

Second Prostate Cancer Marker May Help Identify Men at Higher Risk for Cancer

By Maritta Perry Grau



Meredith Yeager, Ph.D.,
Scientific Director, CGF

Researchers have discovered a second genetic marker for prostate cancer that, combined with an earlier finding, accounts for one out of every four cases of the disease in white males in the

United States. Prostate cancer is the number 3 cancer killer in men.

Meredith Yeager, Ph.D. (SAIC-Frederick, Inc.), Stephen Chanock,

M.D. (NCI), and others of the Core Genotyping Facility (CGF) have discovered that a common genetic variant, known as rs6983267, may contribute as much as 20 percent to the risk of prostate cancer in white men in the United States and Europe. When added to the previous discovery of another prostate cancer marker, rs1447295, the two markers may contribute to nearly 25 percent risk for these same cancer cases.

“Discovery of this common variation is very exciting. Building on this finding, we may be able to identify men at highest risk for prostate cancer, diagnose the disease earlier, and hopefully prevent it altogether.

One of the next steps is to understand the mechanism by which this genetic variation exerts its effect on cancer risk,” said NCI Director John E. Niederhuber, M.D.

The gene variation in the CGF study appeared on chromosome 8, a region marked by a number of single nucleotide polymorphisms (SNPs), the most common genetic variant in which a single unit of DNA may vary from one person to the next. Interestingly, the rs6983267 SNP is located in a segment of DNA that has few known or predicted genes for prostate cancer, although it is near rs1447295, the SNP found in earlier research. “We now have two significant regions in the same general area that convey risk for prostate cancer. This will undoubtedly focus

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Project Management: the New Hot Topic at NCI-Frederick

By Carmen V. Clark

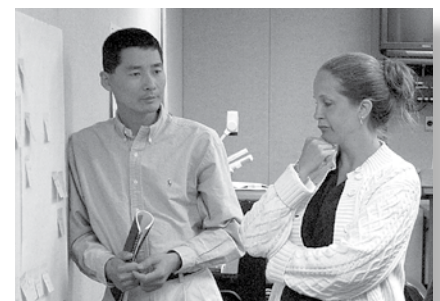
Project management is not just for the construction or information technology industries anymore. It's a hot topic that has everyone—organizations and individuals—realizing the importance of systematic planning, assessing and managing risks, applying quality measurements, managing “stakeholders,” managing “scope creep,” measuring progress against a baseline, and documenting lessons learned and best practices. SAIC-Frederick, Inc., is at the forefront, teaching employees to use project management effectively and

thus enhance SAIC-Frederick, Inc.'s overall mission to NCI-Frederick.

Well, We Aren't That New to It...

We all know that corporate SAIC is no newcomer to project management, having used the system to provide information technology services and other technologies to clients worldwide for decades. We also know that our own Facilities Maintenance and Engineering Directorate has been using project management techniques for construction and renovation projects for some time. So it should come as

no surprise that high-profile, complex projects, such as the NCI Community Cancer Centers Program (NCCCP) and the deployment of Laboratory



A team studies the “Work Breakdown Structure” of their project tasks, captured on Post-its®.

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Arthur's Corner

NCI-Frederick's Visibility Increases Significantly



Dr. Larry Arthur

The visibility of NCI-Frederick has increased significantly over the last couple of months, mainly due to the many contributions to the prevention and treatment of cancer and AIDS and our unique abilities as a Federally Funded Research and Development Center (FFRDC).

The director of the National Institutes of Health (NIH), Elias Zerhouni, M.D., visited in April. It may have been the first ever trip to this campus by an active NIH director. NCI Director John E. Niederhuber, M.D., opened our Spring Research Festival and returned in June to host a meeting of the National Cancer Advisory Board (NCAB) and to lead the group on a campus tour. The Honorable David Edgerley, secretary of the Maryland Department of Business and Economic Development, came to hear about NCI-Frederick's effective partnerships with Maryland businesses and academic institutions.

Drs. Zerhouni and Niederhuber and Mr. Edgerley all expressed enthusiasm for the work we do. They also expressed support for the idea of expanding the use of public-private partnerships to speed up the delivery of new treatments to patients.

As an FFRDC, NCI-Frederick has special authorities and flexibility

to broker partnerships among the federal government, public corporations, private businesses, academic institutions, and other nonprofit research and development entities. Over the years, these partnerships have helped overcome some of the challenges of translating basic research into treatments for patients.

NCI has recognized this ability as an important asset for addressing some of the persistent problems that impede the rapid development of new, molecular-based and -targeted cancer treatments. We are in a good position to respond to the call set forth by Dr. Zerhouni in his *NIH Roadmap for the Future of Biomedical Research*. In this document he calls for more widespread use of public-private partnerships, along with other new methods and collaborations, and a re-engineering of the clinical research enterprise.

Community Cancer Centers

At the NCAB meeting, Dr. Niederhuber announced that pilot sites have been chosen for a national program to bring state-of-the-art cancer care to more patients in their home communities. The pilot phase of the NCI Community Cancer Centers Program (NCCCP) will explore ways of reaching underserved cancer patients, getting more adults into clinical trials, and linking cancer researchers and care givers through an Internet-based information and data exchange system (see page 5).

Sixteen community hospitals are participating in the pilot, which is being managed by SAIC-Frederick, Inc., through subcontracts to eight free-standing community hospitals and two national health-care organizations. The pilot sites are being established in 14 states: California, Colorado, Connecticut, Delaware, Georgia, Indiana, Louisiana, Maryland, Montana, Nebraska, South Carolina, South Dakota, Texas, and Wisconsin.

SAIC-Frederick, Inc., was chosen to manage the pilot for a number of reasons. The project requires a high level of programmatic control, including the ability to connect multiple sites and harmonize all components of the pilot. This level of control is not assured through grants, cooperative agreements, or a government-issued contract.

As an FFRDC contractor, we can provide a quick response and flexibility. We have expertise and management capabilities involving a wide range of novel technologies, clinical cancer research, biorepository services, and biomedical informatics. We regularly manage groups of related subcontracts to multiple centers simultaneously.

Using SAIC-Frederick, Inc., contract personnel for procurement and program oversight and coordination fills all the requirements for the pilot research program, eliminating the need for a separate oversight structure.

Dr. Niederhuber wants this program to have an immediate and lasting impact on cancer research and care. The program came to SAIC-Frederick, Inc., as a concept last summer. We worked with the NCI to develop program objectives and a statement of work, issued a request for proposals, and completed an evaluation and selection of pilot sites in time to launch the pilot in June. Using the FFRDC will also accelerate completion of the pilot and its assessment and set the stage for a more extensive national network of community cancer centers three or four years from now. ☺

Larry O. Arthur, Ph.D.

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

Prostate *(continued from page 1)*

multidisciplinary studies on this stretch of DNA, called 8q24," said Dr. Yeager, lead author.

Dr. Yeager is scientific director of CGF, which SAIC-Frederick, Inc., operates for NCI-Frederick at the Advanced Technology Center, Gaithersburg. Senior authors Drs. Chanock, director of CGF, and Gilles Thomas (NCI), are among the co-leaders of the Cancer Genetic Markers of Susceptibility (CGEMS) study, a three-year project to identify genetic susceptibility to prostate and breast cancer. CGF conducts most of the laboratory work,

including bioinformatic analysis, for this project.

CGEMS researchers are gathering data on breast cancer, the second leading cause of cancer-related deaths in women in the U.S. The CGEMS database will soon contain close to 2.5 billion genotypes, allowing researchers to identify genetic risk factors for breast and prostate cancers using 540,000 SNPs across the genome. By comprehensively surveying for common genetic variations and following up promising findings in confirmatory studies, researchers hope to identify and verify

associations that increase or decrease the risk of these cancers. ↻

Related Links

<https://caintegrator.nci.nih.gov/cgems/>

www.cancer.gov/newscenter/pressreleases/CGEMSP prostate

<http://www.nature.com/ng/journal/v39/n5/full/ng2022.html> (Yeager M, Orr N, Hayes RB, *et al.* Genome-wide association study of prostate cancer identifies a second locus at 8q24. *Nature Genetics* 39:645–649, 2007)

Niederhuber and National Cancer Advisory Board Visit NCI-Frederick

By Maritta Perry Grau



James Tatum, M.D. (far right), Acting Associate Director for the Cancer Imaging Program, Division of Cancer Treatment and Diagnosis, explains the vision and operation of the Small Animal Imaging Program to members of the National Cancer Advisory Board.

NCI Director John E. Niederhuber, M.D., and members of the National Cancer Advisory Board met at NCI-Frederick on June 16.

Larry Arthur, Ph.D., president of SAIC-Frederick, Inc., presented a comprehensive look at NCI-Frederick's programs, showing the many facets of translational research that take place here. He pointed out that NCI-Frederick has less than 10 percent job turnover, and perhaps the highest

concentration of retroviral researchers anywhere in the world.

NCAB members were interested in learning about the accessibility of NCI-Frederick's programs to extramural investigators. While NCI-Frederick already works with numerous agencies, and does some work for the Department of Defense, more support, such as trials and developmental research, could be developed if the investigators are interested. Dr. Niederhuber noted that

investigators could apply for support through CTEP (Cancer Therapy Evaluation Program). He emphasized that NCI's responsibility "is global; we need to work with the underdeveloped areas of the world, and transfer our learning to theirs. I was really surprised to learn that infectious disease is not the only big killer worldwide: so is cancer."

After the morning meeting, the group toured the Small Animal Imaging Facility, Building 553, and NIAID's Vaccine Pilot Plant on Geoffrey Way.

The National Cancer Advisory Board has 18 members, appointed by the President of the United States, as well as 12 nonvoting, *ex officio* members. They are selected from among various national health and scientific agencies, as well as representatives of public policy, law, health, economics, and management. Their function is to work with the secretary and the NCI director in overseeing NCI's activities and policies; the group may recommend grants and cooperative agreements. ↻

Project Management *(continued from page 1)*

Information Management Systems, would also need formalized processes to help ensure that the final outcomes meet the intended objectives, both on time and within their proposed budgets.

For several years, the SAIC-Frederick, Inc., Project Management Office (PMO), part of the Contract Management Office, Contracts and Administration Directorate, has provided project management resources, including oversight, creation of formal plans, templates for applications and plan development, management training, and volumes of project management bibliographical references (visit <http://library.ncifcrf.gov/search/ftlist%5Ebib04,1,0,12/mode=0> to see the entire collection).


So, why haven't you heard about project management at SAIC-Frederick, Inc., before now? In our research and development environment, the project management paradigm did not seem consistent with the scientific experimental research paradigm. However, in 2006, through the mutual efforts of both NCI and SAIC-Frederick, Inc., management, formal project management processes were agreed upon for all high-level, complex NCI-Frederick projects involving integrated project teams (that is, project teams consisting of members from multiple contractors, departments, and NCI personnel).

Recent Training

This past spring, selected staff deemed likely to manage complex projects or serve on integrated project teams from SAIC-Frederick, Inc., NCI management,

Wilson Information Systems Corporation, and Data Management Services participated in several project management training sessions.

Carl Pritchard, of Pritchard Management Associates in Frederick, taught a two-day course, "Essentials of Project Management." Mr. Pritchard is a PMI-certified Project Management Professional and Earned Value Professional, an experienced project manager, author, and renowned expert on risk management. His course was both informative and entertaining, and he consistently received overwhelmingly positive reviews from his NCI-Frederick graduates.

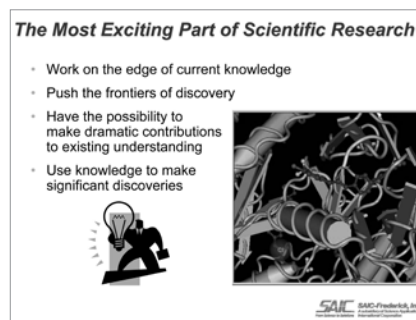
Would you like to apply project management principles to your own projects, big or small? Call Carmen Clark at 301-846-1947 for information. 

Laboratory of Molecular Technology Participates in High School Career Day

By Maritta Perry Grau

Laboratory of Molecular Technology (LMT) staff represented SAIC-Frederick, Inc., at Urbana High School's eighth annual Math, Science, and Technology Career Day Expo on May 31. LMT presenters included Kelley Banfield, Ph.D., Kristen Pike, and Claudia Stewart. They gave ten 30-minute sessions, which included a PowerPoint presentation, labware props, and time for questions. They also highlighted the Student Internship Program and handed out NCI-Frederick's *Bench to Bedside, Accelerating Progress against Cancer and AIDS* booklet to interested students, according to Marty White, who spearheaded the group's presentation.


Dr. Banfield noted that each session, held in a science classroom, comprised



At Urbana High School's career day, three LMT staffers used a PowerPoint presentation to introduce students to the many opportunities in scientific careers.

about 30 students, grades nine through twelve. "The students were very interested in the new technology that we showed them," she said, "sometimes because they had family members who had cancer. It was hard to tell them that these technologies were so new that they were still being tested and might not be available for several years. Some

seemed interested in pursuing careers in the science field, either in medicine or in the laboratory. We were also able to discuss related scientific careers and the education needed," she added.

Other scientific and technological areas represented included NASA Goddard, earth/space science; Bechtel Power Corporation, engineering careers; BP Solar, renewable energy development; the State Department, security technology; Computer Network Systems, vaccine/pharmaceutical and virus medication research; the Smithsonian Institute, plant biology collections; the National Park Service, natural resource conservation and protection, forestry and wildlife management; nursing; Frederick County GIS; and the U.S. Air Force, ROTC. 

NCCCP Launch

By Frank Blanchard

More Americans need access to the best in research-driven cancer care so the nation can cope with a coming “tsunami of cancer,” National Cancer Institute Director John E. Niederhuber, M.D., said July 25 at the kickoff of the NCI Community Cancer Centers Program (NCCCP) pilot in Bethesda, Md.

Dr. Niederhuber noted that cancer deaths in the United States have declined for two years in a row, but the nation’s population is aging and cancer is a disease of the aged. By 2030, 20 percent of the U.S. population will be over 65, compared with 12 percent in 2004.

“We need prevention and the earliest possible diagnosis,” he told the audience of about 100, including representatives of the 16 community hospitals that are participating in the pilot, members of the NCI, and other experts in attendance.

The pilot is being conducted as a research project to examine how to best provide access to the latest scientific advances in the community setting. Dr. Niederhuber said he was looking to the pilot hospitals to lead the nation in this endeavor.

At the Natcher Conference Center, pilot representatives introduced their

organizations in a series of presentations and then met in working groups formed around the major goals of the pilot: overcoming health care disparities, accruing more patients into clinical trials, exploring electronic networking technologies and ways of standardizing the collection of voluntarily donated blood samples and

other medical specimens for research, and addressing issues of quality of care and survivorship.

The pilot is being managed for NCI by SAIC-Frederick, Inc., which is subcontracting with eight free-standing hospitals and two health care organizations. ↻

Participating in the three-year pilot are

- Billings Clinic, Billings, Mont. (Billings Clinic Cancer Center)
- Hartford Hospital, Hartford, Conn. (Helen and Harry Gray Cancer Center)
- St. Joseph’s/Candler, Savannah, Ga. (Nancy N. and J.C. Lewis Cancer and Research Pavilion)
- Our Lady of the Lake Regional Medical Center, Baton Rouge, La. (Our Lady of the Lake Cancer Center and Mary Bird Perkins Cancer Center)
- Sanford USD Medical Center, Sioux Falls, S.D. (Sanford Cancer Center)
- Spartanburg Regional Hospital, Spartanburg, S.C. (Gibbs Regional Cancer Center)
- St. Joseph Hospital, Orange, Calif. (St. Joseph Hospital Cancer Center)
- Christiana Hospital, Newark, Del. (Helen F. Graham Cancer Center at Christiana Care)
- Ascension Health of St. Louis, Mo., with these participating hospitals:
 - St. Vincent Indianapolis Hospital, Indianapolis, Ind. (St. Vincent Oncology Center)
 - Columbia St. Mary’s, Milwaukee, Wis. (Columbia St. Mary’s Cancer Center)
 - Brackenridge Hospital, Austin, Texas (Shivers Center)
- Catholic Health Initiatives of Denver, Colo., with these participating hospitals:
 - Penrose-St. Francis Health Services, Colorado Springs, Colo. (Penrose Cancer Center)
 - St. Joseph Medical Center, Towson, Md. (St. Joseph Cancer Institute)
 - A coordinated regional program in Nebraska sponsored by Good Samaritan Hospital in Kearney (Good Samaritan Cancer Center); St. Elizabeth Regional Medical Center in Lincoln (St. Elizabeth Cancer Center); and St. Francis Medical Center in Grand Island (St. Francis Cancer Treatment Center).

24 Presenters and Co-Authors Win at Spring Research Festival

Congratulations to the following SAIC-Frederick, Inc., poster winners at this year’s NCI-Frederick/Fort Detrick annual Spring Research Festival.

Dr. Stephen Anderson, Rachel Bagni, Dr. Mike Baseler, Alan Brooks, Dr. Mary Carrington, Jim Cherry, Dr. Betty Conde, Melissa Gregory, Curtis Hose, Wojciech Kasprzak, Dr. Anatoli Malyguine, Vickie Marshall, Dr. Pat Martin, Dr. Anne Monks, Dr. David

Munroe, Dr. Rekha Panchal, Carrie Saucedo, Dr. Tom Sayers, Kim Shafer-Weaver, Dr. Anil Shanker, Susan Strobl, Dian Wang, Dr. Denise Whitby, Liubov Zaritskaya.

For a complete listing of poster winners, including categories and titles, go to web.ncifcrf.gov/events/springfest/, or watch for the listing in the September *Poster*. ↻



Vickie Marshall discusses with NCI Director John E. Niederhuber, M.D., her prize-winning work on conservation of virally encoded microRNAs in the Kaposi’s sarcoma-associated herpesvirus.

Human Resources Offers Free Workshops

By Nancy Parrish

The Human Resources department continues to expand its offering of workshops designed to improve personal and professional skills. Under the direction of Sukanya Bora, Training and Development Manager, the workshops are provided at no charge and take place during business hours throughout the year. "Employees' needs are identified with the help of training needs assessments, as well as through feedback from individuals across the organization," Ms. Bora said.

The **Professional Development** series focuses on specific skills needed to improve performance on the job, whether in the laboratory or at a desk.

Some of the workshops have been developed in collaboration with other business units, according to Ms. Bora. For example, the scientific writing and the presentation workshops result from a collaboration with Scientific Publications, Graphics & Media. Other workshops address topics such as customer service, quality management, and time management. Steve Harshman, the new Quality Assurance Officer, is developing a course on quality management to be offered in the fall.

The **Management and Supervisory** series provides workshops covering management skills, including delegation, managing and motivating

employees, conducting meetings successfully, and goal setting, to name a few.

Ms. Bora notifies supervisors and managers of upcoming workshops; they, in turn, notify their employees. Interested employees complete the registration that is sent with announcements and is also available in the catalog. Because the workshops fill up fast, however, Ms. Bora advises that it's important to sign up early.

A *Staff Resource Development Catalog* has been published. For more information, contact Ms. Bora (Building 372) at 301-846-1129; boras@mail.nih.gov. ↻

Protective Services Hosts 5th Annual Open House

By Nancy Parrish

Protective Services held its 5th Annual Open House in June, giving NCI-Frederick an opportunity to meet the Protective Services staff and learn about many of its programs. "I am proud to manage a group of hard-working individuals who come from different backgrounds and who possess various interests and accomplishments," said Tom Gannon-Miller, Manager of Protective Services. In addition to lunch, the Open House included a

drawing for a 30-day reserved parking space, which was won by Marti Welch, Scientific Publications, Graphics & Media photographer. The event was topped off by a visit from Rusty "the Bomb Dog" and his handler, Sergeant Frederic "Ric" Boyle of the NIH Police. Together, they demonstrated Rusty's skill at sniffing out explosive material hidden inside closed cases.

Sergeant Boyle noted that the canine patrol has been helping protect NIH for at least 30 years. ↻



Sgt. Boyle's son (L), also a skilled dog handler, helped with the demonstration.



Students find the displays of great interest.



The Protective Services Open House included a light lunch.



Rusty picks out the case containing mock explosives by sitting next to it.

Employee Learning Opportunities

Fall 2007 (August–December)

The following are open to all SAIC-Frederick, Inc., employees. There is no charge for any of the programs.

Personal Enrichment Series

Four Steps to Better Workplace Relationships	November 14, 9:00–11:00 a.m.
How to Get the Most from Your Work Day	December 7, 9:00–11:00 a.m.

Professional Development Series

Assertive Communication	September 20, 8:30 a.m.–12:30 p.m.
Effective Oral Presentations	October 11 and 18, 8:30 a.m.–12:00 p.m.
Improve Your Time Management Skills	September 26, 8:30 a.m.–12:30 p.m.
Learning to Listen	December 5, 8:30 a.m.–12:00 p.m.
Presenting Science the “Write” Way: Strategies for Scientific Publication	November 5, 7, and 9, 9:00 a.m.–12:00 p.m.
Providing Exceptional Customer Service	October 16, 9:00 a.m.–12:00 p.m.
Quality Management	October 23, 9:00 a.m.–12:00 p.m.

Brown Bag Sessions

Anger Management	September 18, 5:15–6:30 p.m.
Getting Down to the Bare Bones: Editing and Proofing	November 20, 12:00 p.m.–1:00 p.m.
Preventing Workplace Violence	November 20, 5:15–6:30 p.m.

The following are open to all SAIC-Frederick, Inc., managers and supervisors only. There is no charge for any of the programs.

Management and Supervisory Series

Coaching Strategies	December 13, 8:30 a.m.–12:00 p.m.
Employee Performance Review	October 25, 10:00–11:00 a.m. or November 7, 10:00–11:00 a.m.
How to Motivate and Inspire Employees	November 1, 8:30 a.m.–12:00 p.m.
How to Set Goals and Performance Plans	November 15, 8:30 a.m.–12:00 p.m.
Running Effective Meetings	October 3, 8:30 a.m.–12:30 p.m.
The Art of Delegating Effectively	September 14, 8:30 a.m.–12:00 p.m.
Managing Employee Performance	November 28, 9:00 a.m.–12:00 p.m.
Understanding and Managing Teams Successfully	September 18, 8:30 a.m.–12:30 p.m.

Management Development Program (MDP)

August 29–October 24, 2007 (Wednesdays)
8:30 a.m.–12:30 p.m.

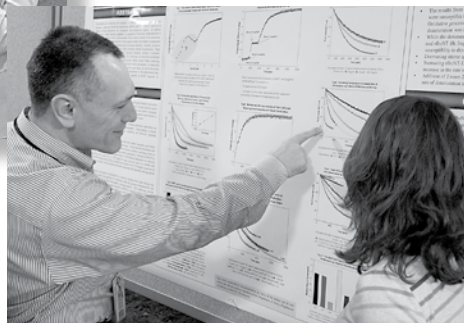
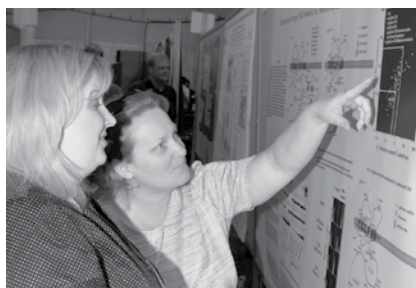
New Managers Orientation Program:

August 22, 8:30 a.m.–3:00 p.m. or
November 7, 8:30 a.m.–3:00 p.m.

The *Staff Resource Development Catalog*, published in August 2007, provides a complete description of all courses, as well as other resource material available. For additional information and registration details, contact Sukanya Bora, Training and Development Manager, boras@mail.nih.gov, or 301-846-1129.

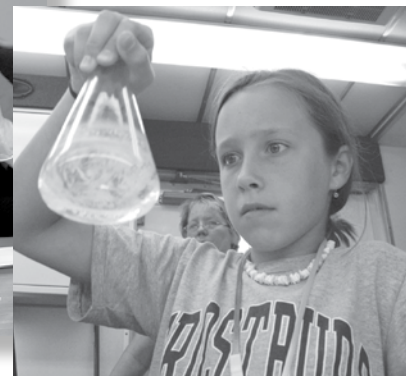
Spring Research Festival 2007

Scientific staff, including students, technical support staff, postdoctoral fellows, and principal investigators, presented their research to the Fort Detrick scientific communities and the general public at the 11th Spring Research Festival in May.



Take Your Child to Work Day 2007

More than 300 children enjoyed the Take Your Child to Work Day activities in July. New this year were the MdBioLab and the Discover Genomics! Mobile Laboratory, both designed to encourage careers in molecular biology and genomics.



Discovery May Lead to New HIV Treatment

By Lisa Simpson and Frank Blanchard

The battle against the AIDS-causing human immunodeficiency virus (HIV) may have a new weapon in its arsenal. Tomozumi Imamichi, Ph.D., head of the Laboratory of Human Retrovirology in the Clinical Services Program, and colleagues recently published work in the journal *Blood* (Fakruddin *et al.*, 2007 Mar 1;109[5]:1841-9) in which they show that an experimental vaccine against the human papillomavirus (HPV) also inhibits the ability of HIV to reproduce in cultured cells.

Their research showed that it was not the HPV vaccine itself causing the inhibition, but rather a newly described cytokine called interleukin-27 (IL-27). The HPV vaccine appears to cause human white blood cells to produce IL-27, one of a class of small proteins the immune system uses to regulate the growth and activity of various immune cells. IL-27 acts on the T cells and macrophages infected by HIV and restricts the virus' ability to reproduce, raising speculation regarding its use as a potential new treatment option for patients infected with HIV, as well as other retroviruses.

HPV causes cervical cancer, the second leading cause of cancer death in women worldwide. In 2006, HIV was responsible for approximately 2.9 million deaths. "We do not know yet whether IL-27 alone also inhibits HPV infection. However, if it does, the ability to work against both diseases at once could have a major public health impact," said Dr. Imamichi.

Unexpected Inspiration

Dr. Imamichi's investigation was originally inspired by data presented at a colleague's seminar about the experimental HPV vaccine, similar to the recently FDA-approved Gardasil®. Although this was not his area of research at the time, he

became intrigued by data showing how the HPV vaccine stimulated the human immune system's dendritic cells to produce certain cytokines that regulate inflammation. Since one of the hallmarks of HIV infection is the production of inflammation-inducing cytokines vital to the ability of HIV to replicate, he wondered what the experimental vaccine would do to



"When we put the vaccine in our culture system," he said, "it inhibited HIV replication nearly 100 percent in T cells."

HIV-infected cells in culture. "When we put the vaccine in our culture system," he said, "it inhibited HIV replication nearly 100 percent in T cells."

Follow-up research confirmed that IL-27 was the agent responsible for the inhibition and that artificially produced, recombinant IL-27 caused the same effect. In addition, in a separate study, IL-27 produced the same results in blood donated from

an AIDS patient. "Taken together, these studies identify IL-27 as a novel antiviral," reported Dr. Imamichi, adding, "Further investigation of IL-27 may have implications for HIV-1 therapeutics."

Future Prospects

Other cytokines, such as interferon α (INF- α), possess anti-HIV effects and are currently used in clinical trials to treat patients infected with HIV or co-infected with the hepatitis C virus. However, negative side effects of cytokine therapy can be troublesome. INF- α , for example, often causes flu-like symptoms, extreme fatigue, and loss of appetite. Dr. Imamichi noted the intriguing possibility that, to alleviate effects like these, IL-27 could replace, or be used with lower levels of, available cytokines or anti-HIV drugs. "Recently, NIAID conducted a clinical trial of another cytokine, interleukin-2 (IL-2) against HIV. Their results showed that IL-2 activated patients' immune responses, a positive effect, but it also increased HIV activation as an undesired side effect. Since IL-27 inhibits HIV replication, a combination of IL-27 with IL-2 could lead to a new immunotherapy," he said.

While it is still too early to plan a clinical trial to test recombinant IL-27 against HIV in human subjects, a hint about its safety for human use may be inferred from the girls and women who have already been vaccinated with the Gardasil® HPV vaccine. Since clinical trials showed the vaccine was well tolerated by women co-infected with HIV, said Dr. Imamichi, it is likely that IL-27 would be safe for treating HIV infections in human subjects, even those co-infected with HPV. However, additional studies, including animal model tests, must be completed before IL-27 can be used. ↻

Does Your Child Know What You're Doing?

By Maritta Perry Grau

It's a little bit like school, with questions asked and children eagerly learning; it's a little bit like a party, with bags of goodies to take home; it's a little bit like a vacation, with parents and kids doing something different together.

July 11 marked the 11th year of Take Your Child to Work Day at NCI-Frederick. Since NCI-Frederick is known for its ground-breaking work, it's no wonder that while many other places just let children observe what their parents do every day, we involve the children in what we do.

New this year were the MdBioLab, a \$200,000 mobile laboratory that showed the children how to take DNA fingerprints and diagnose patients with sickle-cell anemia, and the Discover Genomics! Mobile Laboratory. The mobile labs, members of the MdBioLab Consortium, encourage students to choose careers in molecular biology, genomics, and related fields.


Counting labs, Hub activities, and the mobile labs, 50 programs were offered,

ranging from "Pus Is Us" to "Debbie Banana and the Mad Scientist."

The kids eagerly participated, often with squeals and sometimes with shudders, in hands-on experiences with laboratory mice and laboratory robots, extracted DNA from mouse cells, explored how fireflies and jellyfish are used in research, learned about the security systems in the laboratories, examined unusual insects, and learned about transgenic plants.

Other demonstrations included an insectarium; petting zoo; the Special Medical Augmented Response Team (SMART), medical experts equipped with sophisticated technology to handle emergency medical responses; the Frederick City police's K-9 unit; In Ji Yong martial artists; Kenny Thomas's race car; the Fort Detrick fire truck; and the NIH police mobile command center.

More than 340 children registered, and 300 participated, noted Julie Hartman, head organizer of the event. She said that it was wonderful to see so many children having such a good learning

experience. "Our program sponsors put a lot of effort, time, and money into preparing their programs," she commented. 



Children learn how water, liquid soap, and dry ice react to one another at Take Your Child to Work Day.

Related Links:

MdBioLab: www.mobilelabcoalition.org/

Discover Genomics! Lab: www.jcvi.org/education/mobilelaboratory.php

TYCTWD pictures: <http://kidsday.ncifcrf.gov/>

SAIC Cares

SAIC-Frederick, Inc., Helps Journalists Covering AIDS Conference

By Frank Blanchard


Through corporate donations, SAIC-Frederick, Inc., is supporting a training program for international AIDS journalists and a seminar series in honor of virology pioneer Norman P. Salzman.

The National Press Foundation's Journalist to Journalist training program prepared reporters to cover the fourth International AIDS conference in Australia.

The five-day program helped journalists grasp important concepts to be

discussed at the conference. Journalists learned about the types of viruses, means of transmission, and lingering stigmas associated with AIDS. They heard overviews of promising new biomedical prevention technologies and learned about T-cell loss, immune activation, and potential therapeutic interventions. Additional topics included co-infection, antiretroviral therapy, and other treatment options. They also got tips on translating the science into lay language.

The Norman P. Salzman award recognizes a young scientist and his or her mentor for innovative and rigorous research in the field of virology. Past recipients have been recognized for work in such areas as 3-D architecture of asymmetric viruses by electron cryotomography, pathogenesis of Aleutian mink disease parvovirus, and the prions and viruses in the yeast *Saccharomyces cerevisiae*.

Other recent donations included those to the Mission of Mercy, American Diabetes Association, Frederick Community College Foundation, Mental Health Association, UC Regents (AIDS symposium), the Garrett 5K Run/Walk, and the American Cancer Society. In all, more than \$18,000 has been donated so far this year. 

Achievement Awards: Employees Honoring Employees

By Nancy Parrish

If you have an SAIC-Frederick, Inc., peer or associate who you believe makes an outstanding contribution to the mission of the company, you might consider nominating that person for a 2007 Achievement Award. Now in its eleventh year, the Achievement Awards Program was developed by the SAIC-Frederick, Inc., Research Council to “recognize employees who have contributed to the quality of science and the research environment” at the NCI-Frederick and Bethesda campuses, according to the council’s web site, <www.ncifcrf.gov/campus/sfrc/awards.html>.

Eligibility for Awards

All SAIC-Frederick, Inc., employees are eligible for the awards, which are granted in five categories (see box below). Recipients are presented with a trophy, a certificate, and a significant monetary award.

Nominations Are Accepted from All Employees

The Achievement Awards represent a significant honor because the nominations come from within: they are made for employees, by employees. While only SAIC-Frederick, Inc., staff may receive an award, nominations may be accepted from all NIH, NCI-Frederick, and SAIC-Frederick, Inc., employees.

“We’d like to emphasize that previous nominees who were not selected for an award may be re-nominated,” said Barbara McElroy, a program coordinator. “Even winners from previous years may be re-nominated, as long as the nomination is for a different effort and in a different category,” she noted.

The Process Begins in August

A letter announcing the call for nominations is mailed from Larry Arthur, Ph.D., Principal Investigator, OTS Contract, SAIC-Frederick, Inc., to all company staff at the end of August. Included with the letter are a complete description of the program and a nomination form. E-mail notifications are sent to NIH and NCI-Frederick staff members.

Each nomination must include a written justification that is specific about the nominee’s accomplishments and suitability for the award. Justifications should be between 100 and 300 words (about 2 to 3 paragraphs). Nominations may be submitted to Lionel Feigenbaum, Ph.D., Chairman of the Research Council Awards Committee, Building 538, Room 3. You may also submit your nomination on-line at <www.ncifcrf.gov/campus/sfrc>. All nominations are due by the end of September.

Selecting the Recipients

Each year, more than 100 nominations are submitted for these prestigious awards. Nominations are reviewed by the SAIC-Frederick, Inc., Research Council Awards Committee, made up of senior staff across all company disciplines. “Each nomination is carefully reviewed by each member of the committee and scored according to its merits,” explained Dr. Feigenbaum. “The award recipients are then selected at a meeting of the committee.” Awards are presented at the SAIC-Frederick, Inc., Winter Staff Meeting in December.

The President’s Award, established in 2003, is the only award that is granted without nominations. This award is presented to the company employee who, the president believes, has made an outstanding overall contribution to the mission of SAIC-Frederick, Inc.

For more information about the Achievement Awards Program, contact Dr. Feigenbaum, 301-846-1696, or feigenbaum@ncifcrf.gov.

SAIC-Frederick, Inc., Achievement Awards

Distinguished Career Service Award: For an employee with a minimum of 10 years’ service who has, throughout the course of his/her career, improved the quality of science and/or the work environment. Two categories: (1) Scientific; (2) Administrative or infrastructure support.

Norman P. Salzman Mentoring Award: For the scientist who most personifies Dr. Salzman’s lifetime commitment to the guidance and direction of others in the pursuit of scientific excellence.

Outstanding Achievement Award (Individual or Team): For consistent outstanding efforts in support of the science at NCI-Frederick. Three categories: (1) Doctoral/postdoctoral; (2) Technical; (3) Administrative or infrastructure support.

Special Achievement Award (Individual or Team): For a specific achievement of a nonrecurring nature that has resulted in the support of the science performed at the NCI-Frederick and Bethesda campuses.

Customer Relations Award: For the employee who, through his or her interactions with and services to the customer, considerably enhanced the image of SAIC-Frederick, Inc. Two categories: (1) Scientific; (2) Administrative or infrastructure support.

Retirements

Nearly 150 Years of Service at NCI-Frederick

By Lisa Simpson and Maritta Perry Grau

Every NCI-Frederick employee contributes in some way to making cancer and other diseases treatable or preventable. Recent retirees Dr. Gwen Chmurny, Dr. Jeffery Derge, Ken Dinsmore, Mary Lyles, Joan Menninger, and Carolyn Whistler leave us a legacy of almost 150 years of service to NCI-Frederick in the lab and in administrative and services support areas.



Gwen Chmurny, Ph.D.

Dr. Gwendolyn Chmurny, a leader in the Nuclear Magnetic Resonance Laboratory section of the Laboratory of Proteomics and Analytical Technologies, worked at NCI-Frederick for 25 years. An active member of the NCI-Frederick community, she generously shared images and NMR data with other researchers and was a contributor to the then-Research Technology Program seminar series, speaking on such subjects as “Nuclear Magnetic Resonance Applications in a Biomedical Environment.”

Jeffery Derge, Ph.D.

When Dr. Jeffery Derge joined NCI-Frederick, the NCI Viral Oncology program “focused on finding an elusive link between herpes viruses and

cancer,” he noted in a recent e-mail, but “ultimately, the NCI decided to drop funding for most of the program, especially the study of the herpes virus-cancer link.”



From l. to r. Dr. Ray Gilden, Dr. Jeffery Derge, and Dr. Larry Arthur.

Dr. Derge moved into scientific administration, participating in some of the NCI’s most important and highly publicized research programs: coordinating the AIDS Task Force and interactions between laboratories in Frederick and Bethesda; working on the Human Genome Project, the NCI Cancer Genome Anatomy Project, and the Mammalian Gene Collection; and coordinating renovations of Building 469. He also supported the Molecular Target Laboratory through a congressional investigation, testifying to House staffers and working with “high-powered Washington lawyers... Fortunately,” noted Dr. Derge, “it did not get to the inquisition phase—no appearances before any convened committees.”

After 31 years, Dr. Derge has retired as head of the Office of Research Administration in the Applied/Developmental Research Directorate. He said, “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...I

will always be thankful for the many different science challenges I have had the privilege to be part of, and for the chance to do that work right here in the wonderful town of Frederick the entire time and not have to drive up and down I-270 for 30 years.”



Ken Dinsmore

Another area important to productive laboratories is finance. Ken Dinsmore, Management Information Systems Administrator, Contracts and Administration, began in 1976 as a financial analyst, preparing budgets and program cost analyses. He later served as manager of the Property Department, then as manager of the Accounting Department, and finally as Management Information Systems Administrator. Mr. Dinsmore considers his group’s greatest achievement that of moving the administrative systems from a paper-based to a computerized system.

Mr. Dinsmore retired in January after 30 years at NCI-Frederick.

Mary Lyles

Mary Lyles believes her greatest achievement has been her “consistency in making work-related decisions in the best interest for the customers and of the facility,” particularly in the face of “a tremendous increase in the volume of calls and employees” over a 35-year NCI-Frederick career as the Trouble Desk operator, Facilities Maintenance and Engineering Directorate (FME).



From 1972 to 1992, Ms. Lyles was the sole Trouble Desk operator, processing all trouble calls, special assistance requests, telephone requests, new installation of equipment, and U.S. Army Garrison work orders that she typed and hand-delivered to the assigned shop. Ms. Lyles noted that the computerized system installed in 1992 was a “very interesting and exciting” change, a comment indicative of her willingness to easily accept department and work process changes.

In 2001, Ms. Lyles and her Trouble Desk co-workers received an Outstanding Science Achievement Team Award for providing “critical support to every aspect of NCI-Frederick and its missions.” In 2002, she received an individual Distinguished Career Service Award for her courteous, efficient, and professional attitude in responding to FME customers and administering the work order process at NCI-Frederick.

This July, Ms. Lyles handled her last emergency phone call and will now spend more time with her family, travel, and help her husband in his hospital and nursing home ministry.

Joan Menninger

An expert in chromosome imaging techniques, Joan Menninger, Associate Scientist, Laboratory of Genomic Diversity, contributed to the lab’s extensive work in comparative gene mapping studies of mammals, from clouded leopards, tigers, and lions to

domestic cats, bears, and humans. She co-authored several research papers and, in 2006, co-edited with Drs. Stephen O’Brien and William Nash the *Atlas of Mammalian Chromosomes*, an extensive collection of chromosome karyotypes for 800 mammalian species. “I really enjoyed studying the animals,” said Ms. Menninger, whose favorite animal is the giraffe.



Ms. Menninger’s career in chromosome research and cytogenetics came about unexpectedly. As a neophyte hematologist in 1964, she learned about a then-new technique for culturing individual chromosomes from blood and examining them under a microscope for alterations associated with certain genetic syndromes or diseases. Her skills took her to the universities of New Mexico and Maine, the Fred Hutchinson Cancer Research Center, and eventually to Yale University. She studied the effects of peyote on human chromosome structure, the use of cytogenetics in prenatal genetic diagnoses, the role of viral infections in chromosomal breakage, and how to “paint” chromosomes with fluorescent dyes to highlight and locate individual genes, a technique that helped usher in the Human Genome Project. Her expertise brought her finally to the Laboratory of Genomic Diversity in 1996. “I very much enjoyed working at NCI-Frederick. The people I worked with were so pleasant and genuinely

interested in each others’ work. My life has been a wonderful adventure,” said Ms. Menninger.



Carolyn Whistler

Carolyn Whistler, Scientific Publications, Graphics, & Media (SPGM), enjoyed mastering new technologies and especially enjoyed the diversity of culture and talent at NCI-Frederick. Being on the cusp of scientific discoveries often motivated her to try new things to improve the communication of science.

For example, when computer slide-making became available, Ms. Whistler and her co-workers developed a dark green background so distinctive that it became known as “L.A. Green,” for Dr. Larry Arthur, the original user.

For Dr. Jeff Lifson, director of the AIDS Vaccine Program, Ms. Whistler generated line graphs and Manhattan plots that quickly communicated the meaning behind data by displaying sequence builds in the 35-mm slides or PowerPoint presentations.

According to her co-workers, Ms. Whistler, who began her career at NCI-Frederick in 1982, had an excellent sense of design and worked with others to complete tasks on projects such as scientific posters. 🌸

Supergraphics Profile

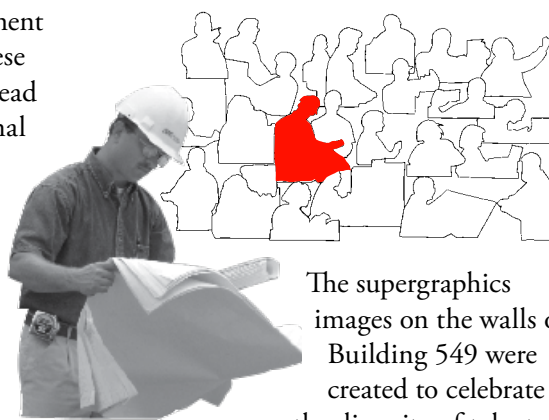
Coordinating Change

by Lisa Simpson

Richard G. Parker, P.E., of Facilities Maintenance and Engineering (FME) has worked for SAIC-Frederick, Inc., for six years as a Mechanical Engineer V. Mr. Parker's experience encompasses a wide range of specialty areas: product and machine tool design, manufacturing, and facilities systems design. He is most interested

in facilities and energy management projects and uses his skills in these areas in his frequent role as the lead engineer on laboratory and animal facility renovation projects at NCI-Frederick, where he must coordinate the efforts of multiple teams.

To relax, Mr. Parker enjoys spending time with his family (wife Theresa and stepdaughter LeAnn), practicing Tae Kwon Do, and playing the trombone for the Martinsburg Jazz Orchestra.



The supergraphics images on the walls of Building 549 were created to celebrate the diversity of talents, expertise, and creativity of the employees at NCI-Frederick. ↻

Important Telephone Numbers

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

Dates to Note

Student Poster Day August 8, 2007
Labor Day: NCI-Frederick closed September 3, 2007
Columbus Day: NCI-Frederick closed October 8, 2007

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