The National Cancer Institute at Frederick

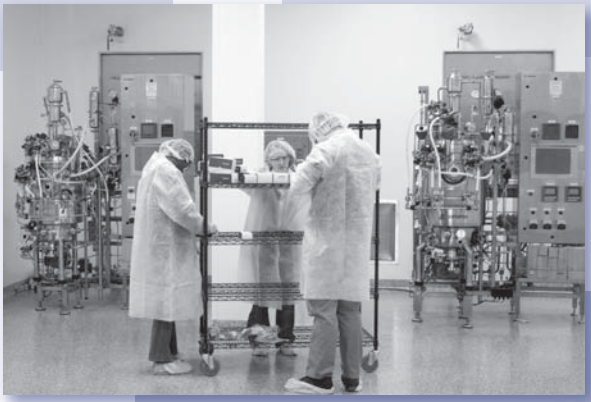
Poster

What is it?
Where is it?

Story on page 10.

Vaccine Pilot Plant: Going Full Tilt

One of the most exciting and challenging projects of the past four years for NCI-Frederick has been the development of the Vaccine Pilot Plant (VPP) and start-up production for the Vaccine Clinical Materials Program (VCMP). The VCMP supports the National Institute of Allergy and Infectious Diseases; vaccines will be used in the Vaccine Research Center's clinical trials. These potential vaccines will include those to be tested for efficacy against AIDS, Ebola, influenza, West Nile, SARS, and Marburg viruses. While cell banks are now being produced, by May the first GMP production of an "improved" Ebola vaccine will be produced for VRC clinical trials. This should be followed in short order by influenza, HIV, and two adenovector vaccines, and a recombinant protein, until all four "trains," or suites, are in use.



Before and After

In the buffer production area, the buffer prep skid manufactured by HyNetics™ is only the second unit of its kind in use in the U.S., and it can produce 200 to 3,000 liters of solution at a time. Bacterial or mammalian cells are grown in one of 11 bioreactors, with capacities ranging from 15 to 2,000 liters. The four suites are called "trains" because they are arranged in straight lines, with each room having its own controls for cleaning and other unique needs.

The four independent bulk production suites operate simultaneously, able to produce anywhere from as little as 100 to as much as 30,000 vials of injectable vaccine. A filling suite can produce as much as 30,000 vials of vaccine per lot at maximum capacity.

continued on page 2

March 2006

In This Issue

Vaccine Pilot Plant: Going Full Tilt

continued from page 1

If you were one of those who toured the plant before its suites were closed to visitors, then you are aware of the many rigorous safeguards instituted to keep the rooms clean and to protect the workers and the materials they are using. For example, many of the machines and tanks are cleaned with steam, which means a lot of water, and of course, water is needed for many of the other operations of the machines. While city water is used, it is first purified by reverse osmosis and electro-deionization, and is further purified to "water for injection" at a rate of 1,000 liters (264 gallons) per hour. This water is stored in a 10,000-liter tank and recirculated throughout the building at 80°C (179°F), to keep bacteria from growing. Dr. Criss Tarr, director of the VCMP, expects the plant to use almost 1,000,000 gallons of water per month, or up to 12,000,000 gallons per year at full capacity. Three 350-horsepower steam boilers and a 1,600-ton air conditioning system regulate the temperatures inside the plant.

Workers who enter the suites must don fresh uniforms each time they enter. The suites are unidirectional (one-way) in flow—you enter at one end of the suite and leave by the other; if you forgot something, you either do without or make the circuit again.

In a July 2005 article in *News & Views* (http://web.ncifcrf.gov/campus/publications/online_newsletter/pdf_download/NV_July_2005.pdf), Dr. Tarr stated, "The VPP is constructed to comply with all current regulatory guidelines governing the manufacture of clinical trial materials. While the equipment and technologies are common to many large biopharmaceutical manufacturing plants, the design, layout, and scale as a multiproduct operation are unique in government-owned, contractor-operated facilities."

For more information, contact Dr. Tarr at 301-228-4017, or tarrc@ncifcrf.gov. ✦

Proteins: Building Blocks for Life and Research

Scientists at NCI-Frederick know that basic research is crucial in providing the building blocks to search for cures for cancer, AIDS, and other debilitating diseases. Because of this need, a burgeoning interest in proteins, the building blocks not only for life but also for research, has been renewed.

SPR Spectroscopy Analyzes Ligand Protein Interactions

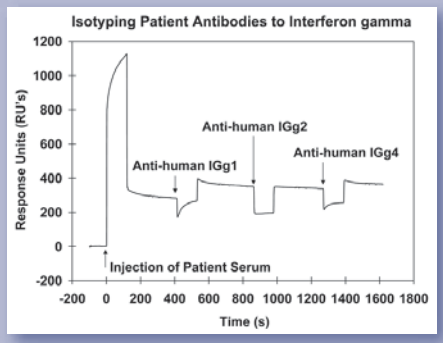
The Protein Chemistry Laboratory (PCL), a Research Technology Program laboratory, which pioneered the use of Surface Plasmon Resonance (SPR) spectroscopy in 1992 to analyze macromolecular interactions and ligand protein interactions at NCI-Frederick, provides investigators with in-depth information about the biophysical and biochemical behavior of target macromolecules and their interactions with specific cognate molecules.

The SPR-based assays monitor interactions among macromolecules or between macromolecules and ligands. According to the NCI Cancer Web site (http://cancerweb.ncl.ac.uk/cgi-bin/omd?surface+plasmon+resonance), SPR is an "alteration in light reflectance as a result of binding of molecules to a surface from which total internal reflection is occurring." In addition, PCL can now measure small molecules that bind directly to immobilized proteins and calculate the association and dissociation rates of small-molecule ligands, thus providing additional information for optimizing lead compounds that are identified from screening or medicinal chemistry campaigns.

SPR Used in Many Collaborations

PCL uses SPR assays in many of its collaborations and partnerships. For example, an SPR spectroscopy assay has been developed to differentiate neutralizing and non-neutralizing antibodies to simian and human immunodeficiency virus in an ongoing collaboration with the NCI-Frederick AIDS Vaccine Program. The results indicate a connection may exist between the off-rates for antibodies that show a high degree of neutralizing capability.

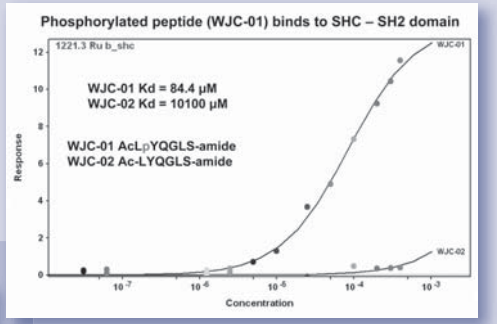
As another example, PCL has collaborated with Dr. Steven Holland's Laboratory of Clinical Infectious Diseases, NIAID, in screening for neutralizing anti-interferon gamma (IFN-γ) auto-antibodies in sera from patients with recurrent infections with intracellular pathogens, particularly nontuberculous mycobacteria (NTM) infections. Results indicate that anti-human IGg1 and IGg4 react with bound antibodies on the IFN-γ surface, while antibodies against IGg2 do not.



Collaborative Projects May Result in Significant Findings

In collaborative projects, partners bring unique approaches that may result in significant findings sooner than when an investigator works alone. For example, when PCL partnered with Dr. James Shen, Laboratory of Human Carcinogenesis, several potential protein partners for a novel tumor suppressor protein were identified. Collaborating with the AIDS Vaccine Program and the Laboratory of Proteomics and Analytical Technologies, SAIC-Frederick, Inc., PCL and its collaborators found four proteins previously unknown to be bound to HIV-1.

A project focusing on the use of BIAcore® technology for rational drug design was initiated with Dr. Terrence Burke of the Laboratory of Medicinal Chemistry, CCR. The PCL completed an extensive study, resulting in 20 publications and 20 abstracts, and will now focus on a new target, another adaptor protein. The results of this study may afford a new therapeutic approach to cancers reliant on disregulation of receptor tyrosine kinases.

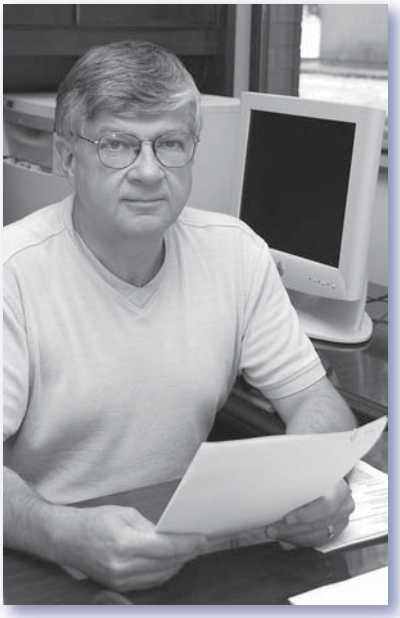


Together with Dr. Ira Pastan, Laboratory of Molecular Biology, CCR, NCI, PCL staff developed a kinetic screen of monoclonal antibodies directed against seven different epitopes in *Pseudomonas* exotoxin 38 (PE38), the toxin portion of a number of immunotoxins directed to various receptors and the subject of several clinical trials. The screen was information-rich, defining both simple and complex binding.

The Protein Chemistry Laboratory supports the NCI's 2015 Initiative through rapid translation of basic research findings into new products for the prevention, early detection, diagnosis, symptom management, and treatment of cancer and AIDS. For further information about using proteins in basic research, contact Dr. Robert Fisher, head, Protein Chemistry Laboratory, at 301-846-5154, fisher@ncifcrf.gov. ✦

Clinical Proteomics Reference Program

This is the third in our features on NCI-Frederick off-site programs, giving you a chance to learn about the valuable scientific work that people in these programs do.



The Clinical Proteomics Reference Program (CPRL), headed by Dr. Gordon Whiteley, is a part of the Research Technology Program, SAIC-Frederick, Inc. The group includes eight people with expertise in a variety of areas: mass spectrometry, immunoassay development and commercialization, medical technology, and bioinformatics.

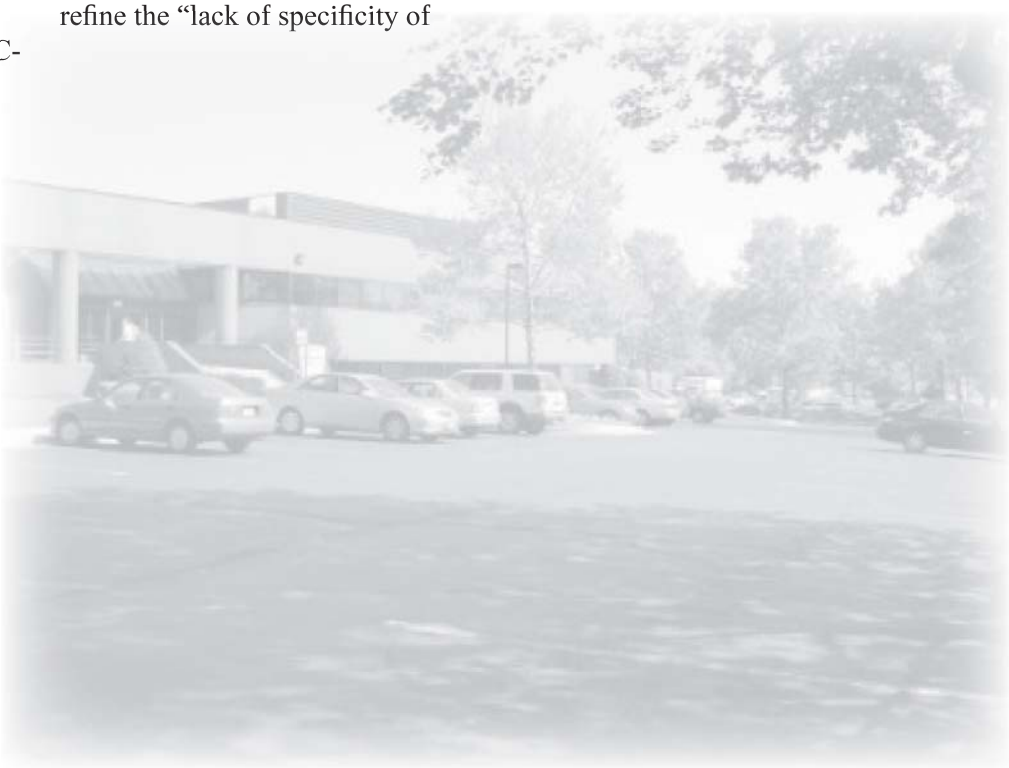
CPRL's mission is to develop and validate technology that emerges from NCI research, with the goal of lowering the barrier to commercialization. According to Dr. Whiteley, the method of validation "is done through a series of steps well known and understood in the diagnostics industry. In particular, our first project is to validate the use of proteomic patterns as a potential diagnostic technique for ovarian cancer. Through our work, this technique will be proven either feasible, or feasible with further discoveries necessary for practical use. Our hope is that early diagnosis will allow treatments to have positive patient outcomes."

To help fulfill the NCI's mission of curing or making cancer and AIDS easily treatable, CPRL constantly challenges itself with developing unique technology. "The technology we use is mass spectrometry and in-house developed and/or commercial computer bioinformatic software for discovery and pattern recognition," Dr. Whiteley said.

In a paper presented on the CPRL Web site, http://web.ncifcrf.gov/rtp/cprl/website/default.asp, Dr. Whiteley and his colleagues (Johann DJ, et al., "Toward a Systems Biology Software Toolkit," http://web.ncifcrf.gov/rtp/cprl/downloads/toward%20a%20systems%20biology%20software%20toolkit.pdf) point out that we can sometimes solve problems when we look at things in a new way.

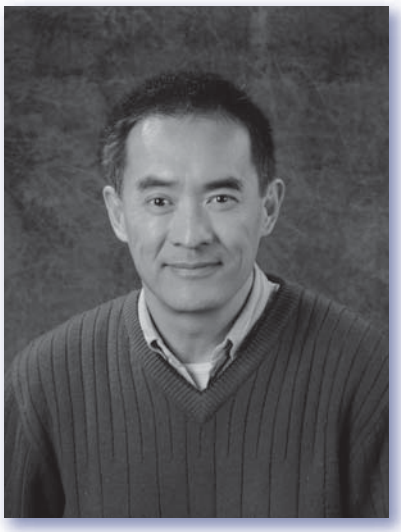
The advances in proteomics and genomics research demand computer-aided diagnostic systems to help refine the "lack of specificity of imaging findings…A synergistic test composed of a targeted imaging study correlated with a genomic or proteomic test(s), offers the potential of a tremendous medical advancement. Bioinformatic software toolkits are crucial components of these systems. Open-source software provides a mechanism for leveraging existing toolkits, sharing expertise, accelerating development, and furthering biomedical, software, and systems sciences in new and complex multi-disciplinary fields. Our evolving toolkit utilizes components from several existing open source projects. It will initially be customized for serum proteomic pattern diagnostics, which will be used in the upcoming NCI/CCR Clinical Trial involving the monitoring for ovarian cancer recurrence," the authors stated in their abstract to the paper.

"Our group is focused on the delivery end of things. The sorts of discoveries that we make are ones that will reduce a concept from research to a practical method that can be used in a clinical setting," Dr. Whiteley said. ✦



Platinum Highlight

Dr. Xiaojiang Gao
Laboratory of Genomic Diversity



Dr. Xiaojiang Gao earned his PhD in the field of Human Genetics at The Australian National University, Canberra, Australia, in 1992. He joined the Laboratory of Genomic Diversity (LGD) in 1998, where he is a senior scientist focusing on the effect of immunogenetic genes on infectious diseases.

The HLA polymorphism is so far the strongest and most significant genetic factor that affects the outcome of AIDS. Previous research by LGD investigators identified the HLA alleles associated with significantly altered rates of AIDS progression. Dr. Gao's current research reveals that the AIDS-associated HLA alleles, either protective or more susceptible, affect the disease progression in distinct stages of AIDS development.

According to Dr. Gao, "the discrete timing of HLA allele influence suggests that different HLA alleles, [and] therefore different individual genetic profiles, may exert their effects on AIDS progression through different pathogenic mechanisms, which partially explains the individual differences in response to HIV infection." Knowing that HLA is associated with AIDS may eventually benefit researchers in developing more targeted vaccinations against HIV infection and more personalized disease prognosis and treatment. ✦

Gao XJ, Bashirova A, Iversen AKN, Phair J, Goedert JJ, Buchbinder S, Hoots K, Vlahov D, Altfeld M, O'Brien SJ, and Carrington M

AIDS Restriction HLA Allotypes Target Distinct Intervals of HIV-1 Pathogenesis

Nature Medicine 11(12): 1290–1292, 2005

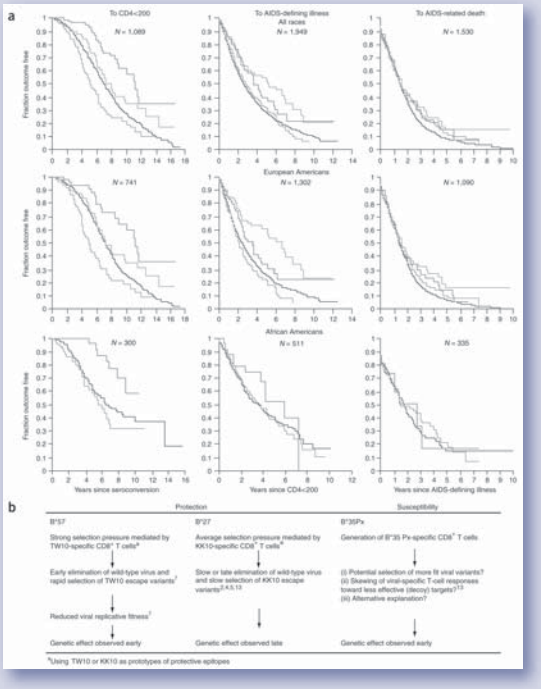
An effective acquired immune response to infectious agents mediated by HLA-restricted T-cell recognition can target different stages of disease pathogenesis. We show here that three *HLA* alleles known to alter the overall rate of AIDS progression act during distinct intervals after HIV-1 infection.

*B*57*-mediated protection occurs early after infection. Once the CD4 cell counts drop to 200 cells/μl, the protective effect of *B*57* begins to subside and may result from rapid viral escape from a strong B*57-restricted TW10 CTL response, leading to a predominant TW10 mutant virus that is less fit relative to TW10 wild-type virus.

In sharp contrast, *B*27* shows no significant protection against progression to CD4<200 relative to most other *HLA* alleles, delaying progression to an AIDS-defining illness primarily after CD4 counts have dropped. Late viral escape from a B*27-mediated KK10 response may allow enduring restriction of HIV long after escape from most other HLA allotypes has occurred.

*B*35-Px* shows an early susceptibility effect, but *B*35* influence is undetectable once CD4<200 is reached. *B*35-Px* alleles may mediate an actively negative effect in AIDS pathogenesis.

This genetic data indicate that the dynamics by which distinct HLA allotypes render protection against a given infectious pathogen may differ from one another, depending on the nature of the antigenic epitopes recognized by those allotypes. ✦



Effect of HLA alleles on different stages of AIDS progression. (**a**) Effect of *HLA* alleles on the rate of progression to AIDS. (**b**) Possible models explaining the distinct temporal genetic effects of selected *HLA-B* alleles on AIDS progression. For complete article and details on the figure, go to http://www.nature.com/nm/journal/v11/n12/full/nm1333.html.

Platinum Publications

The following 18 articles have been selected from a quarterly listing of publications in 9 of the most prestigious science journals.

Apoptosis

Pandhare J, Cooper SK, Phang JM. Proline oxidase, a proapoptotic gene, is induced by troglitazone: Evidence for both PPARgamma-dependent and independent mechanisms. *J Biol Chem*, 2005: http://www.jbc.org/cgi/reprint/M507867200v1.

Cell and Tumor Biology

Burger AM, Gao YG, Amemiya Y, Kahn HJ, Kitching R, Yang YL, Sun P, Narod SA, Hanna WM, Seth AK. A novel RING-type ubiquitin ligase breast cancer–associated gene 2 correlates with outcome in invasive breast cancer. *Cancer Res* 65(22):10401–10412, 2005.

Lee HS, Bong YS, Moore KB, Soria K, Moody SA, Daar IO. Dishevelled mediates ephrinB1 signalling in the eye field through the planar cell polarity pathway. *Nat Cell Biol*, 2005: http://www.nature.com/ncb/journal/vaop/ncurrent/full/ncb1344.html.

Cellular Immunology and Immune Regulation

Carlos CA, Dong HF, Howard OMZ, Oppenheim JJ, Hanisch FG, Finn OJ. Human tumor antigen MUC1 is chemotactic for immature dendritic cells and elicits maturation but does not promote Th1 type immunity. *J Immunol* 175(3):1628–1635, 2005.

Experimental Therapeutics, Molecular Targets, and Chemical Biology

Li M, Laco GS, Jaskolski M, Rozycki J, Alexandratos J, Wlodawer A, Gustchina A. Crystal structure of human T-cell leukemia virus protease, a novel target for anticancer drug design. *Proc Natl Acad Sci USA* 102(51):18332–18337, 2005.

Hemostasis, Thrombosis, and Vascular Biology

Calvani M, Rapisarda A, Uranchimeg B, Shoemaker RH, Melillo G. Hypoxic induction of a HIF-1{alpha}-dependent bFGF autocrine loop drives angiogenesis in human endothelial cells. *Blood*, Nov 2005: http://www.bloodjournal.org/cgi/reprint/2005-09-3541v1.

Economopoulou M, Bdeir K, Cines DB, Fogt F, Bdeir Y, Lubkowski J, Lu WY, Preissner KT, Hammes HP, Chavakis T. Inhibition of pathologic retinal neovascularization by alpha-defensins. *Blood* 106(12):3831–3838, 2005.

HIV

Beignon AS, McKenna K, Skoberne M, Manches O, DaSilva I, Kavanagh DG, Larsson M, Gorelick RJ, Lifson JD, Bhardwaj N. Endocytosis of HIV-1 activates plasmacytoid dendritic cells via toll-like receptor-viral RNA interactions. *J Clin Invest* 115(11):3265–3275, 2005.

Huang CC, Tang M, Zhang MY, Majeed S, Montabana E, Stanfield RL, Dimitrov DS, Korber B, Sodroski J, Wilson IA, Wyatt R, Kwong PD. Structure of a V3-containing HIV-1 gp120 core. *Science* 310(5750):1025–1028, 2005.

Immunobiology

Herbeuval JP, Grivel JC, Boasso A, Hardy AW, Chougnet C, Dolan MJ, Yagita H, Lifson JD, Shearer GM. CD4(+) T-cell death induced by infectious and noninfectious HIV-1: Role of type 1 interferon-dependent, TRAEL/DR5-mediated apoptosis. *Blood* 106(10):3524–3531, 2005.

Immunology

Yang GB, Obiakor H, Sinha RK, Newman BA, Hood BL, Conrads TP, Veenstra TD, Mage RG. Activation-induced deaminase cloning, localization, and protein extraction from young V-H-Mutant rabbit appendix. *Proc Natl Acad Sci USA* 102(47):17083–17088, 2005.

Inflammation

Iribarren P, Chen KQ, Hu JY, Zhang X, Gong WH, Wang JM. IL-4 inhibits the expression of mouse formyl peptide receptor 2, a receptor for amyloid beta(1-42), in a TNF-alpha-activated microglia. *J Immunol* 175(9):6100–6106, 2005.

Protein Structure and Folding

LaRonde-LeBlanc N, Wlodawer A. A family portrait of the RIO kinases. *J Biol Chem* 280(45):37297–37300, 2005.

Mitchell MS, Tozser J, Princler G, Lloyd PA, Ashleigh A, David D. Synthesis, processing and composition of the virion-associated HTLV-1 reverse transcriptase. *J Biol Chem*, Dec 2005: http://www.jbc.org/cgi/reprint/M507660200v1.

Wang Q, Song CC, Irizarry L, Dai RM, Zhang XD, Li CCH. Multifunctional roles of the conserved arg residues in the second region of homology of p97/valosin-containing protein. *J Biol Chem* 280(49):40515–40523, 2005.

Receptors

Chen K, Iribarren P, Hu J, Chen J, Gong W, Cho EH, Lockett S, Dunlop NM,Wang JM. Activation of toll-like receptor 2 on microglia promotes cell uptake of Alzheimer's disease–associated amyloid beta peptide. *J Biol Chem*, Dec 2005: http://www.jbc.org/cgi/reprint/M508125200v1.

RNA: Structure, Metabolism and Catalysis

Dash C, Marino JP, Le Grice SF. Examining Ty3 polypurine tract structure and function by nucleoside analog interference. *J Biol Chem*, Nov 2005: http://www.jbc.org/cgi/reprint/M510369200v1.

Transplantation

Sun K, Wilkins DEC, Anver MR, Sayers TJ, Panoskaltsis-Mortari A, Blazar BR, Welniak LA, Murphy WJ. Differential effects of proteasome inhibition by bortezomib on murine acute graft-versus-host disease (GVHD): Delayed administration of bortezomib results in increased GVHD-dependent gastrointestinal toxicity. *Blood* 106(9):3293–3299, 2005. ✦

Poster People Profile: Rocky Follin

What Do You Do?

Rocky Follin has come full circle. When he started at Facilities Maintenance and Engineering in 1974, his primary responsibilities were to make copies of engineering drawings and to maintain the flat files where the drawings were stored. As he gained knowledge and experience, he began to work more closely with the design engineers to produce the architectural, mechanical, and electrical drawings required for renovations throughout the NCI-Frederick facility. Now, 31 years later, he produces his own designs and shares his knowledge and experience with younger staff members.

He currently is senior designer, with architecture as his primary engineering discipline. His work at FME runs the gamut of engineering disciplines because he must be aware of so many different factors on a job. As he explained, "When I receive a work order assignment, my first task is to verify the existing conditions for the area to be renovated. Wall locations, room sizes, utility locations, and floor and ceiling materials must be identified." He is quick to point out that a full engineering design is the product of not one, but many, people whose "goal is to provide efficient, modern laboratories and administrative areas for our scientific program staff."

Rocky Follin, Senior Designer, Facilities Maintenance and Engineering

The best thing about working at NCI-Frederick…

"It's the people who make the difference," Mr. Follin believes, and he feels fortunate to have met and worked with so many people "who have shared their time and talents at NCI-Frederick." He credits the people here with helping him move ahead in his career. Although he earned his associate's degree in engineering from Hagerstown Community College, he feels that "on-the-job training has been most beneficial. I was fortunate to have had several unselfish mentors over the years who tutored me and shared their knowledge and talents."

Another benefit of his type of work, he says, "is getting to see the 'before and after' aspect of the renovations. It's satisfying to see the physical results of the designs we produce."

NCI-Frederick has changed a lot since…

Mr. Follin has seen a lot of changes over the years at NCI-Frederick. Among them, he notes that when he started in 1974, 18 of the current 105 buildings did not exist; 12 buildings were unoccupied; and the building known as the "Eight Ball" was surrounded by another building, which was destroyed in a fire in 1975. He remembers the first Winter Staff Meeting (called the "Christmas Party"), which was held in Building 427, then vacant, with no heat or permanent lighting. He recalled, "Ice in the punch was strictly optional; it was already cold enough in the building."

"…the only noise you could hear was your own footsteps."

One of his most striking memories, however, comes from the mid-seventies. "When President Nixon shut down the Biological Warfare Program, the laboratories at Ft. Detrick were abandoned and sterilized. However, the equipment and furnishings remained in place. The buildings were full of 1950s' vintage casework, sterilizers, and Class III hood systems. Some labs and offices even had 1969 calendars hanging on the walls. Imagine walking through a dimly lit corridor on the second floor of Building 469 with all the rooms dark and the only noise you could hear was your own footsteps."

Community Activities

An active member of the NCI-Frederick community, Mr. Follin has worked on the FME summer picnic committee for many years, participated in several on-campus mentoring programs for summer students, and volunteered at the Frederick County Public School Career Camp at Frederick Community College. He is currently part of the Campus Improvement Committee, and participates in some of the ERC sports events, commenting, "It's hard to pass up a free lunch and those ice cream socials." ✦

Did You Know?

Nine Scientists Receive Innovation Awards

NCI-Frederick investigators received 9 of the 32 NCI Director's Innovation awards at the 2006 NCI Intramural Scientific Retreat in Bethesda, MD. Dr. John Niederhuber, Deputy Director, NCI, made the presentations.

The newly instituted annual awards are designed to promote innovative or high-risk approaches and technology aimed at significant problems in cancer research. Principal Investigator Awards are given to recently tenured or tenure-track investigators and provide funds for supplies and services up to $50,000. Fellows, staff scientists, and staff clinicians are eligible for Career Developmental Awards, which convey $10,000 for supplies and services.

Recipients affiliated with the Center for Cancer Research at NCI-Frederick include:

Dr. Joan Cmarik
Laboratory of Cancer Prevention
"Does Viral Infection Play a Role in the Etiology of Bronchioloalveolar Adenocarcinoma of the Lung?"

Dr. Jeffrey Gildersleev
Laboratory of Medicinal Chemistry
"Application of Carbohydrate Microarrays to Cancer and HIV Vaccine Development"

Albert Gold
Laboratory of Genomic Diversity
"Defining Breast Cancer Risk Modifier Genes"

Dr. Alison Rattray
Gene Regulation and Chromosome Biology Laboratory
"Isolation of DNA Palindromic Amplicons from Human Tumor Cells"

Dr. Nadya I. Tarasova
Structural Biophysics Laboratory
"Self-Assembling Nanoparticles Targeting G-Protein Coupled Receptors and ABC Transporters"

Yien Che Tsai
Laboratory of Protein Dynamics and Signaling
"Mitochondrial Dynamics and Its Relationship to Ubiquitination and to Apoptosis in Cancer"

Edward Wu
DRP, Human Retroviral Replication Laboratory
"Recombinant Telomerase Reverse Transcriptase"

Dr. Matthew Young
Laboratory of Cancer Prevention
"Targeting Translation Initiation: A Drug Discovery Proposal."

In addition, **Dr. Mark Cosentino**, Biorepository Manager, SAIC-Frederick, Inc., was a co-principal investigator on a Division of Cancer Epidemiology and Genetics Career Development award for the study "Designing a Novel Cryococktail for Peripheral Blood Mononuclear Cell Storage," submitted to the Division of Cancer Epidemiology by staff scientist Dr. Jim Vaught. ✦

Housing Available

Need a temporary home or know someone who does? You might want to consult the NCI-Frederick Web site http://web.ncifcrf.gov/campus/housing/ for information. There, you'll find partial listings of currently available housing, whether you're looking for long- or short-term stays, as well as services to help you find area housing and apartment complexes. These include such nearby places as the Holiday Inn and Red Horse Comfort Inn on route 40 and Sunset Apartments off Seventh Street. The listings include details such as cost, proximity to public transportation, number of bedrooms, and air conditioning. ✦

Did You Know?

Update on Campus Signage

Production has been completed and we've taken delivery of new NCI-Frederick building number signs. Facilities Maintenance and Engineering is scheduling installation of the 284 signs on all 102 NCI-Frederick buildings, and they will begin to appear shortly. The new signs feature the NCI logo and official colors and will label all buildings as part of NCI-Frederick, replacing the existing plain number signs. In addition, several signs that match the colors and style of the new number signs are in production for designated programs considered to be popular visitor destinations.

Both of these projects are part of a multi-phased campaign to give the NCI-Frederick portion of Fort Detrick a distinctive identity. The campaign began with the design and production of utility pole banners which were installed in May 2005. The next phase of the plan involves replacement of existing roadside directional signs. ✦

Bow Hunting Season Comes to a Close

This year's bow hunting season closed on February 28, after a one-month extension. The season had been producing results that were less than anticipated, according to Lt. Dave Stealey, Game Warden, Provost Marshal's Office, who coordinates the hunt. By mid-January, 28 hunters had taken 15 deer. Officials extended the season "in an attempt to increase the harvest, by increasing the number of days available to hunt," said Lt. Stealey. As we went to press, Lt. Stealey reported that hunters had taken 17 deer. Information is not available on how much, if any, meat was donated to the Farmers and Hunters Feeding the Hungry organization. ✦

Personalized Items Available On-line

Need something new to wear to the gym? Now you can go on-line to purchase a variety of casual clothing and other items personalized with your choice of color and any logo from the National Institutes of Health, including NCI and NCI-Frederick. You may also customize your selection with your own text, such as a name or lab.

You can choose from tee-shirts in all sizes, including baby, toddler, and youth, tank tops, sweatpants, sweatshirts, and shorts. Also included are baseball caps, cooking aprons, and baby bibs, all of which can be personalized.

To find out more:

1. Access the Web site at: http://www.recgov.org/.
2. Click on "NIH" under Federal Employee Associations.
3. Click on "NIH Logo Items On-line" on the red banner.
4. Click on "Next" or "Enter Here".

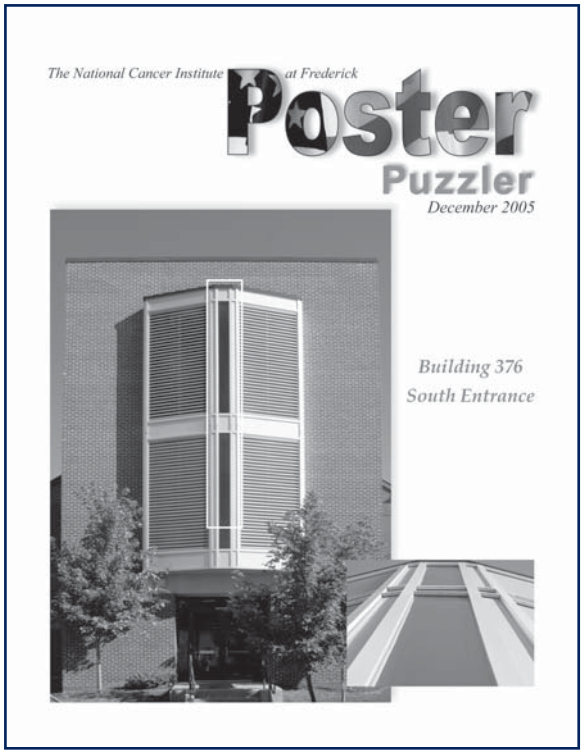
Then follow the instructions, clicking on "Next" to make your choices. You may view color, logo, and text as you make your selections, and change your options until you create exactly what you want. ✦

Poster Puzzler

What is it?
Where is it?

Your challenge, should you decide to accept it, is to correctly identify the item and its location from the picture to the right. Clue: It's somewhere at Fort Detrick/NCI-Frederick. Win a framed photograph of the Poster Puzzler by e-mailing your guess, along with your name, e-mail address, and daytime phone number, to Poster Puzzler at poster@ncifcrf.gov. Alternatively, you can send us your guess, along with your name and daytime phone number on one of *The Poster* forms found on the front of *The Poster* stands in the lobbies of Buildings 426 and 549. All entries must be received by Friday, **April 28, 2006**, and the winner will be drawn from all correct answers received by that date.

Good luck and good hunting! ✦



Congratulations to our December 2005 winner: **David Drake**, Database Administrator, Developmental Therapeutics Program ✦

The Poster Puzzler:
Building 376, South Entrance

Built in 1951 for the U.S. Army Aerobiological Laboratories, Building 376 originally had no entrance on the south end of the building. The exterior wall had large intake louvers for the HVAC system at the attic level. NCI-Frederick renovated the building in 1976 to include research labs, animal holding rooms, and a surgical suite for the National Institute of Neurological Disorders and Stroke (NINDS). The south wall received a cosmetic upgrade of new air intake louvers with barriers for snow and birds – but still no entrance.

The big change occurred in 1999, when the second NCI-Frederick renovation was completed for the Laboratory of Medicinal Chemistry. The main entrance to the building was relocated to the south wall, and a new entrance lobby and stair tower were added. A small louver was still required for the HVAC system, but in order to maintain the original architectural appearance of the building, the decorative curtain walls seen in *The Poster* Puzzler were installed.

Thanks to all the participants in the December 2005 *Poster* Puzzler!

Special thanks to Rocky Follin, FME, for providing the information for this article. ✦

Poster Puzzler

The September Poster Puzzler winner: Mary Ellen Palko, Neurodevelopment Group, Mouse Cancer Genetics Program, pictured here with Paul Miller, Executive Editor of *The Poster*, in front of Building 1052.✦

The December Poster Puzzler winner: David Drake, Developmental Therapeutics Program, pictured here with Paul Miller, Executive Editor of *The Poster*, in front of Building 376. ✦

Shhh… It's Confidential!

Do you know the importance of Confidential Disclosure Agreements (CDA) to the work of NCI? Can you keep a secret? Try this little pre-test:

You approach or are approached by a non-NCI employee about a possible collaboration. The potential collaborator is interested in your unpublished data to see whether the collaboration would be valuable. Your response is:

a. I could share it with you, but then I'd have to shoot you.
b. Do you swear on the locks of hair from your first-born's first haircut to keep it a secret?
c. Let's ask our technology transfer offices to put a Confidential Disclosure Agreement in place.

Options a and b are a bit drastic and probably not conducive to further collaboration. Some reasons for choosing option c are discussed below.

As the federal government's premier cancer research resource center, the National Cancer Institute (NCI) is obligated to disseminate, through public databases, Web sites, seminars, talks, and journal publications, new findings and discoveries. Also, in order for NCI's Intramural Program to remain a cutting-edge research endeavor, our programs and labs must receive important information from outside sources with as little delay as possible. Often it becomes necessary for NCI to exchange information under terms of confidentiality.

NCI has a unique "Challenge Goal," to eliminate the suffering and death due to cancer by 2015, and recognizes that to accomplish this goal, it will need to partner with both nonprofit and for-profit collaborators. Such partnering will require efficient exchange of critical new data and information, most often before publication or the filing of a patent application. Also, many businesses use periods of confidentiality for their new technology to afford them time to further develop the technology toward a commercial product before the information falls into the hands of their competitors. A balance must be struck between our need to disseminate/obtain knowledge freely and the "business" requirement of confidentiality, at least for short periods.

Confidential Disclosure Agreements (CDAs) are tools used by the technology transfer staff in this balancing act. A disclosure made "in confidence" can help preserve patent rights and publishing opportunities, so it is critical to keep new information confidential until your article is published or presented in a seminar, or a patent is filed. Additionally, government employees are obligated by statute, 18 USC §1905, to protect confidential information coming to them in the course of their official duties.

A CDA is a written contract that records the terms under which information will be shared. The main elements of a typical CDA include: what the anticipated confidential information is and how it will be identified as such by the parties; identification of all who might receive the confidential information; what the information will be used for; and how long the information is required to be kept secret.

At NCI, CDAs are often precursors to other agreements, such as Cooperative Research and Development Agreements (CRADAs), and can be vehicles for the rapid exchange of preliminary information. Most CDAs are universal in their terms, making them easy to put in place quickly.

In previous articles in *The Poster* [see http://web.ncifcrf.gov/ThePoster/Dec05_POSTER.pdf and http://web.ncifcrf.gov/ThePoster/archive/Sep05_POSTER.pdf], we discussed the importance of NCI and its contractor employees to report intellectual property (inventions) to the NCI Technology Transfer Branch (TTB) before public disclosure of the information. Patent protection is a significant factor in attracting commercial interest to further develop technologies for market. Remember, presentations, abstracts, journal articles, some grant applications, theses, e-mails, and even "private" conversations may all constitute disclosures.

Of primary importance, NCI's publication interests must be preserved. When you share unpublished data with a colleague, a CDA clarifies what data are confidential and helps prevent an accidental appearance of your data in someone else's publication. Also, outside parties often want terms that limit NCI's ability to publish its research, and we would want such terms to be removed before the agreement is executed.

Clearly, intellectual property, which includes patented and unpatented knowledge and technology, is a valuable asset. It is taken very seriously by our partners and is critical to NCI's mission of developing new technologies for the benefit of the public's health. Often, the value of a CDA to our investigators is in its intrinsic reminder to the recipient that the information is valuable and not to be shared.

If you have any questions related to this or any other technology transfer topic, please do not hesitate to contact us at 301-846-5465 or on the Web at http\\:www. ttb.nci.nih.gov. ✦

EHS Spearheads Emergency Response Plans for NCI-Frederick

Whether it's an emergency stemming from events such as 9/11 or a natural disaster such as Hurricane Katrina, you want to know what you should do and what procedures are in place to help you. NCI-Frederick has had an Emergency Preparedness Committee since 9/11, comprising representatives from NCI and all contractors; individual members have been classified as Tier 1 Essential or Tier 1 Critical.

Emergency Plans

The committee's initial mission was to institute emergency plans to enable designated NCI-Frederick staff access to the base if Fort Detrick were to be put on high alert, such as Force Protection level Charlie or Delta. However, since Hurricane Katrina hit the New Orleans, Mississippi, and other Southern regions last September, everyone has been more conscious of the need for accurate communication. To aid communication in the event of emergency at NCI-Frederick, the 426 Conference Room has been designated as "command central," and has been upgraded with wireless capabilities and extra phone lines. In addition, an Emergency Notification System (ENS) has been implemented to notify you through emergency e-mails of any base closing, impending natural disaster, or other event. For more immediate notification during working hours or off-hours, the National Notification Network (3n™) service http://3Nonline.com/ enables Environment, Health, and Safety (EHS) to notify needed personnel with pertinent information.

NCI-Frederick keeps up to date with a variety of special means of basic communication: EHS, Facilities Maintenance and Engineering, and Protective Services use an internal radio system; special fire pagers notify EHS when Ft. Detrick Fire and Emergency Services has been dispatched to NCI-Frederick; and programmed radios allow SAIC-Frederick, Inc., staff to communicate with the Army during an emergency.

Avian Flu Task Force

The NCI-Frederick Avian Flu task force was formed last October to identify important specific activities to keep NCI-Frederick operating, and to maintain a healthy work force in the event of a pandemic outbreak. For information, visit http://www.pandemicflu.gov/plan/businesschecklist.html.

Security Clearance Subcommittee

Another task force, the Security Clearance Subcommittee (SAIC-Frederick, Inc., representatives from Human Resources, EHS, Advanced Biomedical Computing Center, and Acquisition and Logistics Services), implemented a system to assure NCI-Frederick's compliance with the Computer Security Act of 1987 (security of federal automated information systems). This group has put a system in place and nearly all the IT personnel have been processed; next, the group will identify and set "position-sensitivity designators" on all positions, since nearly every employee at NCI-Frederick has access to or uses a computer in performance of his or her work.

Disaster Recovery/Contingency Planning

Another group, in development, is Disaster Recovery/Contingency Planning. The group is focusing on "communication, and more importantly, communication during an emergency," Siobhan Tierney, EHS, said. "The goal is to form a group of representatives that can assimilate some basic information to assure that essential resources are in place for all the directorates. Internal processes are in place to notify staff and to perform data backups; however, the objective is to unify the facility, which only gets more complicated as we expand outside the 'gates' [i.e., off-site programs], and assure computer and employee security."

For more information, visit: http://web.ncifcrf.gov/campus/emergency/. ✦

As part of security clearance processing, employees will be fingerprinted. Here Tom Gannon-Miller and Roberta Brown of Protective Services demonstrate the fingerprinting equipment.

New Faces at NCI-Frederick

NCI-Frederick Welcomes New Staff

Ninety-seven people joined our Facility in September, October, November, and December 2005.

NCI-Frederick welcomes…

Michael Abram
Satyanarayana Ande
Kajal Biswas
Philippe Gaubert
Kristbjorn Gudmundsson
Jessica Hawes
Elaine Hurt
Amr Kheir
Michael Kim
Weimin Li
Sorin Lupascu
Karen Mann
Michael Mann
Emiko Matsuda
Carl McIntosh
Michael Moore
Alok Mulky
Yuri Purtov
Rebecca Russell
Sudhirkumar Yanpallewar
Limei Yu
Di Zhang ✦

Michael Kim

Samantha Bauchiero

Jillian DeShazer

SAIC-Frederick, Inc., welcomes…

Dennis Angel
Florence Bangura
Samantha Bauchiero
Katie Beam
Darren Benedick
Michell Berg
Kasey Biddinger
Mervyn Bond
Glenn Burriss
Qingrong Chen
Sung Chin
Andrey Chudny
Euarina Clay
Laura Coffin
Nancy Cogliano-Shutta
Jennifer Farrell
Diane Flook
Freda Freeman
Johanna Gable
Lazarus Graves
Melissa Gregory
Lauri-Ann Hahn
Bradley Harris
Heather Herman
Gina Hodge
Valerie Jackson
Rajesha Javaraiah
Ashley Jones
Leslie Jones
Gireaud Joseph
Mohammed Khan
Robert Kinders
George Klarmann Jr.
Angelina Kline Burgess
Khin Kywe
Sherri Lewelling
Jin Liu
Jean Lynn
Daphne Mann
Nadine Mcdaniel
Tammy McVay
Francisco Mejia
Amy Mintz
Violva Moore
Justine Niamke
Melissa Novak
Janene Nusraty
Evelyn Obot
Alberta Peugeot
Mark Radtke
Amilcar Ribeiro
Chad Roberts
Kristine Robillard
Alice Rosenberg
Sandra Schaefer
Johney Silva
Jeffrey Snavely
Hua Song
Sharat Chandra Srinivasula,
Kashena Swann
Amanda Sweeney
Ying Tang
Robert Thomas
Martin Todd
Jiawei Wang
Yanmei Wang
Zhaoming Wang
Laura Weddle
Joan Weedon
Pamela Welch
Catherine Wells
Deborah Wright
Banu Zolnik✦

Charles River Laboratories welcomes…

Terrie A. Pyles ✦

Data Management Services welcomes…

Jillian DeShazer ✦

Rebecca Russell

Emiko Matsuda

Dennis Angel

Chad Roberts

Rajesha Javaraiah

Books Headed for Mongolia

In a few more weeks, we will celebrate Asian-Pacific month through our display case in the NCI-Frederick Café. It seems a fitting time to acknowledge the way that members of the scientific community are reaching out to help others.

For NCI-Frederick's book lovers, the WISCO annual book swap is a treasured event, and we've learned that the books you collect make their way not only to your home library, but to out-of-the-way places, as well.

For example, some of last fall's "remainders" have been sent to Mongolia, thanks to the hard work of Yunden Badralmaa, an SAIC-Frederick, Inc., researcher in the Laboratory of Molecular Cell Biology, Clinical Services Program, and her daughter Bilguujin Dorjsuren.

Ms. Badralmaa's daughter chose to collect books for children in her native country of Mongolia as part of her required senior project at Governor Thomas Johnson High School in Frederick. Two years ago, Ms. Dorjsuren explained in a recent e-mail, English officially became the second language of Mongolia.

However, she said, "There are no English books available in the public school libraries. There are books in the stores, but not everybody can afford them—especially children of the countryside."

Ms. Dorjsuren sent about 160 books, more than half of which came from the Scientific Library's book swap. "The books that I chose from the Scientific Library were mostly books for middle and high school children. There was a variety of books, including science fiction, Shakespeare, romance, Westerns, and mysteries," she said.

Ms. Dorjsuren expected the books to arrive in Ulaan Baatar, Mongolia, sometime in February. Her parents helped her with the shipping costs, and her grandparents, who live in Mongolia, will help with the distribution to schools in the suburbs and poor districts. "I hope that I can help some children to learn English better and enjoy the books. My little sister and my parents helped me to collect books," she said. ✦

Data Management Services (DMS)

C&SS Welcome Packet for New Employees

Are you a new employee? The Computer Service's Helpdesk has assembled a "Welcome Packet" just for you. This packet provides essential information about the NCI-Frederick Computer Helpdesk, such as contacting the Helpdesk, accessing site-licensed software and complying with anti-virus and system security policies. The packet also includes an informative brochure which outlines the many other information technology services available from Computer & Statistical Services (C&SS). To ensure that C&SS stays "at your fingertips," you will also receive a mouse pad and pen emblazed with the Helpdesk phone number and Web site address. ✦

Departments and Labs Can Request Extra Packets

While welcome packets are distributed to new employees during the New Employee Safety Orientation, you are welcome to call the Helpdesk (301-846-5115) to request additional Welcome Packets or schedule a personal tutorial on our services for your new employees. ✦

Computer Software Training

The next computer software training schedule will begin in spring 2006. Watch for notices to be released in mid-March. If you have any suggestions or questions, please contact Cathy McClintock at training@css.ncifcrf.gov. ✦

Contacting C&SS

Computer Services Helpdesk
Web: http://css.ncifcrf.gov/helpdesk
E-mail: helpdesk@css.ncifcrf.gov
Phone: 301-846-5115

Hours of Operation:
8:00 a.m.–5:00 p.m.,
Monday through Friday

NCI-Frederick Webmasters
Phone: 301-846-6700
E-mail: webmaster@css.ncifcrf.gov

Other Inquiries
Phone: 301-846-1060

Cystic Fibrosis Author to Speak in Frederick

Frank Deford, whose memoir, *Alex: The Life of a Child*, a recounting of his daughter's courageous life before dying from cystic fibrosis at age 8, will speak April 3 at three separate venues in Frederick, as part of the Frederick Reads Program. *Alex* and cystic fibrosis (CF) were the topics for March's lunchtime health seminars at NCI-Frederick.

The April 3 Frederick Reads Program offers you three opportunities to hear Deford:

- "Writing as a Vocation," moderated by the Frederick *News-Post*'s Katy Leslie will be held at Frederick Community College at 2:00 p.m.;
- "The Author and His Work," moderated by Marc Steiner (WYPR/WYPF 88.1), at Hood College, 4:00 p.m.; and
- "A Conversation with Frank Deford," moderator John Fieseler, Frederick Tourism Council, at the Temple, 22 West Church Street, 7:30 p.m.

Deford's April 3 lectures dovetail nicely with the NCI-Frederick lunchtime series jointly offered by Occupational Health Services, the NCI-Frederick Employee Diversity Team, and the Scientific Library. These programs, part of the Scientific Library's REWARDS program, provide information and discussion on timely health-related topics. Invited speakers for the NCI-Frederick March program included Dr. Michael Dean and Mr. Bert Gold from the Human Genetics Section of the Laboratory of Genomic Diversity. The movie video, the book (both on *Alex: The Life of a Child*), and the videotape of the speakers are packaged together and will be available for checking out of the Scientific Library following the completion of this REWARDS program.

For information, visit the Frederick Reads Web site http://www.fcpl.org/information/programs/2005/reads.htm or the Scientific Library's REWARDS site http://www.library.ncifcrf.gov/rewards.aspx#upcoming. ✦

Fitness Challenge for the Entire Community

Did your New Year's resolutions include getting more fit? If so, you're in luck. In January, Occupational Health Services (OHS) kicked off its year-long Fitness Challenge for 2006 with a two-day open house in the Building 549 lobby. Participants signed in and were weighed in a private, screened-off area; had a chance to speak with OHS personnel and Center for Health Information representative Chris Miller; and to pick up literature about healthy eating and exercise. With the weigh-in, participants received a card on which to track their weight, miles walked, run, or biked, and other activities. On the back of the card are instructions for calculating your exercise heart range and American College of Sports Medicine's guidelines for healthy aerobic activity.

Also, please join OHS for our monthly "Learning Lunches" the second Thursday of every month. In February, we discussed "Nutrition Nuggets, Easy Ways to Eat Healthy"; the topic for March was "Healthy 'Deskersizing' and Stretching." Upcoming topics will be "Tooling Your Kitchen for Low-Fat Eating" (April); "Eating Addictions" (May) and "Sun Safety" and "Exercising in the Sun" (June).

Second Quarter Will Begin March 31st

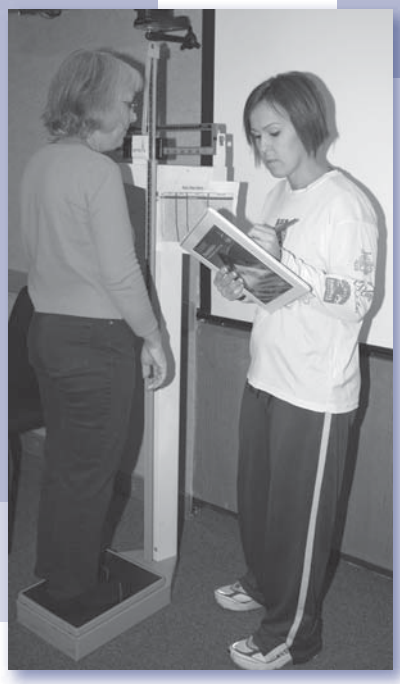
The second quarter of the Fitness Challenge will begin March 31. As the weather warms, you'll have more opportunities to get outside, enjoy the milder weather, and participate in fitness activities. While we'd like you to exercise, run, or walk, you might consider alternating those with other activities:

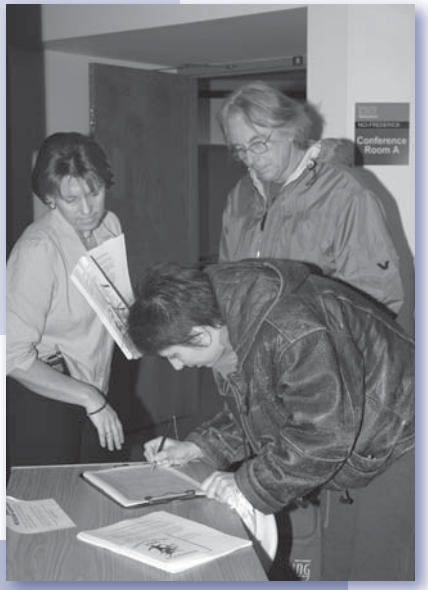
- Take the kids to the park and walk while they play;
- Enjoy downtown Frederick—explore the many stores, historical sites, and landmarks;
- Watch for local walk/run events—form a team, train together, set a goal (such as completing a 5K).

If you haven't done so already, visit the OHS Web site at http://saic.ncifcrf.gov/fitnesschallenge/. There you will find helpful information, recipes, Web links, and success stories. If you did not join the Challenge in January, join OHS March 31st for the Second Quarter Check-In.

If you have any recipes or success stories you would like to share with us, please contact Kim Winters at OHS; 301-846-1096, or e-mail OHS@ncifcrf.gov.

Have a strong and healthy second quarter. See you on the walking trails. ✦





Esposito Award

While most investigators were attending the PI Retreat in Bethesda, MD, last January, Dr. Dominic Esposito, Protein Expression Laboratory, was at CHI's PepTalk Protein Expression meeting in San Diego, CA. While there, he received the Protein Expression People's Choice Award, determined by popular vote of meeting attendees. The award was for the poster, "EDIT: A novel method for generation of deletion fragments for protein expression." Authors included Dr. Esposito, Kelly Esposito, and James Hartley, head of PEL. ✦

NCI-Frederick Central Repository: Fisher BioServices

We Deliver…

To accommodate the needs of investigators on base, the NCI-Frederick Central Repository managed by Fisher BioServices provides delivery of samples housed at any of the repository facilities. Central Repository staff currently delivers specimens stored on base to the loading dock/delivery door(s) of the various NCI-Frederick buildings according to the schedule given below.

Building	Arrival Time (A.M.)	Departure Time (A.M.)
560 Wing 1	9:00	9:10
560 Wing 2	9:15	9:25
560 Wing 3	9:30	9:40
567	9:50	10:00
469	10:05	10:15
432	10:20	10:30
1052A	10:35	10:45
535	10:55	11:10
325	11:20	11:30

Requests for delivery must be made by 8:00 a.m. on the day of the delivery. A withdrawal request should be made using the standard withdrawal form on which you have written relevant delivery instructions. Withdrawal forms may be found on the Central Repository Web site http://www.ncifcrf.gov/repository/forms/manager/. NOTE: All requests for delivery service must have your phone number plus an alternate contact name and phone number in the event you cannot be reached at the time of delivery.

Requests for delivery should be sent via fax to the building in which the samples are stored:

Building 434, Liquid Nitrogen Facility: fax 301-846-6767
Building 1066, Mechanical (-20°C to -80°C): fax 301-846-7069

You will be asked to sign a "Delivery Log Sheet" and provide an original, signed withdrawal request for the material you receive. If you are not available to receive the material at the agreed-upon delivery time for that building, the specimens will be returned to the repository for storage or disposition. You will be contacted for further instruction.

Due to the critical timing necessary for delivery of frozen material to waiting requesters, this service is not intended to provide last-minute, unplanned retrieval and delivery of specimens for laboratories. Researchers may always opt to retrieve specimens from the repository when necessary and reap the added benefit a brisk walk provides our health and well-being.

We're here when you need us….

The Central Repository maintains an emergency laboratory back-up service which provides investigators with storage space at Buildings 434 and 1066 in the event that a unit at a laboratory goes down. Several mechanical freezers and liquid nitrogen tanks are reserved as emergency back-up units for laboratories.

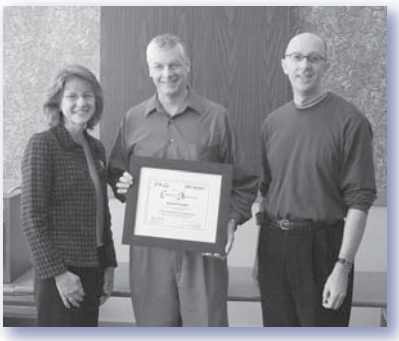
During business hours, if you need emergency back-up storage, please contact the appropriate repository facility for assistance:

Building 434, Liquid Nitrogen Facility: 301-846-1286
Building 1066, Mechanical (-20 °C to -80 °C): 301-846-5182

After hours, you should contact Protective Services who, in turn, will contact the Central Repository on-call staff and provide you with the on-call number. You then contact repository staff to coordinate transfer of material into backup units. You will be asked to provide necessary contact information. Access to the material is restricted to those individuals listed on the documentation. This material is maintained as "un-inventoried" and in accordance with Fisher BioServices' "Un-Inventoried Material Policy."

The first month of storage is provided to you at no charge to allow time for repair of the failed unit. Standard storage fees are applied beginning at the second month until material is transferred out of the repository.

For more information, see the "Emergency Laboratory Backup Service and Un-Inventoried Material Policy" on the repository Web site http://www.ncifcrf.gov/repository/cr/, under the "Services" and "Management" tabs, respectively. ✦



Dr. Kristen Komschlies and Dr. Mark Cosentino present awards to Dr. Dick Camalier (top), biologist with the Biological Testing Branch, and Dr. Gordon Cragg (bottom), head of the Natural Products Branch, Developmental Therapeutics Program, to commemorate their many years of service to NCI-Frederick.

Wilson Information Services Corporation (WISCO)

CHI's Special Programs Support the NCI-Frederick Fitness Challenge

The Center for Health Information (CHI) at the Scientific Library has announced new services in coordination with the NCI-Frederick Fitness Challenge 2006. Please feel free to stop in and take advantage of these resources at any time.

- **Weigh in**—If you have decided to participate in the Weight Loss portion of the Fitness Challenge, CHI now has a scale that you can use to track your weight. No appointment or registration is necessary; just stop by and check your progress.
- **Track your progress**—A computer is available in the CHI room for you to track your progress using the online form from the Fitness Challenge Web site http://saic.ncifcrf.gov/fitnesschallenge/. Record weight, miles, and/or hours so that your team will get credit for your hard work.
- **Share your success**—Visit CHI on Wednesdays at 12:00 p.m. and get support and motivation for keeping involved. Get encouragement through difficult weeks and celebrate successful weeks by sharing your achievements with others.

As always, CHI has books, videos and pamphlets on related health topics, including cookbooks and exercise videos. In addition, the CHI Web site http://www-library.ncifcrf.gov/chi.aspx has been updated to include a list of useful links related to exercise. Some examples include:

Centers for Disease Control and Prevention
Components of Physical Fitness
http://www.cdc.gov/nccdphp/dnpa/physical/components/index.htm
General Recommendations
http://www.cdc.gov/nccdphp/dnpa/physical/recommendations/index.htm
Getting Started
http://www.cdc.gov/nccdphp/dnpa/physical/starting/index.htm

United States President's Council on Physical Fitness and Sports
Fitness Fundamentals
http://fitness.gov/fitness.html

United States Department of Health and Human Services
Small Step Program
http://smallstep.gov ✦

Scientific Library and Center for Health Information hours:

Monday-Thursday, 8:30 a.m.–9:00 p.m.

Friday, 8:30 a.m.–7:00 p.m.

Saturday, 10:00 a.m.–5:00 p.m.

Sunday, 11:00 a.m.–5:00 p.m.

Skovira Celebrates Five Years with WISCO

Elaina Skovira recently celebrated her five-year anniversary as a Library Aide with the Scientific Library. Originally from New Hampshire, she has lived in Frederick County for 10 years. Before coming to WISCO, Ms. Skovira served as a children's librarian at the Frederick County Public Library.

While she keeps busy at NCI-Frederick in the evenings and on weekends, she spends her weekdays teaching elementary school in Emmitsburg. Although her three college-age children and three cats keep her busy during leisure hours, when time permits, she likes to garden, read, bake, and hike. ✦

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http://web.ncifcrf.gov/ThePoster

Employment Opportunities

Please contact the individual contractor's human resources representatives or go to the contractor's Web site for up-to-date, detailed information about jobs or research and training opportunities and requirements.

Charles River Laboratories
http://www.criver.com

Data Management Services
http://css.ncifcrf.gov/about/dms.htm

National Cancer Institute at Frederick
http://www.training.nih.gov/postdoctoral

SAIC-Frederick, Inc.
http://saic.ncifcrf.gov
www.saic.com

Wilson Information Services Corporation
http://www-library.ncifcrf.gov

Look for the Following Events Around Campus:

Poster Puzzler—Entry Deadline: April 28, 2006

Computer Software Training Classes—Check the Web site for the schedule http://css.ncifcrf.gov/training

Scientific Library Orientations—second Wednesday of every month

Spring Research Festival—May 17 and 18, 2006

Take Your Child To Work Day—July 12, 2006

Fitness Challenge Learning Lunches—second Thursday of each month. Check the Web site for details: http://saic.ncifcrf.gov/fitnesschallenge/

Reminder: When you have a change in staff, such as new staff, a promotion, retirement, loss of staff, be sure to change the information on the NCI-Frederick database. You can do this online by logging on to http://web.ncifcrf.gov/campus/phonebook/, or by contacting your human resources representative. For more information, you may refer to the inside front cover of the *NCI-Frederick Telephone & Services Directory*.

Comments or suggestions for The Poster may be directed to http://web.ncifcrf.gov/ThePoster

The National Cancer Institute at Frederick
Poster
Frederick, MD 21702-1201