

Breast Cancer Drug Tamoxifen Gets Boost from Second Compound

By Frank Blanchard
Director, Public Affairs
SAIC-Frederick, Inc.

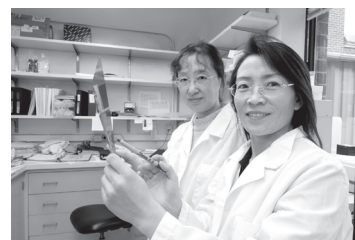
The widely used breast cancer drug, tamoxifen (Nolvadex®), which can lose effectiveness over time, might retain its full strength indefinitely if given along with a second compound, according to studies in mice at NCI-Frederick.

“Overcoming tamoxifen resistance could not only benefit women who use the drug but could also help us learn about the mechanisms that lead to such resistance and apply those lessons to the development of new and better cancer therapies,” said NCI Director John Niederhuber, M.D.

Tamoxifen has been used successfully since the 1970s to treat certain types of breast cancer and to prevent them from recurring after surgery. Initially, tamoxifen can cut the recurrence rate in half. Over time, however, patients develop resistance and the drug loses effectiveness.

Li Hua Wang, Ph.D., lead author of the study, said tamoxifen resistance can be overcome by first exposing the cancer cells in culture to a compound called disulfide benzamide, or DIBA. The approach also worked in mice engineered to have tamoxifen-resistant tumors.

Some, but not all, breast cancer tumors have many receptors that bind to estrogen molecules circulating in the



Li Hua Wang, Ph.D., and colleague

bloodstream. This binding triggers a series of events that ends in cell division and tumor growth.

Tamoxifen works by binding to estrogen receptors in place of estrogen and blocking the events that lead to cell division. Initially, tumor growth slows or stops altogether. As time goes by, however, the estrogen receptors and their signaling pathways can become altered, rendering tamoxifen ineffective as an inhibitor. In some cases,

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Community Cancer Centers Pilot Scheduled for Spring

By Frank Blanchard
Director, Public Affairs
SAIC-Frederick, Inc.

SAIC-Frederick, Inc., will manage a three-year pilot program designed to give more patients greater access to the latest advances in cancer care and treatment without having to leave their home communities.

The pilot will test the concept for a National Cancer Institute (NCI) Community Cancer Centers Program (NCCCP), which would extend the benefits of cutting-edge research and clinical programs to a greater number of patients across the country.

The community-based program would complement and expand upon the existing NCI Cancer Centers Program, which supports 61 major academic and research institutions nationwide that conduct broad-based, interdisciplinary cancer research. These centers give patients access to the latest research advances and a gateway to NCI-sponsored clinical trials.

But as it stands, only 16 percent of Americans diagnosed with cancer have direct access to these centers. For the remaining 84 percent of patients—including senior citizens and underrepresented and disadvantaged populations—NCI-designated cancer

centers may be too far away, too removed from family and other support systems, or inaccessible for other reasons. These patients receive care in their home communities in private-practice oncology settings.

It is to these settings that the NCI wants to bring the latest scientific advances and the highest level of innovative, multi-specialty care. There is also a growing need for additional patients to enroll in early-stage clinical trials so promising medications can be tested for safety and effectiveness without delay.

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Arthur's Corner

Another "Outstanding" Year for SAIC-Frederick, Inc.

I would like to extend my thanks to all of our employees for another successful year. On top of that, NCI has recognized our success by awarding SAIC-Frederick, Inc., "outstanding" scores of 90 percent (spring) and 91 percent (fall), at both Award Fee Board meetings this year.

Sole Source Negotiations.

In addition, NCI has stated in *FedBizOpps* that it plans to negotiate on a sole source basis with SAIC-Frederick, Inc., for a new 10-year contract: "The Government has determined that the OTS services being provided by the incumbent are at such an outstanding technical level, and at a cost that is fully reasonable and in accord with the technical performance, that meaningful improvement in performance cannot be achieved through solicitation and award to another source." This is a powerful endorsement of our performance in running this contract.

Our scientific staff has published more than 600 manuscripts, book chapters, abstracts, and presentations; has reported 36 inventions, seven patent applications, and three patents submitted; provided support to more than 300 national and international clinical trials for NCI, NIAID, and NIEHS; and has taken on more than 230 Yellow Task requests.

Tenth Directorate Named. This past year we added our 10th directorate, the Clinical Research Directorate, and hired Barry Gause, M.D., as the director. This new directorate is home to the rapidly expanding support we provide to NCI and NIAID

clinical trials. Another new effort that is currently being established is the NCI Community Cancer Centers Program. This is a pilot program envisioned by NCI Director John Niederhuber, M.D., to ensure that cancer patients who do not live near major cancer centers still have access to state-of-the-art cancer treatments. His decision to assign this important new initiative to NCI-Frederick is a tribute to the confidence NCI has in SAIC-Frederick, Inc.'s ability to successfully implement complex new programs.



VCMP Milestone. The Vaccine Clinical Materials Program (VCMP) celebrated an important milestone this year by releasing its first GMP product, an experimental avian flu vaccine. This important new vaccine was produced in the VCMP's new Vaccine Pilot Plant just 36 months after ground was broken. The first clinical trials with the prototype vaccine began in December. The candidate vaccine went from the research bench into clinical trials in six months. This is a remarkable achievement; kudos to everyone involved in this effort.

I encourage you to read about these and other impressive achievements this year at NCI-Frederick in the

executive summary, *Bench to Bedside*. This publication gives an overview of NCI-Frederick, with a focus on its work in translating the results of laboratory research into new treatments for cancer and AIDS. The report features partnerships with academic, private sector, and government scientists, and highlights a range of accomplishments made during 2006.

These include the Nanotechnology Characterization Laboratory, an update on the first vaccine that protects against cancer, as well as the VCMP success.

Copies of the report have been distributed to all SAIC-Frederick, Inc., directors and are available at the library.

SAIC Corporate IPO. A major event this year was the capital restructuring move by SAIC through its Initial Public Offering. On October 13, 2006, SAIC, Inc., began trading on the New York Stock Exchange. The offering

was priced at \$15 per share and resulted in net proceeds to SAIC of more than \$1.2 billion, paid as dividends to SAIC shareholders.

At SAIC-Frederick, Inc., we recognize and support community involvement of our staff. During this past year, SAIC-Frederick, Inc., and its employees have supported the United Way, Frederick Memorial Hospital, Goodwill Industries, Frederick Community College, and numerous other charitable organizations that are important to the quality of life in our communities. Likewise, SAIC-Frederick, Inc., employees are actively involved in a wide variety of community volunteer organizations.

Tamoxifen *(continued from page 1)*

tamoxifen begins to act like estrogen and can stimulate tumor growth.

Administering DIBA causes certain physical changes to occur between the estrogen receptor and the biological machinery it uses to cause cell division. "By coincidence, these changes also restore the estrogen receptor to a form that makes it vulnerable once again to tamoxifen," Dr. Wang said.

DIBA and related compounds are being studied because of their ability to disrupt cellular activity at the genetic level. These so-called electrophilic compounds were first investigated for possible use against AIDS because they can block the

human immunodeficiency virus (HIV) from replicating. The HIV studies are ongoing.

Dr. Wang has been investigating electrophilic compounds and breast cancer since 2004 (*Nature Medicine*, 2004, 10[1]). She is now exploring ways to produce DIBA in a water-soluble form so it could be given as a pill, as is tamoxifen. If successful, this could set the stage for preclinical studies.

"This basic study generated exciting results in our mouse model and suggests a promising approach that might be tried in human patients," said research team leader William Farrar, Ph.D., head of the Cancer Stem Cell Section,

Laboratory of Cancer Prevention, Center for Cancer Research.

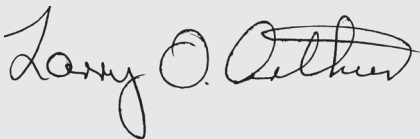
Results were published in the Dec. 11 issue of *Cancer Cell* (Wang LH, Yang XY, Zhang X, An P, Kim H, Huang J, Clarke R, Osborne CK, Inman JK, Appella E, and Farrar WL. Disruption of estrogen receptor DNA-binding domain and related intramolecular communication restores tamoxifen sensitivity in resistant breast cancer. *Cancer Cell*, 10[6]: Dec. 11, 2006).

Collaborators include Georgetown University, Washington, D.C.; Baylor College of Medicine and The Methodist Hospital, Houston, Texas; and the National Institute of Allergy and Infectious Diseases, Bethesda, Md. ❧

"Outstanding" year *(continued from page 2)*

I want to thank each of you who volunteer your time to these worthwhile community organizations.

The achievements over this past year have been outstanding and I consider myself fortunate to work with such dedicated and devoted employees as we have here at SAIC-Frederick, Inc. Again, I want to express my sincere appreciation. ❧



Larry O. Arthur,

Principal Investigator of the Operations and Technical Support Contract and Associate Director of the AIDS Vaccine Program, SAIC-Frederick, Inc.

2006 Fitness Group Logs 25,917 Miles

By Nancy Parrish



Fitness Challenge 2006 winners, L to R, John Carter (ADD), Allison Hazen (ADD), and Beverly Studebaker (FME) gather with Dr. Larry Arthur.

Fitness Challenge participants ran, walked, or biked more than one circumference of the globe in 2006, lost more than half a ton of weight, and completed more than a year's worth of other fitness activities. Prizes were awarded for the highest percentages of body weight lost. Beverly Studebaker, Facilities Maintenance and Engineering, won the top prize of \$1,000; John Carter, Applied/Developmental Research Directorate (ADD), took the second prize of \$500;

and Allison Hazen, also of ADD, captured the \$250 third prize.

Special congratulations were also extended to Donald Harne, NCI Office of the Director, who, though ineligible for prize consideration, lost the overall highest percentage of body weight (22 percent).

Larry Arthur, Ph.D., SAIC-Frederick, Inc., president, announced the winners at the Fitness Finale on December 21. The event capped the year-long program

(continued on page 5)

NCCCP *(continued from page 1)*

Management of the NCCCP will fall to Joy Beveridge of the Clinical Monitoring Research Program, Clinical Research Directorate, and project manager of support activities to several NCI cancer research programs.



Joy Beveridge
CMRP Manager for
the NCCCP pilot

NCCCP Focus Is Fourfold

Beginning this spring at approximately six test sites, the NCCCP pilot will focus on:

- Improving cancer health-care delivery in community settings to a wider range of geographic, racial, ethnic, and socioeconomic groups;
- Increasing the number of patients who participate in clinical trials;
- Creating an electronic communications network for community-based cancer providers to exchange information and best practices on cancer prevention and treatment; and
- Implementing standards for collecting and storing donor specimens for cancer research.

The existing system of NCI-designated cancer centers was created during a time when the aggressive treatment of many cancers required careful management of highly toxic side effects. But treatments are changing.

Researchers are rapidly accumulating knowledge about the genetic underpinnings of cancer and the genetic profiles of patients. This information is being translated into a new era of

personalized medicine, in which tests and treatments will be tailored to the individual, based on his or her unique tumor profile. NCI-designated cancer centers are leading this transition.

There is also evidence that cancer patients diagnosed and treated in a setting of multi-specialty care and clinical research may live longer, have a better quality of life, and have a greater chance of cancer cure. In the future, the greatest risk for mortality from cancer may be lack of access to optimal care.

Pilot to Explore New Approaches to Therapy

The NCCCP pilot will explore standards for collecting biospecimens for NCI-sponsored research, the adoption of electronic medical records, the use of telemedicine to improve research, clinical care and access, and the advancement of an Internet-based cancer research information network called the cancer Biomedical Informatics Grid. This could become a nationwide data repository on screened patients, high-risk patients on prevention trials, cancer patients actively being treated, and cancer survivors.

Over the past five years, major reports mandated by Congress and the Administration indicate the nation's fragmented health-care system fails to provide adequate information and access to effective cancer prevention, diagnosis, and treatment services promptly and equitably. This is especially true among underrepresented and disadvantaged populations, people of lower socioeconomic status, residents of rural areas, and members of other underserved populations for whom a disproportionate burden of cancer continues to be documented through cancer surveillance networks.

The NCCCP pilot will explore new approaches to overcome these health-care disparities, particularly for cancer screening and treatment. Pilot

sites will have a strong track record of community outreach programs that include formal relationships organized to reach people who do not have health-care services.

Pilot Sites Linked to Academic Research Centers

NCCCP pilot sites are not planned at major academic institutions, but they would form ties with academic research centers. This would allow the pilot program to establish a comprehensive programmatic presence in more geographic areas, giving patients—especially senior citizens and underrepresented and disadvantaged populations—direct and easy access to cutting-edge research and optimal care.

Successful pilot centers will have research relationships and will have procedures in place for referring patients for phase I clinical trials to NCI-designated cancer centers or other appropriate academic medical centers. Over the course of the pilot, the sites will expand their research relationships and their patient referral activities, thus enhancing the quality of both clinical research and health-care delivery.

The success of the pilot will be determined with the aid of an independent program evaluator who will be hired under a separate NCI contract. The evaluator will conduct qualitative and quantitative data analyses and issue recommendations. ☺

JoAnn Garrett

Just as the January issue of *News and Views* was going to press, staff received word that JoAnn Garrett, a longtime buyer in Acquisition and Logistical Services, had died. The *News & Views* staff sends condolences to her coworkers, friends, and family. A tribute will follow in the April issue. ☺

Fitness *(continued from page 3)*

inspired by an article Dr. Arthur had read in *The Lancet*, which indicated that a good diet, exercise, and a healthy lifestyle play a key role in reducing the risk of cancer. Dr. Arthur responded by challenging SAIC-Frederick, Inc., to lose a ton of weight (2,000 pounds); walk, run, or bike around the world (~25,000 miles); and perform a year's worth (8,760 hours) of other exercise. NCI-Frederick quickly jumped on board. Occupational Health Services (OHS) worked with Data Management Services to create a Web site carrying fitness tips, special event information, recipes, a tool for finding a fitness buddy, and the fitness tracker for logging individual weight and exercise information. OHS also sponsored monthly Lunch and Learn sessions, in which speakers addressed various health-related issues.

Of the 432 NCI-Frederick participants who enrolled at the kick-off, 332

created accounts on the Fitness Challenge Web site. Other employees joined the Challenge in July, with 281 additional participants striving to reach their fitness goals. To keep everyone's interest, Dr. Arthur announced in October that cash prizes would be awarded to nongovernment employees of NCI-Frederick.

NCI-Frederick's fitness goals were exceeded in two of the three categories: participants covered 25,917 miles by running, walking, or biking, and performed 12,068 hours of other fitness activities. In the weight-loss category, participants reached the halfway mark, losing 1,077 pounds. Dr. Arthur felt the challenge was "extremely successful," although, he added, next year he'd like to see the full ton of weight lost.

SAIC-Frederick, Inc., Awards

The top five SAIC-Frederick, Inc., employees in each category were awarded prizes at the Winter Staff Meeting on December 20. Winners in

the weight-loss category were: Beverly Studebaker, John Carter, Allison Hazen, Robin Dewar, and Timothy Tewalt. Winners for miles run, walked, or biked were Robin Dewar, Jim Lynch, Judith Poiley-Nelson, Eugene Oliver, and Roberta Matthai. Awards for the most hours for other fitness activities went to Richard Hobbins, William Lonergan, Maritta Grau, Drina Sta. Iglesia, and John Carter.

New Challenge Announced

In announcing the same challenge for 2007, Dr. Arthur said, "In the U.S., the population is moving toward an unhealthy situation with weight. We need to pass healthy habits down to our children. Working at a cancer research center gives us an opportunity to be role models." He plans to create more competition among the 10 directorates and offer more prizes to encourage wider participation. ☺

2006 Fitness Challenge Winner**Fitness = Energy**

Beverly Studebaker thought entering the Fitness Challenge in January 2006 would give her a good incentive to lose weight. Joining Weight Watchers early in 2006 provided an instant support group, she said. She also had lots of support at home and at work. Although she confesses she had not done much exercise before the challenge, she had purchased an exercise bike just before the challenge began. That, combined with her new support groups, gave her a good start toward a healthier lifestyle.

"If you mess up, don't worry about it. You can start fresh the next day."

Ms. Studebaker bikes daily, aiming for 6 to 10 hours of weekly exercise and up to 20 hours on weekends. She eats more fruits and vegetables, but said, "I eat pretty much what I want. I just try to eat smaller portions." That's one of the key lessons of Weight Watchers, according to Ms. Studebaker.

Her advice to anyone trying to shed a few pounds: "Drink plenty of water. Eat five servings of fruits and vegetables and three servings of dairy every day, and use a support group." The main thing to remember is: "If you mess up, don't worry about it. You can start fresh the next day."

The biggest change is in how she feels. "I have more energy now," she said. "I



Beverly Studebaker

feel better." She needed that energy in January, when she used her \$1,000 winnings to visit San Diego for her granddaughter's first birthday. ☺

Gause Named Director of Clinical Research Directorate

By Frank Blanchard
Director, Public Affairs
SAIC-Frederick, Inc.



Barry Gause, M.D., has returned to Frederick as director of SAIC-Frederick, Inc.'s new Clinical Research Directorate (CRD). Dr. Gause had worked at NCI-Frederick in the Biological

Barry Gause, M.D.
Director of Clinical
Research

Response Modifiers Program from 1991 to 1996, when the program moved to the Bethesda campus.

"I'm very excited and pleased about the development of this new directorate and am delighted to welcome Dr. Gause back to NCI-Frederick," said Larry Arthur, Ph.D., president of SAIC-Frederick, Inc. "With his experience, we will be able to serve NCI-Frederick well in the research, design, development, and improvement of new and existing programs."

Most recently, Dr. Gause was with the National Cancer Institute's Medical Oncology Branch in Bethesda, where he had primary responsibility for developing and running clinical trials, managing an outpatient clinic, and directing the fellowship training program.

The SAIC-Frederick, Inc., directorate was recently established to strengthen and expand clinical trials support to NCI and the National Institute for Allergy and Infectious Diseases. SAIC-Frederick's program provides regulatory and clinical trials management support for human clinical trials, ensuring compliance with applicable regulations

and guidelines and confirming patient safety and consent.

Dr. Gause, an oncologist with extensive experience in clinical research and patient care, will focus on bringing more patients into clinical trials, with special attention to underrepresented ethnic and socioeconomic populations in which cancer rates are above average.

Another major goal of CRD is to respond quickly to urgent clinical requirements that arise from research into cancer and infectious diseases. Dr. Gause will work to streamline projects while continuing to provide a full range of services, including patient care, program management, regulatory compliance, and quality assurance.

Elizabeth Baseler, Director of the Clinical Monitoring Research Program, which falls under the new directorate, said, "I'm looking forward to working with Barry to expand our support of clinical trials, which represent a critical step in the translation of basic research into new treatments for cancer and other diseases."

Dr. Gause received his undergraduate and medical degrees from Michigan State University and was a clinical associate in the Clinical Oncology Program at NCI in the early 1980s. He was Chief of Medical Oncology and an assistant professor at Howard University before joining NCI as a senior investigator in the Division of Cancer Treatment. He served in other positions at NCI before being appointed Clinical Investigator in the Medical Oncology Research Unit in 2002.

Dr. Gause is located at Industry Lane and can be reached at <gauseb@mail.nih.gov>, 301-846-1009 (Frederick) or 301-496-4916 (Bethesda). ↻

Donations to Schools and Charities

SAIC-Frederick, Inc., donated more than \$4,500 to schools and charitable organizations during the last quarter of 2006. Recipients included the American Diabetes Association, the Salvation Army, the American Cancer Society, American Association of the Deaf-Blind, Inc., and the Special Olympics of Maryland. ↻



EHS Christmas Tree

Holiday Creativity

J.T. Moore, Tim Rowe, and Sherry Shaner, all of Environment, Health, and Safety (EHS), found a unique way to decorate their holiday tree. Using coffee filters for snowflakes, earplugs, masks, biohazard tags, and other everyday departmental items, they made their area quite festive. After the holiday, all supplies were recycled for their intended purpose. According to Mr. Rowe, nothing was wasted, "but the coffee is a bit gritty from the holes cut in the filters." ↻

Corrections

The Supergraphics Profile on Dr. Shirley Tsang in the October *News & Views* erroneously pictured Derdev Battsetseg, Scientific Library. The Web issue has been corrected.

The new Human Resources Employment Specialist is **Molly Assion**; she handles CMRP, RTP, and OPI and can be reached at 301-846-5516; massion@ncifcrf.gov. ↻

Sole Source Negotiation

By Maritta Perry Grau

As noted in "Arthur's Corner" (page 2), NCI announced in *FedBizOpps* that it planned to negotiate a sole source contract renewal with SAIC-Frederick, Inc. NCI indicated that a noncompetitive renewal is key to maintaining the essential research and development capabilities of NCI-Frederick and that it was unlikely that another company could materially improve upon SAIC-Frederick, Inc.'s performance. Larry Arthur, Ph.D., president of SAIC-Frederick, Inc., said, "This public notice by NCI is a testament to the commitment and outstanding performance of the SAIC-Frederick employees."

The announcement gave potential competitors for the NCI contract a chance to comment on the government's decisions.

The description pointed out that NCI-Frederick is a Federally Funded Research

and Development Center and noted that the new OTS contract could last three years, with five one-year award term options and one two-year option for a possible 10-year contract term.

NCI said that the action "is necessary to maintain the outstanding capability of NCI-F and perform the mission of the National Cancer Institute. The Government has decided to exercise this right based on the need to provide the ongoing development of new technologies and the translation of basic science discoveries into novel agents for the prevention, diagnosis and treatment of cancer and AIDS. The Government has determined that the OTS services being provided by the incumbent are at such an outstanding technical level, and at a cost that is fully reasonable and in accord with the technical performance, that meaningful improvement in performance cannot be achieved through solicitation and award to another source."

While other contractors were allowed to submit a statement of interest in the contract by November 16, NCI

explained that "It must be readily apparent from the capability statement that an organization has the staff and corporate experience to provide meaningful improvement to the outstanding performance level of the incumbent contractor."

The major parameters will be familiar to nearly anyone who works at NCI-Frederick. NCI advised that in the capability statements submitted by other potential contractors, it would be looking at, among other things, the company's ability to attract and keep key personnel experienced in: managing large, complex operations such as ours; implementing new initiatives and technologies; and operating various research programs, especially in the areas of cGMP (current Good Manufacturing Practices) product development; advanced biomedical technologies; biomedical computing; cancer and AIDS research; and business management in a biomedical research environment. ↻

Winter Staff Meeting Awards

President's Award



Scott McNeil, Ph.D.
Nanotechnology Characterization Laboratory, Office of the Director

Scott McNeil, Ph.D., has led his group to

international recognition for their work in characterizing nanomaterials for use in biomedical applications for cancer treatments. NCI's collaborative, multidisciplinary approach supports the NCI Alliance for Nanotechnology in Cancer. The laboratory performs

preclinical efficacy and toxicity testing of nanoparticles to accelerate their transition into the clinic.

Norman P. Salzman Mentoring Award



Stephen Anderson, Ph.D.
Laboratory of Experimental Immunology, NCI

Stephen Anderson, Ph.D., conducts cutting-edge research in gene regulation, yet finds

time to mentor graduate and summer students, postdoctoral fellows, and technical staff, helping them to publish in prestigious scientific journals, obtain senior positions, and establish their own research groups in other institutions.

Distinguished Career Service Award, Scientific Recipient



John Roach
Biopharmaceutical Development Program (BDP)

John Roach manages the BDP manufacturing operations. He has earned both a B.A. and an M.S. while

leading and working closely with his staff. He also acts as a liaison to transfer projects smoothly and coordinate activities to achieve project goals.

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Achievement Awards *(continued from page 7)***Distinguished Career Service Award, Administrative Recipient**

Wayne Christensen
Director of Administrative Support, Laboratory Animal Sciences Program (LASP)

Wayne Christensen is skilled at

simplifying and presenting complex budgetary data and providing concise and easy-to-follow reports needed for site visits and budget preparations. In addition, he assists on projects and initiatives outside LASP.

Outstanding Achievement Award, Doctoral/Postdoctoral Recipient

Ilya Lyakhov
Ph.D.
Center for Cancer Research, Nanobiology Program

Ilya Lyakhov, Ph.D., invented nanoprobe used to detect and modify

molecules. Nanoprobes consist of a molecular rod with a molecular tether at each end, connecting functional groups, such as an antibody or an oligonucleotide, which recognize a target. The low-cost probes have only one reagent and can be used in the clinic to rapidly analyze a patient's blood. Two patent applications, one for nanoprobes, and one for a related technology, Medusa™ sequencing, have been submitted.

Outstanding Achievement Award, Doctoral/Postdoctoral Recipient

Li Hua Wang,
Ph.D.
Laboratory of Molecular Immunoregulation, Basic Science Directorate (BSD)

Li Hua Wang, Ph.D., has made significant

contributions to the study of breast cancer. She has demonstrated the reversing of tamoxifen resistance in breast cancer and has described a new paradigm in blocking estrogen receptor function. Her work has been published in top journals such as *Nature Medicine*, *Immunity*, and *Cancer Cell*.

Outstanding Achievement Award, Technical Recipient

Barbara Brooks
Manager, Fill/Finish, Vaccine Pilot Plant (VPP)

Barbara Brooks manages the Fill/Finish Section of the VPP. She designed and

implemented the fill/finish section; helped with the design, validation, complementation, and operation of the GMP cleaning operation; and hired and trained the cleaning staff. All of this aided the start-up of the National Institute of Allergy and Infectious Diseases' (NIAID's) VPP.

Outstanding Achievement Award, Technical Recipient

Steven Stull
Basic Science Directorate

Steven Stull provides technical support for four laboratories within the Laboratory Animal Sciences Program; handles

in vivo manipulations; performs special projects for other investigators; and has completed the American Association for Laboratory Animal Science's Technologist certification course.

Outstanding Achievement Award, Team Recipients

Vaccine Pilot Plant Facility Maintenance Team: Judy King, Marlene King, Delores Nelson, and Stacey White

This team of cGMP cleaning technicians keeps the Administrative, Operations Support, and Clean Room areas in an inspection-ready state at NIAID's VPP. Their excellent quality of workmanship contributes to the success of the VPP programs.

Outstanding Achievement Award, Team Recipients



Molecular Targets Development Team: Curtis Henrich, Ph.D., Lauren Krumpe, Nancy Shulley, and Antony Wamiru, Basic Research Program, BSD

This team maintains chemical libraries (more than 250,000 compounds) and programs; maintains high-speed robots; prepares samples; schedules and identifies compounds in the Molecular Targets Development Program's (MTDP's) screening operation. This past year, the team tested more than 1 million samples, aiding in the discovery of numerous lead compounds and natural product extracts. Through its efforts, MTDP has taken on more high-priority projects and significantly reduced the time needed for discovery of potentially useful compounds.

Special Achievement Award



Laura Cartner
Molecular Targets Development Program, BSD

Laura Cartner led the development of a project to chromatographically fractionate a large number of natural product extracts. She developed methods and procedures, established protocols, verified the process, and ordered and managed supplies and equipment. When all was in place, she supervised the summer students doing the work that resulted in 2,000 natural

product extracts generating 8,000 to 10,000 fractions for screening.

Special Achievement Award



David Petersen
Microarray Support Laboratory, Applied/Developmental Research Directorate (ADD)

David Petersen participated in a groundbreaking, FDA-sponsored DNA microarray technology study published in *Nature Biotechnology*. The study involved more than 150 researchers from academic, government, and commercial institutions, among which the Microarray Support Laboratory's arrays were the only noncommercial ones. The arrays held up well against six commercial platforms and gave some of the best results of all the sites involved.

Special Achievement Award



Virus Microarray Team: Cassio Baptista, Ph.D., Research Technology Program (RTP); Elizabeth Shannon, RTP; Claudia Stewart, RTP; Xiaolin Wu, Ph.D., RTP; Vickie Marshall, BSD

This team designed and implemented microarray technology to detect and identify all known mammalian and avian viruses. The array has virus-typing capabilities, can distinguish between human and avian influenza strains, can detect viruses in very low numbers, and should help

identify otherwise unknown but related viruses. It is expected that the technology will be useful in medical, agricultural, and veterinary fields, as well as in the pharmaceutical and biosecurity industries. Two patents are pending.

Customer Relations Award, Scientific Recipient



Veronica Roberts
Protein Expression Laboratory, RTP

Veronica Roberts provides customer service and scientific support for numerous key projects, including—for the past 20 years—three long-term NCI-Frederick projects: the NCI 60-cell lines; the Cancer Genome Anatomy Project; and the Mammalian Gene Collection. Her attention to detail ensures the purity of cultures; she provides the researchers with cell lines and gives them tips on how to recover and care for the cell lines.

Customer Relations Award, Administrative Recipient



Sharon Fritz
Access Control Coordinator, Protective Services

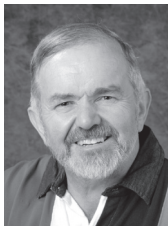
Sharon Fritz has been part of the Protective Services Department, Environment, Health, and Safety Directorate, for 29 years. Her work must be error-free, since she programs access control for more than 100 buildings and limited access spaces, and issues ID badges to NCI-Frederick employees, contract and subcontract employees, temporary agency workers, and visitors.

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Achievement Awards *(continued from page 9)***Customer Relations Award,
Administrative Recipient**

Amy Huter-Imming
*Administrative Director,
Basic Research Program, BSD*

Amy Huter-Imming oversees the scientific efforts of more than 180 researchers. As the administrative director, she established a positive relationship with the Center for Cancer Research administration; acted as a liaison between contract and government employees; represents BRP contract employees at SAIC-Frederick, Inc., meetings; and contributes to the positive work environment of NCI-Frederick through her 10-year commitment to the Employees' Recreational Council. ☺

**Length of Service
Awards****30-Year Service Awards**

Charles Brashears
*Facilities Maintenance
and Engineering*



Marilyn Buchen
*Construction
Subcontracts,
Contracts and
Administration (C&A)*

Marilyn Buchen began part-time in Personnel, but soon was a full-timer in Purchasing. She remembers typing purchase orders with carbon paper for extra copies and said she is "amazed at how we are able to support more users with fewer people through technology and streamlining" and how the physical facilities have evolved from Army buildings to a real campus.



Wayne Christensen
*Director of
Administrative Support,
Laboratory Animal
Sciences Program*



Dennis Cooper
*Facilities Maintenance
and Engineering*



**Jeffery Derge,
Ph.D.**
*Head, Office
of Research
Administration*

Jeffery Derge, Ph.D., remembers that when he started in June 1976, NCI-Frederick "was dreary." Although most of the shower-in locker rooms at the front of each wing in Building 560 had been removed, huge, full-size autoclaves were still at the rear of each wing. Dr. Derge's research involved "finding an elusive link between herpes viruses and cancer." Later, he helped coordinate the AIDS Task Force and the interactions between the AIDS support from Frederick and the research of Dr. Robert Gallo's lab in Bethesda. "Being on the inside of the explosion in research in those early days of the AIDS crisis was probably my biggest thrill in science here."



Ashok Desai
*Facilities Maintenance
and Engineering*

Ashok Desai has spent the past 30 years as an electrical engineer, first helping convert biological warfare laboratories and infrastructure into those suitable for cancer research. As a member

of the project team, he prepared designs, drawings, and specifications for electrical lighting and power distribution, fire alarm systems, scientific equipment alarm systems; and contributed to the design and installation of at least three versions of campus supercomputers. Over the years, fast-paced technological advancements and state-of-the-art scientific research equipment have required "an improved, reliable quality of electrical power. These advancements have also caused us to constantly improve our data-gathering and monitoring systems," he said.



Kenneth Dinsmore
*MIS Administrator
C&A*

Ken Dinsmore began at NCI-Frederick as a financial analyst, preparing budgets and program cost analyses. He became manager of the Property Department, which was then under Finance, and in 1984 became manager of the Accounting Department, and later was promoted to Management Information Systems Administrator. He considers his group's greatest achievement that of moving from paper to computerized systems.



Roberta Gardella
*Molecular Targets
Development Program,
CCR*



Joseph Griffiths
*Facilities Maintenance
and Engineering*



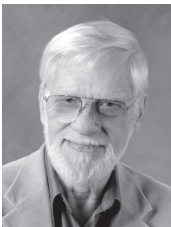
Shirley Hale
*Biopharmaceutical
Development Program*



Russ Hanson
*Basic Research
Program, BSD*

Russ Hanson's first project was to determine the extent of Bovine Leukemia

Virus infection in U.S. cattle herds, and he has been associated with many interesting projects and people over the years, such as Take Your Child To Work Day, the Fort Detrick Farmers' Market, and the Science Enrichment Program, a science summer camp sponsored by NCI for underprivileged and underserved ninth graders from around the United States.

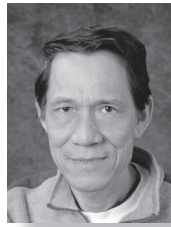


**Lou Henderson,
Ph.D.**
*AIDS Vaccine
Program, BSD*

Lou Henderson, Ph.D., began work at NCI-Frederick in the Protein Chemistry

Section, headed by Stephen Oroszlan, Ph.D. There, Dr. Henderson worked with Ray Sowder, developing numerous advanced techniques for the separation and sequence analysis of proteins with emphasis on retroviral proteins. Their findings took on special meaning when it became known that AIDS was caused by a retroviral infection (HIV-1). Some of his group's earlier work aided initial attempts to generate a vaccine. Methods his group developed were ultimately utilized to generate whole-killed virus particles with native envelope proteins and have been explored extensively as potential vaccines. Dr. Henderson noted that he looks "forward to the ongoing evaluation of the whole-killed

virus vaccine strategy and its impending transition to human trials."



Leo Lee, Ph.D.
*Laboratory of
Molecular Technology,
RTP*

Leo Lee, Ph.D., and his colleagues pioneered the concept that viruses

cause cancers. Many of the viruses Dr. Lee worked with have been implicated in human cancers. Newer technologies, such as polymerase chain reaction, have contributed to mapping of the human genome and other gene mapping efforts.



Donald Simms
*Facilities Maintenance
and Engineering*



Raymond Sowder II
*AIDS Vaccine
Program, BSD*

Raymond Sowder II began his NCI-Frederick career working with Louis

Henderson, Ph.D. Their research in protein chemistry has helped many other laboratories. They found a way to use reversed-phase high-pressure liquid chromatography to purify and sequence large peptides, which Mr. Sowder said led to their most important discovery, zinc fingers. "A dead virus with a native surface is just possibly the best potential reagent for a vaccine," Mr. Sowder said. In fact, limited trials in SIV model systems have already shown some success for this kind of killed-native virus vaccine. "A vaccine against HIV is the world's most pressing medical necessity, not only because so many people are suffering and dying from this disease, but also because its inherently high mutation rate may someday result in a form of the virus that is much more easily transmissible, where the consequences

to humanity may be far greater than presently exist. I feel honored to be a part of this important work."



Martha Todd
*Glassware Kitchen,
Central Glassware
Services, RTP*



Martin White
*Laboratory of
Molecular Technology,
RTP*

Marty White began at NCI-Frederick as a research associate

supporting protein chemistry and molecular biology studies of the role of viruses in cancer. Now he is in program administration and management oversight. He has seen procedures evolve from labor-intensive, isotope-based labeling platforms processing only several samples a day to automated, dye-based/laser reading platforms sequencing and analyzing thousands of samples in a day. Automated, high-density microarray platforms now screen for tens of thousands of genes at a time. He has also seen significant advances in approaches to managerial and financial systems.



Dolores Winterstein
*VPP, Vaccine Clinical
Materials Program*

Dolores Winterstein first worked as a lab technician, prepping

animals for treatment, performing surgeries, and maintaining the animal inventory. In each of the seven laboratories where she's worked, she's learned new skills, ranging from tissue culturing to molecular biology and biochemistry. At one point, she was part of a team that cloned, sequenced, and partially categorized an FK506 binding protein, FKBP65. "Although it seemed very frustrating

(continued on page 12)

Length of Service *(continued from page 11)*

at times, it is satisfying to know that our work helped to add to the knowledge base of this family of proteins. The antibody is now available commercially," she said. Now, with advanced training, she's moved from basic cancer research to testing vaccine products for clinical trials at the Vaccine Pilot Plant. 🌟

25 Years

Teresa L. Covell • Paul D. Green, Jr. • Ann D. Heller • Amy Huter-Imming • Charles W. Keeney • Peggy S. Keyser • Rebecca F. Kiser • John R. Klose • Marilyn Powers • Dennis K. Smith • Steven W. Stull • Robert P. Testerman • Anita L. Washington

20 Years

Terry L. Alexander • Curt W. Anthony • Michael W. Baseler • Lori L. Bowles • Robert L. Burras, Jr. • Jihhsiang Chen • Bhalchand A. Diwan • Kathy L. Easterday • Wilbur Z. Fair, Jr. • Craig L. Gladden • Sujatha B. Gowda • Ruth S. Green • Valerie L. Hill • Curtis D. Hose • Ralph H. Jones • David L. Kelbaugh • Robert W. Leberherz III • Jordan L. Ledford • Patricia A. Lloyd • Joseph D. Mayo • Thomas G. McCloud • Mehrl L. Murphy, Jr. • Aruna A. Patel • Thomas J. Sayers • Tammy L. Schroyer • Deborah D. Shores • John A. Sill • Susan B. Skidmore • Patricia A. Snowden • Susan L. Strobl • Jonathan C. Summer • Terry L. Sweeney • John M. Toomey • Eleazar Vega-Valle • David J. Waters • Jeanne M. Weinstein • Kurt W. Zimmerman

15 Years

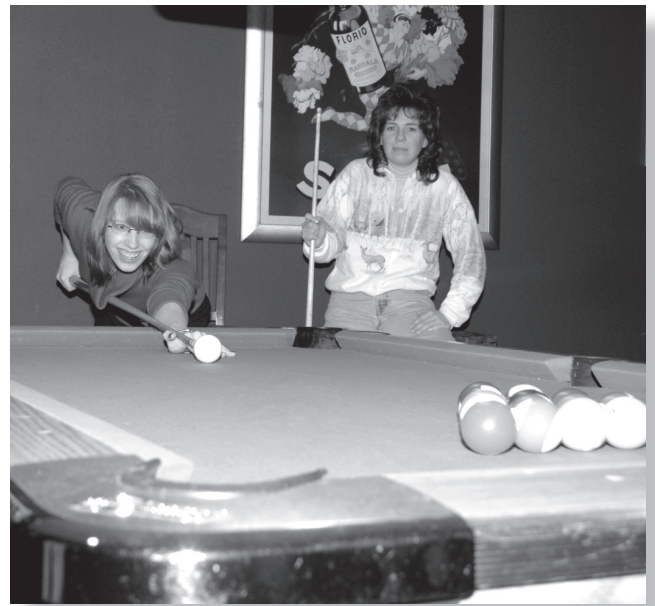
Miriam R. Anver • Christina L. Barnhart • Linda G. Brandenburg • Raul E. Cachau • Kimberly J. Cassidy • Michael L. Citro • Betty J. Clift • Shawn W. Clopper • Constance C. Dixon • Stephan E. Dobson • Mary C. Fleming • Taree R. Foltz • Helga V. Fox • Erik D. Harris • Jeanne M. Herring • Jeffrey A. Hess • Mary B. Hilton • Keifford D. Jackson • Thomas L. Kennedy • Phillip J. Mayhew • Mary J. McNally • James F. Notnagle • Daniel P. Oleyar • Eugene L. Oliver, Jr. • Lee J. Ott • Arvind G. Patel • Patricia L. Ramsey • Russell A. Reinhart • Linda L. Ritchie • Clint W. Schiffhauer • Gunamani Sithanandam • Marianne J. Subleski • Michael E. Sullivan • Virginia E. Taylor • Dolores H. Troxell • Andrea N. Villarini • Holly J. Wastler • Timothy J. Waybright • Ruth G. Webb

**10 Years**

Parirokh Awasthi • Tabassum R. Bandey • Joel R. Brown • Oleg Y. Chertov • David R. Cragg • Joe L. Downer • Lionel Feigenbaum • Jeanette M. Higgins • Maureen P. Martin • Joan C. Menninger • Melody Roelke-Parker • Dale S. Ruby

5 Years

Maribel Alarcon • Lisa L. Anders • John W. Appling • Yunden Badralmaa • Sandra M. Baer • Patricia A. Barr • Colleen A. Barrick • Eugene V. Barsov • Martin L. Baugher • Bonnie J. Baxley • Jennifer E. Beachley • Lakshman K. Bindu • Julie C. Blake • David M. Brashears • Barry Breakall • Trevor L. Broadt • Merideth M. Brown • Kathryn M. Burke • Robin K. Bushnell • Xin Chen • Wei Cheng • James M. Cherry • Salma K. Chowdhury • Yadelie Civil • Frederick R. Conner • Thomas P. Conrads • Andre Cornelis • Andrew T. Crenshaw • Jane E. Crutchley • Gerald S. Degray, Jr. • Senad J. Diglisic • Darla M. Doyle • Ruth E. Eichler • Dominic Esposito • Bruce T. Fernald • Maria E. Figueroa • Simona Florea • Sandra J. Gibson • Andrea L. Gnuschke • Cari E. Graff-Cherry • Vanessa C. Grubbs • Li Guan • Patricia M. Hall • James L. Hartley • Steven R. Havas • Misty Y. Hawes • Anne R. Hermone • Steve K. Hershberger • Joanne M. Hilburn • Chad R. Hildebrand • Kimberly A. Iman • Shannon E. Jackson • Joseph G. Jankowski, Jr. • Hengguang Jiang • Lamin Juwara • Abraham T. Kallarakal • Megan B. Kaminski • Warren E. Kelly • Valerie R. Kemp • April P. Kennedy • Bailey D. Kessing • Sonny Khin • Karen P. Lau • Scott M. Lawrence • Cara L. Leitch • John W. Madsen • Eugenia Y. Magracheva • Jamba Maidar • Clinton D. Malone • Corina D. May • Kenneth V. Michaels • Steven M. Minnick • Patricia A. Miss • Lauren A. Mora • Samuel D. Morrison • David F. Nellis • Rebecca G. Newhall • Tam L. Nguyen • Dwight V. Nissley • Colm O'Huigin • Kelli A. Oswald • Calvin S. Ott, Jr. • Jonathon D. Paarlberg • Bernice R. Packer • Rekha G. Panchal • Richard G. Parker • Xu Fang Pei • Ligia A. Pinto • Kathryn M. Riling • Barry E. Robinson • Claudette Saint • Paul Carrie • J. Saucedo • Carey A. Scott • Geoffrey D. Seidel • Kimberly A. Shafer-Weaver • Wen Shao • Joyce A. Shelton • Brad T. Sherman • Suzanne M. Shipley • John T. Simpson • Monica D. Slate • Jesse J. Snyder, Jr. • Brian J. Staats • Beverly M. Stalker • Amy L. Stotler • Ester L. Sudec • Connie E. Suders • Zhonghe Sun • George C. Tarr • Shirley Tsang • Richard A. Tucker • Susan M. Turner • Tracy M. Ulderich • Timothy D. Veenstra • Ulrike Wagner • Lena C. Wang • Paul N. Warfield • Jennifer E. Waters • Gail M. West • Lester E. Williams, Jr. • David E. Williams • Jane Xiaojin Wu • Jenny A. Yingling • Dana L. Young • Fang Yuan • Gen-Mu Zhang • Zhiyu G. Zheng • Matthew P. Zustiak 🌟



Winter Staff Meeting



Retirement

Shirley Hale

Biopharmaceutical Development Program

By Lisa Simpson



(L to R) Douglas Gaum, Shirley Hale, and David Bufter celebrate Ms. Hale's retirement at a campus reception in her honor on November 28, 2006.

Shirley Hale, Quality Assurance Specialist at the Biopharmaceutical Development Program (BDP), retired in November 2006 after 30 years with NCI-Frederick. With a background in science and medical technology, Ms. Hale was hired by the late Don Cameron in 1976 in a histotechnology training program at the Pathology/Histotechnology Laboratory (PHL).

She was lab manager for 15 of her 24 years in the Laboratory Animal Sciences Program.

In 2000 Ms. Hale joined the BDP, where she became the key player in implementing the then-new TrackWise® data tracking system for monitoring the quality of BDP products and processes. With very little formal training, Ms. Hale customized the software to fit the complex needs of the BDP and agencies with which BDP interacts, a feat of which Ms. Hale is proud.

David Bufter, Director of the Contracts and Administration Directorate for SAIC-Frederick, Inc., has known Ms. Hale since he came to NCI-Frederick in 1977. "Shirley and I met early on and have always had a good working relationship," he commented. "Shirley is a person who always takes care of business. One thing I really appreciate about her is that, at a time in her career when others might not have been willing to take on a big change or challenge, Shirley eagerly embraced the switch from PHL to BDP and took responsibility for making the

TrackWise® system work for the program."

Coworker Sandy Gibson noted that Ms. Hale was always one of the first people in the office each day and that the BDP staff will miss her "team spirit, sense of humor, creativeness, and positive outlook."

Ms. Hale also made time to volunteer at campus events, including the Spring Research Festival and Take Your Child to Work Day.

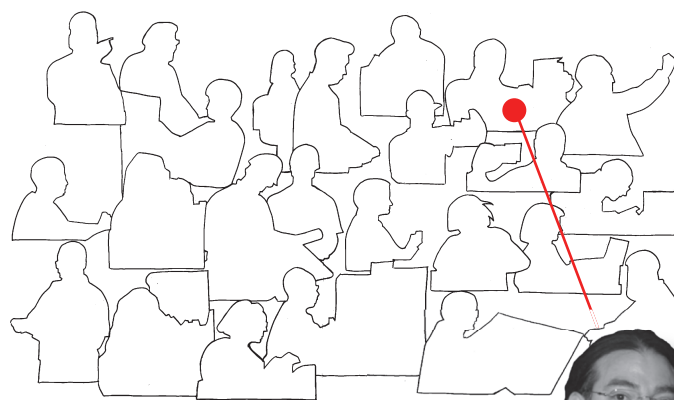
While Ms. Hale's schedule is now filled with volunteer work and a complete house restoration, she said she will miss the people she worked closely with during her career at NCI-Frederick. "Over the years, almost everyone who works here has had their lives affected by cancer or AIDS in someone close to them. I believe the impact of these personal experiences has driven the desire to find cures and relieve the devastation that these diseases can cause in our families. The success of SAIC-Frederick is directly attributed to a dedicated group of people with a vision to make a difference," she said. 🌟

Supergraphics Profile

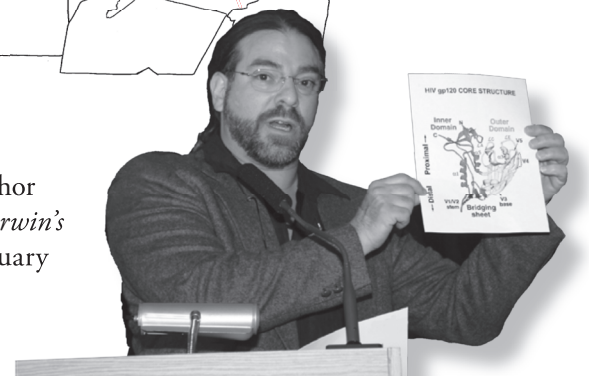
By Maritta Perry Grau

Jeffrey Lifson, M.D., Director of the AIDS Vaccine Program, Basic Science Directorate, has worked for SAIC-Frederick, Inc. for 11 years, advancing the field of AIDS research. He leads the efforts of some 50 researchers in the AIDS Vaccine Program, pursuing multidisciplinary basic and applied research in molecular retrovirology, retroviral immunology, retroviral pathogenesis, and AIDS vaccine development.

Outside of the laboratory, Dr. Lifson enjoys reading science fiction, and was



instrumental in getting the author Greg Bear (*Darwin's Radio; Darwin's Children*) to speak here in February 2005 to commemorate Charles Darwin's 196th birthday. 🌟



SAIC-Frederick Inc.'s Year in Review



For the fourth consecutive year, SAIC-Frederick, Inc., has received the "Seal of Approval" from the Alliance for Workplace Excellence (formerly the Maryland Work-Life Alliance).



Frank Blanchard became SAIC-Frederick, Inc.'s first public affairs director.



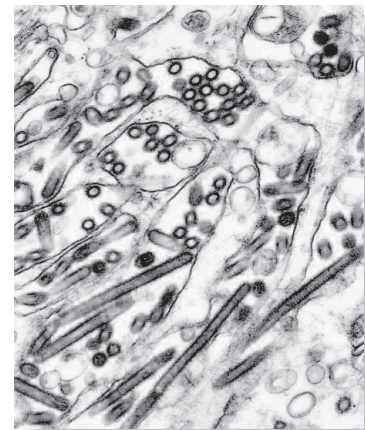
25th anniversary of the AIDS assay: NCI-Frederick played a crucial role.



RTP representatives participated in the 14th BIO 2006 Convention. Mary Lou Siegle and Dr. Carl Garland stand ready to discuss the WFO/EA.



Apis mellifera, Honey Bee, became the symbol of the 10th annual Spring Research Festival.



NCI-Frederick developed contingency procedures to be used in the event of a flu pandemic.



A Fitness Challenge was established to inspire, support, and record employees' efforts. OHS gave free pedometers to fitness participants.



20 LASP employees earned AALAS certification, demonstrating the importance of continuing education.

Important Contact Information

Ethics Hotline	1-800-760-4332
Human Resources Department	301-846-1146
Benefits Questions, HR Department	301-846-1146
SAIC Stock Programs	1-800-785-7764 or 858-826-4703
SAIC Stock Price	1-888-245-0104
Employee Assistance Program	1-800-765-3277 www.bhsonline.com

Important Dates

Presidents' Day	February 19, 2007
Scientific Writing Workshop	April 16, 18, 20, 2007
Spring Research Festival	May 16-17, 2007
Armed Forces Day	May 19, 2007
Memorial Day	May 28, 2007

Have Time Sheet Questions?

Call one of the following people to find your answers.

Time sheet issues or policy:

Help Desk: 301-846-1200

Technical problems, passwords, or organizational changes:

Ken Dinsmore 301-846-1530

Debbie L. Green 301-846-5545

SAIC Stock

SAIC's common stock is listed on the New York Stock Exchange under the symbol "SAI." For information, visit the Stock Programs Web site by logging onto ISSAIC at <https://issaic.saic.com>, or contact Stock Programs at 1-800-785-7764 or 1-858-826-4703.

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SAIC-Frederick, Inc.
The National Cancer Institute at Frederick
P.O. Box B
Frederick, MD 21702-1201