next 5 years.

The senator, who had been a caregiver herself as her father suffered and died from Alzheimer’s disease, passionately described her stand on aging and caregiving issues. She said with the passage of additions to the Older Americans Act, caregivers would receive tax breaks and one-stop shopping for information they need for services and support.

Suzanne Lewis

Low-Dose Estrogen Spares Bones, Enhances Hormone Replacement Therapy

Giving lower doses of estrogen and progesterone during hormone replacement therapy (HRT), in combination with calcium and vitamin D, spares older women significant osteoporotic bone mass loss while limiting HRT’s significant side effects, according to a new NIAMS-supported study.

The randomized, controlled clinical trial (Ann Int Med. 1999; 130:897-904), carried out by Dr. Robert R. Recker and his colleagues at the NIAMS-sponsored Specialized Center of Research on Osteoporosis at Creighton University, tested a continuous daily regimen of 0.3 milligrams of estrogen (and 2.5 milligrams of progesterone) in women over 65 with low bone mass. The test dosage was less than half the HRT estrogen dosage most commonly prescribed to prevent osteoporosis. Calcium and vitamin D were added to ensure adequate patient levels. Over the course of the 3.5-year study, patients showed a 3.5 percent increase in spinal bone mineral density and significant increases in total body and forearm bone density—effects similar or better than higher dose regimens. Perhaps even more importantly, the women’s experience of HRT side effects—such as breast tenderness, pelvic discomfort, mood changes and bleeding—was mild and short lived.

“HRT has long been the bedrock of osteoporosis prevention, but for many women, its side effects have been intolerable,” says Recker. “Our results could mean that many more postmenopausal women who could benefit from the therapy would be willing to be treated, and with a higher compliance rate.”

Dr. Joan McGowan, director of NIAMS’ Musculoskeletal Diseases Branch, sees great potential benefits in the study’s results. “Since estrogen is the first line of defense against osteoporosis,” she says, “it’s critical to use the lowest effective dose that will preserve and even add bone. This study provides important proof that low-dose estrogen can be an effective preventive and therapeutic option in older women with adequate calcium and vitamin D intake.”—Ray Fleming

Healthy Women Sought

Healthy postmenopausal women are needed to participate in a study of normal blood. To be eligible, you must have had no abnormal bleeding or clotting in the past. Participants must be willing to stay off any hormone treatment for 9 months and to give small blood samples; some women will be asked to give additional small samples once a month for 3 months. The study involves no hormones or medications. Compensation ($50) is provided for each blood draw. For more information, call 496-5150.
GRAD STUDENTS, CONTINUED FROM PAGE 1

primarily for graduate students. This center, which could be ready “before the snow flies,” said Gottesman, would feature refreshments, café tables on whose whiteboard tops students could scribble theories, books kiosks, and newspapers from around the world. “My actual dream is to have free food at the graduate student café,” quipped Gottesman, “and a non-alcoholic happy hour.”

The intramural champion of grad student training at NIH for the past several years, Gottesman began the meeting with a review of recent efforts to improve relations with doctoral candidates. “Believe it or not, our motives are altruistic—it’s a real pleasure to see our graduate students learn and grow here, and become better scientists.” He said that new recruits to NIH’s senior scientific staff tend to be much more enthusiastic about attracting and teaching graduate students than many of the old guard, who have resisted the notion of NIH as schoolhouse.

A group of about 20 scientists interested in graduate education, along with Gottesman and NIH director Dr. Harold Varmus, identified two challenges for NIH: How to improve the lot of current graduate students, and how to develop new graduate activities here. “We also plan a series of focus groups with potential (academic) partners to see what would interest them about collaborations with NIH,” Gottesman said.

Three suggestions emerged from the group, he reported. First, do a better job of mentoring and supporting research activities. “There was a strong suggestion that we develop our own graduate thesis committees,” noted Gottesman. Second, develop some serious grad-level coursework, including seminars and lectures, that would attract not just graduate students but also postdocs. “These courses would complement the curricula already offered by FAES (the Foundation for Advanced Education in the Sciences). We could offer particularly strong classes in translational research—how basic science ends up at the bedside. We have a lot of people who do that extremely well.”

The third suggestion addresses concern about the isolation of grad students on campus. “Most of them only know one or two other peers,” Gottesman said. “Dr. Varmus is interested in creating a student center, and feels strongly that it be as central as possible to the campus. He has suggested we adapt a portion of the Visitor Information Center to this purpose.” Gottesman displayed a poster with architect’s drawings of how the current VIC could be modified at minimal time and expense to better suit the needs of grad students. “It might even become a cyber café,” he predicted, “with computer terminals at the tables, which is the current mode attractive to many people. It could become a very popular place.” Once the new Mark O. Hatfield Clinical Research Center is built, a more specialized grad student space could be crafted, he continued. The Office of Graduate Studies (OGS) could be appended to that social area.

Voicing the concerns of the students was Deanna Buck of NINDS’ behavioral and neurosciences unit. She and a committee of peers recommend an orientation package for new students; a grad student coordinator who could help students match their interests with the most appropriate labs; notification about any grant or award opportunities for which grad students could apply; better liaison between NIH and the students’ home institutions; a social center somewhat more quiet and intimate than the one envisioned by Gottesman; grad student representation on bodies that make decisions affecting students’ lives; an ombudsman (NIH ombudsman Dr. Howard Gadlin was in the audience and assured the students that he and his staff of four are available to them); more sensitive mentorship taking students’ intellectual interests into account, not just according to what one student referred to as the “dog-race atmosphere” of research pushed by news headlines; temporary low-cost housing; financial aid in the form of tuition reimbursement or deferral of student loans (Buck said that some grad students here take on part-time jobs, “which is unheard of back at our home institutions.”) Concorded Gottesman, “I don’t think students should have outside jobs—your work as grad students is hard enough.”); a Web site; and a refreshment fund to entertain guest speakers at seminars and journal clubs.

Gottesman answered each suggestion in turn: there will be an OGS with a respected director, orientation presentations and materials will be first-rate, thesis committees will be composed of people “dedicated to you, not to your supervisor, necessary,” and a Web site and lifestylerv will be no trouble to provide.

He said NIH will look into the possibility of leasing low-cost housing nearby, which he called “a major problem for many of our training programs.” During a brief Q&A session, Gottesman: agreed that grad students should never be transformed into technicians by aggressive lab chiefs; pledged to expand partnerships with more universities, even distant ones; applauded the participation of grad students in FARE, an award competition chiefly among postdocs in which grad students did proportionately better than the postdocs in the past year; and seconded the notion of adding a Grad Student Fair to the annual Research Festival.

The meeting ended with refreshments as the group gave Gottesman a unanimous go-ahead to proceed with plans to transform part of the VIC this fall.
NINDS Participates in Variety of Disease Workshops
By Marcia Vital

The National Institute of Neurological Disorders and Stroke is forging stronger alliances with the public, voluntary agencies and patient advocacy groups. Over the past few months, NINDS has participated in several conferences and workshops on rare disorders including Friedreich's ataxia (FRDA), spinal muscular atrophy, Sturge-Weber syndrome, and Batten disease.

Last spring, the institute, in cooperation with the Office of Rare Diseases and the Friedreich's Ataxia Research Alliance (FARA), cosponsored the 1999 International Friedreich's Ataxia Conference on the NIH campus.

"It is important to encourage families with rare disorders to work with the NIH," says NINDS neurologist and program director Dr. Giovanna Spinella. "Voluntary agencies and patient organizations bring to the NIH the energy to help mobilize the patient and scientific communities, which provides the foundation for future research efforts."

"I think we are trying to set the train in motion at this meeting," said FRDA researcher Dr. Robert Wilson. "We have the 50 or 60 top investigators whose research is directly related to Friedreich's ataxia. The future lies in continuing the coordination between basic science and clinical application that has been so well achieved at this meeting."

FARA was founded in 1998 by Ronald and Rayche1 Bartek and a small group of parents, patients and researchers. "When my son was about 10 years old, he started to show signs of stumbling and difficulties with fine motor skills," says Ms. Bartek. "We thought he might have some minor problem with coordination. We never dreamed that it was a life-shortening neurological disorder. It was a devastating diagnosis."

FRDA is a recessive, genetically inherited, neurodegenerative disorder that strikes about one in every 50,000 persons. The incidence is about two and a half times higher among the Acadian population of South Louisiana, the original home of the Bartek family, than in the general population. Loss of coordination, an unsteady walk, slurred speech, and other symptoms usually appear between the ages of 3 and 15. Most patients need a wheelchair full-time by their late teens or early twenties and most die in early adulthood.

Last May, a spinal muscular atrophy (SMA) patient advocacy group, Andrew's Buddies, held a workshop at the Neuroscience Center on Executive Blvd. The workshop addressed research efforts for SMA, an uncommon, genetically inherited, neuromuscular disease characterized by degeneration of the motor neurons of the anterior horn of the spinal cord resulting in loss of skeletal muscle. The workshop brought together scientists from around the world and from diverse fields to talk about their common interest in SMA. Topics of discussion ranged from genetics and gene therapy to mouse models and accurate diagnostic tests.

"This is a chance for scientists who don't often have the opportunity to talk to each other to get together and thrash out ideas," said Joe Slay, cofounder with his wife Martha of Andrew's Buddies. "If by sponsoring this meeting we can foster the exchange of one useful idea or encourage the collaboration of scientists on a project which may one day lead to treatments for patients with SMA, then we've done our job."

In June, Families of SMA, a patient-advocacy group that provides support to patients and families and also funds research on SMA, held its annual meeting in Milwaukee. Several NINDS scientists attended and participated in the 3-day conference, which covered such topics as financial planning, coping mechanisms for handling grief, social activities for patients with SMA, respiratory complications associated with the disease, and the future of research in the field.

"Spinal muscular atrophy is an important problem and research in this area is progressing rapidly," says Dr. Kenneth H. Fischbeck, chief of the Neuro-genetics Branch, NINDS, who participated in both SMA meetings. "Foundations like Andrew's Buddies and Families of SMA play an important role in heightening public awareness, raising money for research, and encouraging NIH support."

Also in June, the Sturge-Weber Foundation held the International Sturge-Weber Syndrome Symposium in Gaithersburg. Sturge-Weber syndrome is a congenital neurological disorder characterized by a port wine stain birthmark on the face, angiomas (excessive blood vessel growth on the surface of the brain), glaucoma (increased pressure within the eye) and seizures. The symposium covered topics related to the scientific and medical aspects of Sturge-Weber syndrome research.

Also last spring, NINDS, along with the Office of Rare Diseases and the Children's Brain Disease Foundation, cosponsored a workshop on Batten disease, a progressive and degenerative neurometabolic disorder characterized by loss of vision, seizures and gradual deterioration of motor and intellectual functioning. Children who inherit the disease die in their late teens to early twenties. The workshop focused on scientific research on Batten disease with the goals of generating new ideas about pathogenesis, increasing the number of young scientists conducting research on the disease, and spurring the development of effective therapies to combat the disease.
Market regulars (from l) Claudia Sayre of northwest Washington, D.C., Sue Larsen of Bethesda, and OD's Sylvia Bennett are weekly patrons.

One of the Farmers Market Association's original NIH vendors, Marie Welsh (r), says the drought hurt her produce—especially the corn. However, one of Welsh's regular customers, Margery Sullivan (l) of NIAID, admits a closely guarded secret. "I'm not sure if I want you to tell this," Sullivan says, laughing, "but she's the only one who brings figs! They're delicious."

Former federal employee Mike Tabor of Licking Creek Bend Farm in Needmore, Pa., would like to see more NIH'ers patronize the market. Healthy food, National Institutes of Health—it's a natural fit, he says.

Renee Spates (l) of Stoney Castle Farm in Poolesville, Md., offers her tomatoes. Tomatoes, vendors and customers agree, were one of the most-missed items at the market during the drought.

FARMERS MARKET, CONTINUED FROM PAGE 1

farmers about cooking and gardening. Seems only natural that a mostly organic market located at a place dedicated to health would stay crowded. And, seems like this year's drought had little or no effect on market business. But, caution some regular market vendors, things aren't always what they seem.

"It was pitiful," declares vendor Marie Welsh, whose infectious grin and cheery demeanor belie her words. She brings produce from her two Maryland locations—Laurel and Taneytown—and is one of the original farmers to join the market at NIH.

"I lost nearly all my corn this year. I had some, but [the ears] were not as filled out as usual. People still loved it, because the flavor was still good, but I could certainly tell the difference. I also lost a lot of beans, peas and carrots. Most of my beets dried up and died too. The problem with this drought was that it started so early—way back in April. When we've had droughts before, they've come in June or July. That way, we were able to save a lot of our produce."

Suspending for a moment his attention to customers' enthusiastic interest in his watercress soup recipe, George Kephart, whose Kephart Farms produces more beef cattle than the herbs and greens he was offering at the market, contrasts current vending conditions with those during the months-long dry spell: "Things are certainly growing a lot better now that we've had some rain. It's remark-

able how quickly my pastures turned back to green. You can also tell if you look at the size of the vegetables now and compare them to the ones I was selling earlier. Today's are much bigger."

John Zawitoski, director of planning and promotion in the agricultural services division of Montgomery County's department of economic development, estimates regional farmers have experienced about a 50 percent loss in their fruit and vegetable crops. Tomatoes, it was generally thought, were the season's most-missed item.

"This year was certainly a challenge for many of our producers," he explains. "There was a lot less produce, and fruits and vegetables were generally smaller, although overall the produce was probably of greater quality. The flavors this year were probably a little bit better in most items because they weren't able to grow as large as they might

PHOTOS: CARLA GARNETT
have grown in previous years. That allows the sugars in the fruits and vegetables to get more concentrated."

Even farmers with irrigation systems suffer during dry seasons, he notes. "There is nothing like a summer thunderstorm to make a difference in a crop. The nitrogen released during the lightning is like a boost of fertilizer for crops."

Montgomery County is also considering ways to help local farmers recover from the drought. According to Zawitoski, whose office provides administrative and advertising support to the four farmers markets—Silver Spring, Potomac, Gaithersburg and NIH—in the county's association, legislation will be introduced soon to establish an emergency assistance program. A similar program rescued many producers 2 years ago after a less persistent dry spell.

In addition to the drought, which happens every now and again in the life of a farmer, some vendors were also wondering good-naturedly about customer demographics at the NIH market, given the agency's mission of health.

"Oh sure," says Mike Tabor, a former HHS employee who left federal service in the early 1970's for the farming life at Licking Creek Bend Farm in Needmore, Pa., "you come out here right about now on a Tuesday and it looks pretty crowded. But if you wait an hour or so, the crowd thins out quite a bit. It'll stay quiet until about 5 or so, when it picks up again. What we've been trying to figure out is why we don't get more NIH'ers out here shopping. I'd estimate that more than 50 percent of our customers are non-NIH people. I've even asked the surgeon general about it. There seems to be an inconsistency between how many NIH workers come and how much healthy food we have available around here."

Sure enough on this Tuesday, a completely informal poll found that fewer than half the customers shopping were NIH'ers. In fact, most of those browsing the wares are more likely to be neighbors—some from as far away as the D.C. city limits—living in the areas surrounding NIH than folks employed by its mission.

"I come here every week," admits Sue Larsen, hands full of items from the Red Wiggler Foundation, a 123-acre farm founded in 1996 as a nonprofit horticulture therapy and vocational training program for adults with developmental disabilities. "I've only missed 2 weeks this year."

"Oh I come here all the time," agrees Claudia Sayre of northwest D.C. "It's a Tuesday ritual."

Marvelous Market, which was cornering the market on freshly baked breads and other items from the oven, debuted this year at the market. "I'd have to say traffic was pretty inconsistent," says MM vendor Giovanni Lizana. "Heat was certainly a factor. It was so hot and dry this year. I think that kept a lot of people indoors. On the days when we did get a good crowd, I recognized a lot of familiar faces. We seem to get lots of return customers."

NIH'ers weren't completely unrepresented in the fresh fields, however. One employee of the Office of Financial Management was expressly grateful for the market's proximity and selection. "Thank goodness they were here," enthuses Sylvia Bennett, who works in the NIH budget office and is a market regular every week. "Compared to the supermarket, the quality here is always so much better—especially during the drought. The prices are better here too."

The NIH Farmers Market is open every Tuesday from 2 to 6 p.m. through Nov. 30.
MEDEICINE FOR PUBLIC, CONTINUED FROM PAGE 1

Oct. 5 Exercise for the Elderly: Have We Discovered the Fountain of Youth? By the year 2030, the fastest growing segment of our population will be those over 85 years of age. Seventy million Americans will be over 65. Dr. Lynn Gerber, chief of the CC rehabilitation medicine department, will explain how research is showing that exercise holds an important key to staying healthy and active as we age.

Oct. 12 New Directions for Organ and Tissue Transplantation Dr. Allan D. Kirk, chief of NIDDK's transplantation section, will explain how diabetes, renal failure and other end-stage organ diseases can be treated more successfully by immunologic strategies that make the body believe that the transplanted tissues are its own. He will explore new methods to prevent the rejection of transplanted organs and tissues, and the development of new drugs or techniques that may improve the success of organ and tissue transplants.

Oct. 19 Blood Transfusion at the Millennium Blood transfusion has changed dramatically during the last quarter of a century. Many of the early risks—hepatitis, incompatibility and limited storage and supply—have been all but eliminated in industrial societies. This is not the case in much of the developing world. Dr. Harvey Klein, chief of the CC department of transfusion medicine, will discuss new and interesting challenges that now involve inactivation of infectious agents in blood, production of substitutes for human blood, and collection of novel blood components for the immunotherapy of cancer and infectious agents, and for such promising new approaches as gene therapy.

Oct. 26 Heart Attack: Rapid Diagnosis Using Magnetic Resonance Imaging When a heart attack is suspected, quick and accurate diagnosis is essential so that treatment can begin immediately. Innovations in imaging technology can significantly speed that process in hard-to-confirm cases. Dr. Robert Balaban, chief of the Laboratory of Cardiac Energetics, NHLBI, will discuss how scientists are using sophisticated magnetic resonance imaging to detect heart attack and heart disease in emergency-room patients.


New Shingles Prevention Study

The shingles research team at NIAID will hold a presentation on a new study at NIH of an experimental vaccine to prevent shingles. All are welcome to hear researchers discuss this common and often severe disease, ways to cope with it, and learn about the new study, which is accepting volunteers at the Clinical Center. The presentation will take place at the Wolff Conf. Rm. (10/11S235) on Thursday, Oct. 21 from noon to 1 p.m.

Shingles strikes about 500,000 Americans per year, most of them over age 50. Almost half of Americans will have the disease by the time they are 80. Shingles is caused by the same virus that causes chickenpox. The virus lies dormant in nerve cells and may reappear as shingles later in life. Symptoms include a cluster of blisters, a rash, chills, fever, nausea and pain than can be so intense even clothing hurts. Although the symptoms can resolve, complications can occur such as permanent eye damage, loss of hearing, loss of taste, and intense, long-lasting pain called post-herpetic neuralgia.

For more information on the shingles prevention study, call 1-800-411-1222. Sought are volunteers who are age 60 or older, in general good health, and have not had shingles. Only one visit to the Clinical Center is required for most participants.

Fellowships for Research in Japan

Through arrangements made with the Fogarty International Center, the Japan Society for the Promotion of Science is offering fellowships for American researchers in the biomedical and behavioral sciences to pursue collaborative research in Japanese universities and other eligible Japanese institutions and laboratories. Government scientists are eligible to apply. JSPS will award: Short-term fellowships for senior scientists (and outstanding junior scientists) for periods ranging from 7 to 60 days; short-term postdoctoral fellowships (for U.S. scientists who have received the doctoral degree within 10 years prior to Apr. 1, 2000) for periods ranging from 3 to 11 months. Deadlines are Oct. 28, 1999, and Apr. 28, 2000 (deadlines will be Oct. 28 and Apr. 28 each year).

Applicants must be U.S. citizens or permanent residents and research plans must be arranged in advance with the Japanese host. Full announcements, application instructions and more information may be found on the FIC Web site at http://www.nih.gov/fic/opportunities/j.html#japan. Information is also available from Lee Ann Gschwind at email JSPS@nih.gov, phone 402-7335; fax 402-2056.

NIH Hosts 'Share the Health' Event, Nov. 6

NIH wants to "Share the Health" with its neighbors on Saturday, Nov. 6 from 8 a.m. to noon at the Natcher Conference Center. The event features health seminars, exhibits, free health materials, presentations by elected officials, interactive computer and Web TV demonstrations, tours, volunteer opportunities and more. For more information, call Terry LaMotte or Jessica Harrison of Palladian Partners at (301) 650-8660, or visit http://health.info.nih.gov/forum99/.
Dr. Michael Martin has recently joined the Center for Scientific Research as director of the Division of Physiological Systems. He will coordinate and monitor the initial peer review of grant applications submitted to NIH in the areas of cardiovascular sciences; endocrinology and reproductive sciences; integrative, functional and cognitive neurosciences; musculoskeletal and dental sciences; nutritional and metabolic sciences; and pathophysiological sciences. The reviews are conducted by six integrated review groups, which consist of about 40 standing study sections.

A native of San Francisco, Martin did his undergraduate work at the University of California in Berkeley. His graduate and postdoctoral studies were at the University of Bristol in England, where he received his Ph.D. in physiology (neurosciences) for research characterizing the role of amino acids as neurotransmitters. In 1977, he returned to the United States and to NIH, where he was a senior staff fellow and a research pharmacologist in the Laboratory of Neuro-Otological Sciences. The reviews are conducted by six integrated review groups, which consist of about 40 standing study sections.

In 1985, he left the lab and joined the NIH Grants Associate Program, designed to assist NIH scientists making the transition from research to science administration. Martin then became program director for basic cancer biology in the National Cancer Institute's Cancer Biology Branch. From there, he became deputy associate director for extramural activities in the National Institute of General Medical Sciences, a position he held until joining CSR.

Martin has published extensively and has received many awards, including the NIH Director's Award that he received in recognition of his “resourcefulness and leadership displayed in the scientific and fiscal management of NICMS' grant programs and for significant contributions to several NIH initiatives.” CSR director Dr. Ellie Ehrenfeld praised Martin's "wealth of NIH experiences as well as his wonderful scientific, managerial, analytical and personal skills."

Currently, Martin is the NIH representative in the American Indian Science and Engineering Society (government relations board). He is a member of the Cherokee Nation of Oklahoma, and has been active in American Indian outreach activities at NIH. Martin is also well-known for his other avocation, birding. This interest has taken him from Scotland to New Zealand, from Alaska to the Amazon, and he has probably seen a fourth of the 9,300 species of birds on Earth.

**NIAMS Funds Multicenter Study of Back Pain**

Surgical versus nonsurgical treatment of three back disorders will be studied in 1,450 patients at 11 medical centers with funds awarded by the National Institute of Arthritis and Musculoskeletal and Skin Diseases. Researchers at these centers will compare the two treatment approaches in patients who have a herniated (bulging) lumbar disc, spinal stenosis (narrowing of the canal through which the spinal cord passes) or degenerative spondylolisthesis, where a vertebra in the spine slips forward out of place. This project is expected to have a major impact on clinical practice and on the cost of medical services for persons with one of the three back disorders.

The 5-year study, which will cost more than $13.5 million, is being performed under the direction of Dr. James N. Weinstein, professor of surgery at Dartmouth Medical School. Patients enrolled in the study will be randomly assigned to either surgical or nonsurgical treatment. An additional 1,800 people with back pain will be observed to assess health and resource outcomes.

Pain involving disorders of the lumbar spine is not only one of the most prevalent health problems for which people seek medical help, it is also one of the most costly. Estimates of cost of medical care for those disabled by severe back pain range from $30 billion to $70 billion annually.

**Commuter Options Explored, Oct. 13**

A Commuter Transportation Fair sponsored by the Office of Research Services will be held on Wednesday, Oct. 13 from 10 a.m. to 2 p.m. in the Natcher Bldg. lobby. Representatives from various agencies will be available to discuss commuting options for employees. Several groups—including Metrobus, Ride-On and Van Pool Services, Inc.—will have commuter vehicles on display. Attendees will hear firsthand information from the Maryland State Highway Administration and Mass Transit Administration on upcoming construction scheduled for the Capital Beltway (Rte. 495) between Georgia Ave. and Rte. 29. Information will also be available on four new bus routes being developed to help commuters during the construction period.

The Employee Transportation Services Office will provide information on car- and vanpooling. The Metropolitan Washington Council of Governments will be on hand to discuss its Commuter Connections program, including the Guaranteed Ride Home Program. In addition, GSA Telework Center, MARC Trains, Eyre Bus Lines, NIH Work and Family Life Center and the NIH Bicycle Club will also have representatives at the fair.

For more information, contact Thomas Hayden, 402-RIDE (7433) or Stella Serras-Fiotes, 496-5037.
STEP Session Explores Humor in Workplace

Is your office like a comic strip, but without the comic relief? If so, plan on attending “Humor in the Workplace: Laughing Matters,” on Wednesday, Oct. 13 at 1 p.m. in Wilson Hall, Bldg. 1. The featured speakers at this session, sponsored by the staff training in extramural programs (STEP) committee, will be Dorothy Yates, director of sponsored programs at the University of Colorado at Denver, and Merrit Felderich of Innovation Consulting, Inc.

The 90-minute session will explore the values, roles and benefits of humor in the work setting. Speakers will discuss examples of positive and negative uses of humor, and how humor, used appropriately, can relieve stress, diffuse difficult situations, enhance communication, burn calories and generally make your work environment more enjoyable.

The session is free and open to all NIHers. Attendance is on a first-come, first-served basis. No advance registration is necessary. Inform STEP of any need for sign language interpretation or reasonable accommodation by Oct. 8. For more information, contact the STEP office at 435-2769.

'Siamsa Tire' at Ford's Theatre

Save $5 on tickets to a performance by Siamsa Tire—the National Folk Theatre of Ireland, Saturday, Nov. 6 at 2:30 p.m. at Ford's Theatre. Tickets on sale now at R&W for $35 to this forerunner of the popular Riverdance.

Computer Classes

All courses are on the NIH campus and are given without charge. For more information call 594-6248 or consult the training program's home page at http://training.cit.nih.gov.

Java GUI Programming
Introduction to Networks
Parachute for Windows 95/98
DWQuery: HR Workforce Demographics & Personnel Actions Mini
Electronic Forms Users Group
Using Photoshop for Acquiring Scientific Images
DWQuery: Property Management
Using PROC FREQ in the SAS System to Perform Categorical Data Analysis
WIG - World Wide Web Interest Group
Relational Database Overview
DWQuery: Research Contracts and Grants
Using SQL to Retrieve DB2 & Oracle Data
DWQuery: HR Personnel Costs
Fundamentals of Unix
DWQuery: Budget & Finance
Introduction to TCP/IP
Flash
Preparing Scientific Images for Publication
Relational Database Design
Basic Telecommunications at NIH
Tango Users Group
DB2 & Oracle Data Definition, Control, and Advanced Manipulation

Free, Reduced-Price Meals Available

The Executive Child Development Center Inc. announces sponsorship of the Child and Adult Care Food Program. The same meals will be available to all enrolled children at no separate charge regardless of race, color, sex, age, disability or national origin, and there is no discrimination in admission policy, meal service or use of facilities. To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Rm. 326-W, Whitten Bldg., 14th and Independence Ave. SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD).

Eligibility for free or reduced price meal reimbursement is based on the following annual income scales effective from July 1, 1999 to June 30, 2000.

<table>
<thead>
<tr>
<th>Family Size</th>
<th>Eligibility Scale for Free Meals</th>
<th>Eligibility Scale for Reduced Price Meals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$0 - $10,712</td>
<td>$10,712.01 - $15,244</td>
</tr>
<tr>
<td>2</td>
<td>$0 - $14,378</td>
<td>$14,378.01 - $20,461</td>
</tr>
<tr>
<td>3</td>
<td>$0 - $18,044</td>
<td>$18,044.01 - $25,678</td>
</tr>
<tr>
<td>4</td>
<td>$0 - $21,710</td>
<td>$21,710.01 - $30,895</td>
</tr>
<tr>
<td>5</td>
<td>$0 - $25,376</td>
<td>$25,376.01 - $36,112</td>
</tr>
<tr>
<td>6</td>
<td>$0 - $29,042</td>
<td>$29,042.01 - $41,329</td>
</tr>
<tr>
<td>7</td>
<td>$0 - $32,708</td>
<td>$32,708.01 - $46,546</td>
</tr>
<tr>
<td>8</td>
<td>$0 - $36,374</td>
<td>$36,374.01 - $51,763</td>
</tr>
<tr>
<td>Each additional member add:</td>
<td>$3,666</td>
<td>$5,217</td>
</tr>
</tbody>
</table>

Meals will be provided at ECDC on Executive Blvd. Contact person is Anne Schmitz, 496-9411.
NIDDK Veterinarian Baas Retires

By Jane DeMouy

You might say Dr. Erv Baas never met an animal he didn't like, and during his 40-year career, the native Iowan has encountered quite a few. After studying veterinary medicine on the GI Bill, he began his professional life as a farm veterinarian in the Midwest. A "house call" usually meant a long drive to a barnyard where Baas was often expected to rope a cow before he could examine her. The fee was $10.

He learned to rope from a Montana cowboy, he says, and has kept his first lariat in his office all these years. "It was nearly broken in two, but I hung it on the wall to remind me that there were days that were worse than the present one," he laughs.

Arriving at NIH as a senior animal diseases investigator for the Veterinary Resources Program (VRP) in the early 1970's, he quickly took on a dual role as chief of the carnivore unit in Poolesville and chief of the Animal Center Diagnostic Laboratory in the VRP. In 1984, Baas became the first veterinarian and animal program director for NIDDK (then NIAMDD), providing scientific support for 175 intramural scientists.

In this role he faced a challenge beyond roping beef cattle. Then NIH director Dr. James B. Wyngaarden called on all NIH institutes to strive for certification by the American Association for Accreditation of Laboratory Animal Care (AAALAC), an independent group providing peer review of laboratory animal care and use programs. At the time, says Baas, animals were not kept in central facilities, and older NIH lab buildings required renovations to accommodate AAALAC standards for animal housing, cleanliness and support. In many instances, new facilities had to be built.

"This was a new approach to animal care," says Sam Cushman, who, as chair of NIDDK's animal care and use committee, worked closely with Baas during the development of an AAALAC-certified program. "It was a creative and progressive effort to champion AAALAC standards, develop appropriate facilities, and educate investigators to the value of the program."

Baas saw to the establishment of NIDDK's animal care facility, beginning with the renovation of Bldg. 8 and assisted several NIH committees in establishing pathogen-free central facilities. Not only were specific space and hygiene for the animals required, but human access to the animals had to be controlled to limit the pathogens they were exposed to. Animals needed to be routinely checked for signs of ill health, twice a day. "These measures protect against transmittal of animal disease to humans and vice versa," says Baas; the bonus is that they also improve the quality and reliability of research. "Erv leaves NIDDK a fine legacy," Cushman adds.

NIH received AAALAC certification in 1993. Baas claims he doesn't know "if it was foresight or serendipity that made Wyngaarden seek AAALAC accreditation," when he did, but it has been a boon for NIH as highly valuable transgenic mice have become the research animal of choice in recent years.

"I came from an era when veterinarians were viewed as enforcers of rules and regulations. Now they're seen as part of the research team," Baas adds, noting how rewarding it has been for him to support NIDDK scientists Marc Reitman and Chuxia Deng in their research with complex transgenic and knockout mice.

At the end of almost 30 years at NIH, Baas says that originally he had never intended to stay in a large metropolitan area on the East Coast. So now he and his wife, Marilyn, are moving south to Richmond. Baas will be a part-time clinician in the animal resources division of the Medical School of Virginia at Virginia Commonwealth University. He also plans to polish his fly-fishing technique in Richmond streams.

Healthy Mothers Needed

The Pediatrics and Developmental Neuropsychiatry Branch, NIMH, seeks right-handed mothers age 20-40 with nonadopted, first-born children age 5-12 to participate in an fMRI study on the visual processing of faces. Volunteers should have no history of medical or psychiatric disorders, and should not be taking prescription medication (including birth control pills). The first-born children of volunteers should have no history of psychiatric illness or chronic medical problems. Volunteers must have normal vision or wear contacts. Participation requires a 2-hour screening interview, a followup visit, and a 3-hour visit for fMRI scan. Participants will be reimbursed. For more information, call Lisa Kalik or Neil Santiago at 456-8381. ☎️

New Chamber Season

Debuts, Oct. 10

The Rock Creek Chamber Players will open their 1999-2000 season at 3 p.m. on Sunday, Oct. 10 in the 14th floor assembly hall at the Clinical Center. Reservations are required for this free public concert, sponsored by the recreation therapy section. The program will include solo piano works by Robert Schumann, Borodin's String Quartet No. 2 in D major: songs by Hugo Wolf, and Dvorak's Serenade, Op. 44, for nine winds, 'cello and bass. For reservations and information call (202) 337-8710. ☎️
Mobile Mammography Screening Offered

The George Washington University Breast Care Center will be visiting NIH for its fall mammography screening. All NIH employees, their families and others associated with NIH (such as IRTAs, visiting scientists, contractors, volunteers) are eligible to participate. The screening dates and van locations are as follows:

- Bldg. 31 (Lot 31D) Oct. 19
- Bldg. 10 (Lot 10H) Nov. 3
- EPN/EPS Not available
- (Parking lot behind complex)
- Rockledge Nov. 10
- (Visitor parking behind RKL One)
- Bldg. 45 (front of building) Dec. 15

The van will be on-site from 9:30 a.m. to 3:45 p.m. taking preschedule appointments. Each screening is conducted by a female technologist, and a board-certified radiologist specializing in mammography will interpret the films. Appointments should take about 20 minutes and will cost $138.

GW will bill some insurance companies directly or payment can be made by cash or check at the screening (check with your insurance company for reimbursement). To see if your insurance is accepted or to make an appointment call (202) 994-9999.

Race, Walk Benefit FOCC

The 8th annual Great Pumpkin Chase 5K Run and 1 Mile Fun Walk to benefit the Friends of the Clinical Center (FOCC) will be held Sunday, Oct. 24. The race will start at 9 a.m. at the National Naval Medical Center, across Rockville Pike from NIH.

FOCC is a private, nonprofit, charitable organization that provides emergency financial aid to NIH patients and their families. Each year more than 152,000 outpatient visits are conducted. The Friends depend solely on contributions to provide financial assistance to patients facing crises resulting from long-term illnesses, which often cause stress both emotionally and financially.

The 5K Run / 1 Mile Walk is open to adults and kids of all ages. Participants will receive a long-sleeve T-shirt (while supplies last) and prizes will be awarded in several categories. The registration fee is $17 per person or $35 per team of four people before Oct. 15. Race day registration is $20 per person. Registration brochures are available on the NIH R&W Web site: http://www.recgov.org or by calling 496-6061 or (301) 348-2036.

NIH-Wide Photo Competition Welcomes Entries

All employees and their families are welcome to enter a photography competition this fall, with winners to be announced in mid-November. There are three categories: black and white prints, color prints and slides. Up to four entries—any subject is fair game—per category may be entered.

All entries must have the photographer’s name and photo title on the back of prints and on the slide mounts. The entry fee is 50 cents per image. Cash prizes of $30 for first, $20 for second, and $10 for third place winners in each category will be awarded. Ribbons will be awarded for honorable mentions.

Entries will be collected by the third week of October, and winners will be announced at a meeting Tuesday, Nov. 16 in Bldg. 31, Rm. 6C10, where all the images will be displayed.

For a schedule of when and where images will be collected, as well as other entry information, visit http://www.recgov.org/r&w/camera.html or call Ellis Gordon at (202) 686-1764 or Margaret Sprott, (301) 299-6805.

Gardeners Discuss Horticultural Therapy

Red Wiggler Foundation is a nonprofit horticulture therapy and vocational training program for adults with developmental disabilities, who grow and sell their produce. Woody Woodruff, founder, will speak at the next NIH Garden Club meeting on Thursday, Oct. 14 at noon in Bldg. 31, Conf. Rm. 10. All are welcome. For more information visit http://www.recgov.org/r&w/garden.