

What is it?
Where is it?

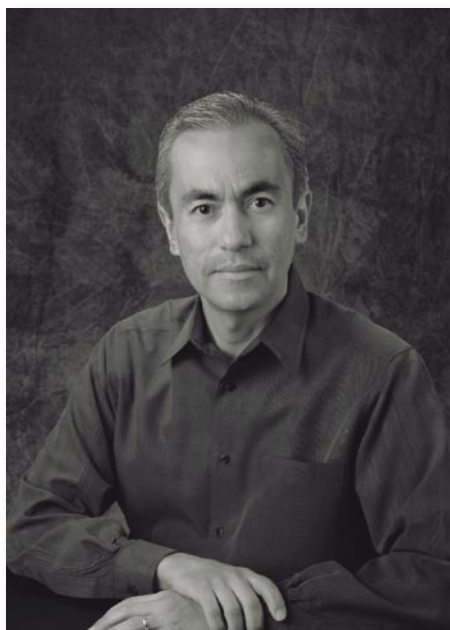
Story on page 6.



Poster

NCI Names David Ramos New Deputy Chief, MOSB

You may have been in Building 427 during the past three months, or looked up from your work and noticed a slender, grey-haired man touring your building. Amazingly, even though he's only been here since the end of January, and is busy with settling into a new office and learning the parameters of the work here, he emanates an air of calmness. This new NCI-Frederick employee is David Ramos, Deputy Chief, Management Operations Support Branch (MOSB). Working for John Eaton, Chief, MOSB, Mr. Ramos supports Mr. Eaton and the MOSB.



In a recent interview, Mr. Ramos explained that as part of his new duties, he hopes to play a "translational" role here, between the Office of the NIH Director and NCI-Frederick, to remain engaged in administrative restructuring decisions being made at the agency level, and to "bring a sense of how they will impact scientific operations and administration here."

New NIH Business System Customizes "Best Practices"

An important part of these decisions is the adoption of the NIH Business

System (NBS) modules and practices that will be deployed throughout NIH in the next year, Mr. Ramos said. Adoption of this system will impact areas such as acquisition and property management, among others. The NBS

replaces the Administrative Data Base (ADB) legacy administrative system that has been in place at NIH for more than 30 years.

Mr. Ramos indicated the NBS adopts the "best practices of the private sector and deploys those business practices as much as we can, adapting and adjusting them to 'federalize' these

systems." He said that the NIH hopes to implement these without a lot of customization. "It will impact many work forces, in terms of the systems that they use and the online systems that they use to support their work in a number of functional areas," he said.

One of Mr. Ramos' responsibilities will be to assist NCI-Frederick in its transition to the NIH business system, especially with the acquisition activity. His experience as former co-chair of the NIH Acceptance Board that is responsible for ensuring that the

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NCI Names David Ramos New Deputy Chief, MOSB

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final system meets the business needs of the agency will certainly help. Mr. Ramos explained that one of the most significant responsibilities of his new position is administration of the contracts for the management and operation of NCI-Frederick; there, his firsthand knowledge of the new NIH business system will aid in creating greater efficiencies and economies. "Since staff resources are not increasing in the same way that office responsibilities are, we need to take full advantage of those business practices, so that we are more productive with the staff that we have. So that's one of the primary things I'd like to see accomplished here," he said.

Chance to Contribute to NCI Scientific Mission Appealing

Mr. Ramos has spent more than 15 years providing central administrative services to NIH, encompassing service to every one of the Institutes in a number of administrative areas, including acquisition, supply, transportation, and property management, among others. He will be able to use his experiences and background—fleet management, asset management, property management, supply programs, etc.—very well here.

He noted that the opportunity to work for one Institute in direct support appealed to him. "Finding cures for cancer and AIDS, and having a chance to contribute more directly to the scientific mission of NIH and NCI, being involved in the plans for growth here, the operations, the opportunities

for collaboration with other agencies—all were appealing," he said.

Another aspect he found appealing was the quality of life at NCI-Frederick. "It's a different culture from Bethesda. One of the most fascinating things has been being introduced to many people who have not only been here many years, but even in the same office—that's very unusual from my previous work. It was common to switch offices frequently as we moved from one agency to another. It's almost like family out here. And it's kind of neat to see that," Mr. Ramos commented.

Mr. Ramos said he likes to get information first, engage individual colleagues, get a sense of where an organization is, and learn how things are done before recommending any changes. Every organization has its own culture, he says, and from what he's observed so far, that culture has served this organization very well.

As part of getting that information, he's been enjoying tours of NCI-Frederick facilities to get "a better sense of the range of services provided here to support the scientific mission. It's invigorating!" he said with enthusiasm. "I'm finding out that my office provides more than just acquisition support; there's a full range of facility support in this office" for work at NCI-Frederick.

Mr. Ramos earned a BS at East Michigan University, where his major was government affairs and management; his MS was earned at the University of Maryland—University

College, in management of health care organizations.

Varied Managerial Experiences Provide Unique Background

Mr. Ramos started his federal career as a management intern in 1975, working for the then-Department of Health, Education, and Welfare (HEW). He also worked for the assistant secretary of the Office of Human Development Services, as the director of contracts and grants management, where his office served Head Start, Administration for Aging, Administration for Native Americans, and other social programs administered by DHHS.

At NIH, he worked first for Dr. Joseph G. Perpich, Associate Director for Program Planning and Evaluation, and later held various posts throughout the department, such as the Health Care Financing Administration (HCFA), the predecessor to the Centers for Medicare and Medicaid Services and the FDA.

Later, at NIH, he was head of the central procurement office, Division of Procurement. He held several different positions within the Office of Director at NIH, including the Division of Logistics and Acquisition Operations; and most recently, was the Acting Associate Director for Administration at NIH.

Mr. Ramos ended, "Everyone has been very helpful and welcoming; I have a lot of good colleagues to work with and am looking forward to contributing here and being part of the growth of NCI-Frederick."

He can be reached at 301-846-1524, e-mail ramosd@mail.nih.gov. ♦



New Faces at NCI-Frederick

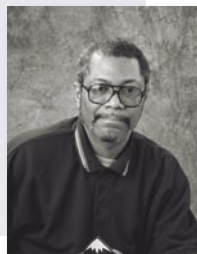
NCI-Frederick Welcomes New Staff

Seventy-five people joined our Facility in September, October, and November 2004.

NCI-Frederick welcomes...

Leonid Belayev
 Anton Brok-Volchansky
 Keqiang Chen
 Jean-Francois Coppin
 Yeshitila Friew
 Michael Glickman
 Gillian Hussey
 Kritika Kachapati
 Han Sung Kang
 Nermina Kantardzic
 Krishan Kuman
 Mary Leuben
 Fa Liu
 Victoria McParland
 Kazushi Motomura
 Tagvor Nishanian
 Deepak Sidhu
 Anuradha Sundararajan
 Nikolaos Tountas
 Chao Tu
 Baohan Vu
 Cuiju Wang
 Stephanie Zillmer
 Natasza Ziolkowska

Christopher McLeland



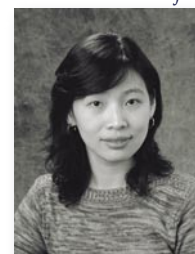
Fa Liu



SAIC-Frederick, Inc., welcomes...

Jo Ann Anderson	Uma Mudunuri
Alma Arnold	Satoshi Nishizuka
Cassio Baptista	Gareth Peters
Karen Baugher	Christopher Peterson
Scott Berry	Richard Poirier
Sukanya Bora	Charmaine Richman
Melissa Borucki	Rosalba Salcedo
Debora Boyer	Gregory Smith
Benjamin Brannen	Mary Spinelli
Arthur Britton	Angela Stowe
Barbara Brooks	Pamela Summers
Robin Burges	Brian Tabb
Lisa Cahill	Hlei Tial
Rikita Carter	Ana Toler
Patrick Clester	Brandon Wastler
Melayne Cromwell	David Wenner
Casey Dagnall	Kimberly Winters
Lorena De La Pena	Leslie Zerby
Donna Dinsmore	Meili Zhang
Joy Flannery	
Theresa Geiman	
Kevin Hedges	
Rebecca Henningsgaard	
Roland Jones Jr.	
Janis Krolus	
Donghan Lee	
Erin Lepper	
Elisa Mancia	
Luis Maza	
Christopher McLeland	
Zhaojing Meng	

Zhaojing Meng



Keqiang Chen



Derdev Battsetseg



Wisco welcomes...

Derdev Battsetseg ♦



Roland Jones, Jr.

Poster People Profile

What Do You Do?

Claudia Martin

What do you like best about your work here at NCI-Frederick?

I enjoy working with the families and the staff at the Play And Learning Station (PALS). There is such diversity in our program that doesn't exist in most child care centers. The parents are very involved with the program, which allows the children to experience child care in a much different way than most child care centers. In addition, everyone connected to the facility goes out of their way to be helpful.

How long have you worked at NCI-Frederick? In what capacity?

I started working at PALS in July of 2002 as the director of child care. It was wonderful coming into a program that was fully staffed and at licensed capacity.

What is your specific job title and what are your duties now? What training or education do you have for your current job?

As Child Care Director, I oversee the daily operations of the child care facility. I manage daily staffing, build enrollment, plan menus, manage the financial operations of the center, observe classrooms and children, maintain licensing and National Association for the Education of Young Children (NAEYC) requirements, provide support in classrooms when needed, and maintain a quality child care program.

I have a master's degree in special education from Hood College and a bachelor of science degree in early childhood education from Frostburg State University. I have been involved in the field of early childhood education for over 25 years, having started out as a teacher of three-year-

olds for the Frederick County Developmental Day Care Center in 1976. I have also completed the 64-hour child development course as well as the 45-hour infant/toddler development course required by the state of Maryland for child care providers. I recently completed the National Administrator Credential through the National Childcare Association, which is an advanced-level course for administrators of child care programs.

How do the demands of your job now differ from what you did when you first began working here?

Although my job title and duties have remained the same since I began my employment here at NCI, the one difference is that the waiting list for enrollment of children has doubled in size. It frustrates me that I am unable to enroll all of the children on the waiting list. The demand indicates the respect that the NCI community has for PALS.

What have been the most interesting or exciting changes you've seen here, either in your job or in the facility as a whole?

One of the most interesting changes that has taken place within PALS has been the reestablishment of the Parents Advisory Committee (PAC). This has enabled us to set up a Web site to allow for better communication and has also increased the support between parents and the center.



*Claudia Martin, Child Care Director,
Play and Learning Station*

What are some of the things you've done to participate in the life of NCI-Frederick—committees, other awards or recognition, etc.?

Until recently, I have not taken the time to participate in the life of NCI-Frederick, other than maintaining a high-quality child care program for the employees. Hopefully, seeing the children as they take walks throughout the campus for special theme days and, most especially, the annual Halloween Parade brings a smile to the faces of the employees here. I am involved in the Frederick County chapter of the Maryland State Child Care Association, as well as numerous committees in Washington County where I live. I have recently been asked to participate in the Early Childhood Development Advisory Board at Frederick Community College and am currently a member of the Protective Services Users Committee. ♦

Poster People Profile

What Do You Do, Too?

Merrell Wilson

What do you like best about your work here at NCI-Frederick?

I like programming applications in the Sybase PowerBuilder Graphic User Interface (GUI).

How long have you worked at NCI-Frederick? In what capacity?

Five years, as a Programmer/Analyst.

What is your specific job title and what are your duties now? What training or education do you have for your current job?

My job title is Senior Programmer/Analyst I-FAC SYS. My duties can be summed up as customer support to the users of our applications that are programmed in PowerBuilder or any other software. I program entire applications (such as the Protective Services Parking Violation system for Fort Detrick) and convert SAS (Statistical Analysis System) programs into PowerBuilder graphs for the Animal Data Application (ADA). I also support the Material Transportation System (MTS) and Smartsort Mail-Slot software for the Transportation Department, the Scientific Publications Graphics & Media Department's LabCommander Access system, the Clinical Services Tracking (CTS) system, and the facility programs for the Animal Facility Management system. Plus, I support the many other applications in PowerBuilder, as necessary. I fix any "bugs" or other problems in the applications while programming new reports, utilities, or sections for the various systems and applications, when needed.

I have a bachelor of science degree in computer science and business administration, and I have attended

many different company classes on databases, programming, object-oriented development, and computer languages. I have programmed in about five different GUIs (including Visual Basic) and eight or more different computer languages (not including GUIs). I have over 20 years' experience in the computer science field as a programmer/analyst.



*Merrell Wilson,
Senior Programmer/Analyst I-FAC SYS,
Data Management Services*

How do the demands of your job now differ from what you did when you first began working here?

I have more responsibility than I had at the start for ensuring that applications and systems run smoothly.

What have been the most interesting or exciting changes you've seen here, either in your job or in the facility as a whole?

Upgrading our PowerBuilder version of our software from 6.5 to 7.03 was, I guess, "exciting" in that the programming environment of PowerBuilder changed, forcing the programmers to learn a new style of development, while at the same time upgrading every application from the old to the new versions (and eliminating software bugs along the way). For a while, all of the programmers experienced "future shock."

What are some of the things you've done to participate in the life of NCI-Frederick—committees, other awards, or recognition, etc.?

I have taken courses through the Computer and Statistical Services software training program. I also try to make it to the fairs, book sales, and farmers' markets on post.

I hold a Polaris Missile Pin for programming support of the Navy's nuclear sub program for more than 10 years. From 1980 to 1992, I supported both Great Britain's NATO nuclear subs as well as the U.S. SSBN "boomers," which are nuclear-powered submarines that carry nuclear weapons in their missiles.

I also have a history of near-greatness—I missed the Marksman medal in the Air Force by one shot, and I placed second in Computer Programming in the VICA (Vocational Industrial Clubs of America) Skills Contest for West Virginia.

I possess one of the largest individual collections of software in the eastern United States—I still have my original Commodore 64, IBM XT, 386 PC, and Pentium III PC. I guess I'll have to leave my collection to the Smithsonian! ♦

Poster Puzzler

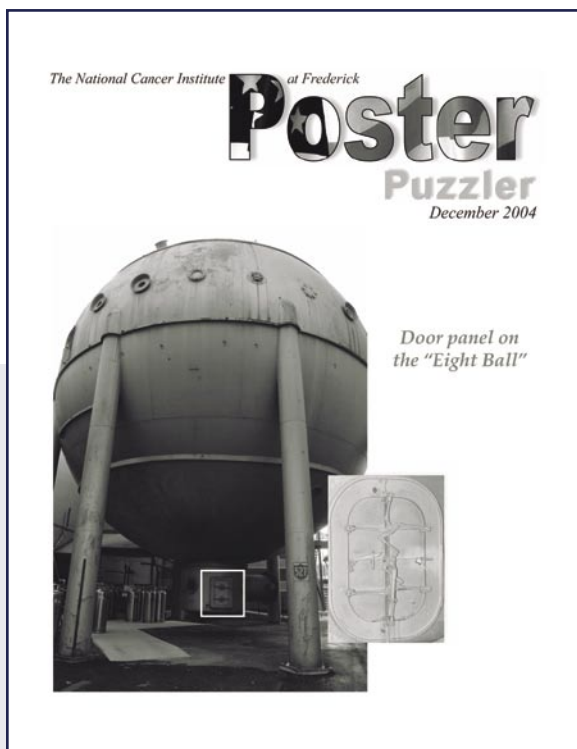
What is it?

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 left. 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 15**, and the winner will be drawn from all correct answers received by that date.



Good luck and good hunting! ♦



The Poster Puzzler:

Door Panel on the "Eight Ball"

When this 1-million-liter test sphere was built in 1948, it was the largest such facility in the world. Known as the "Eight Ball," this bizarre-looking laboratory was used for the study of infectious agent aerosols. A spherical shape was selected for the lab because the experiments frequently involved explosives, and a sphere can withstand stronger blasts than a rectangular building. Fail-safe backup systems, air pressure controls, and alarms assured the safe operation of the facility. In the 19 years of the sphere's almost daily operations, it enjoyed a perfect biological safety record. The sphere's last known use for biological or chemical tests was in 1972, and in 1977 it was placed on the National Register of Historic Places.

Source: http://www.dcmilitary.com/army/standard/6_04/local_news/5147-1.html

Congratulations to our December 2004 winner:
Robert Tuskan, Biological Laboratory Technician,
Mouse Cancer Genetics Program. ♦

Thanks to all the participants in the December
Poster Puzzler! ♦

Dr. Rosalba Salcedo, Pediatric Oncology Branch



Dr. “Rosi” Salcedo received her doctoral training in immunology

at the Karolinska Institute at Stockholm, Sweden, graduating in 1996. Her doctoral thesis was “Leukocyte Adhesion to Cells and Extracellular Matrix Proteins.” Eight months later, in August 1997, she joined the Laboratory of Molecular Immunoregulation under Dr. Joost J. Oppenheim and worked on projects regarding the roles of chemokines and chemokine receptors in angiogenesis and tumorigenesis. In September 2002, she began working in the Pediatric Oncology Branch under Dr. Jon M. Wigginton, studying the roles of IL-23 and IL-27 in suppression of tumor growth and activation of the cytotoxic immune response. Although she worked directly for NCI for most of this time, last fall she became an SAIC-Frederick, Inc., employee.

Currently, Dr. Salcedo and her colleagues conduct pre-clinical research on potential uses of IL-27 in immunotherapy. In the article highlighted here, the group described a very potent antitumor effect of IL-27 in a neuroblastoma model of cancer.

Dr. Salcedo commented, “Neuroblastoma tumors characteristically express very low levels of MHC-I in vivo—which enables this tumor to escape elimination by cytotoxic T lymphocytes (CTL). IL-27 enhances MHC-I expression on neuroblastoma tumor cells, thus rendering them susceptible to CTL-mediated elimination. Therefore, IL-27 might have potential therapeutic uses, and enable CTL-mediated immunotherapy in human cancer.” ♦

Salcedo R, Stauffer JK, Lincoln E, Back TC, Hixon JA, Hahn C, Shafer-Weaver K, Malyguine A, Kastelein R, Wigginton JM.

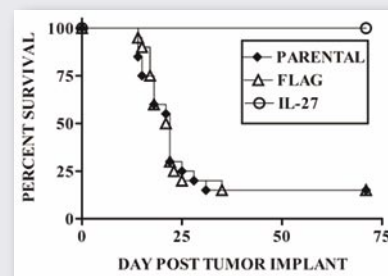
IL-27 mediates complete regression of orthotopic primary and metastatic murine neuroblastoma tumors: Role for CD8(+) T cells

J Immunol 173(12):7170–7182, 2004

We have shown previously that IFN- γ -inducing cytokines such as IL-12 can mediate potent antitumor effects against murine solid tumors. IL-27 is a newly described IL-12-related cytokine that potentiates various aspects of T and/or NK cell function. We hypothesized that IL-27 might also mediate potent antitumor activity in vivo. TBJ neuroblastoma cells engineered to overexpress IL-27 demonstrated markedly delayed growth compared with control mice, and complete durable tumor regression was observed in >90% of mice bearing either s.c. or orthotopic intra-adrenal tumors, and 40% of mice bearing induced metastatic

disease. The majority of mice cured of their original TBJ-IL-27 tumors were resistant to tumor rechallenge. Furthermore, TBJ-IL-27 tumors were heavily infiltrated by CD8⁺ T cells, and draining lymph node-derived lymphocytes from mice bearing s.c. TBJ-IL-27 tumors are primed to proliferate more readily when cultured ex vivo with anti-CD3/anti-CD28, compared with lymphocytes from mice bearing control tumors, and to secrete higher levels of IFN- γ . In addition, marked enhancement of local IFN- γ gene expression and potent up-regulation of cell surface MHC class I expression are noted within TBJ-IL-27 tumors compared with

control tumors. Functionally, these alterations occur in conjunction with the generation of tumor-specific CTL reactivity in mice bearing TBJ-IL-27 tumors, and the induction of tumor regression via mechanisms that are critically dependent on CD8⁺, but not CD4⁺ T cells or NK cells. Collectively, these studies suggest that IL-27 could be used therapeutically to potentiate the host antitumor immune response in patients with malignancy. ♦



See on-line article at <http://www.jimmunol.org/cgi/content/full/173/12/7170> to view complete figures and detailed information.

Editor's note: The following 48 articles have been selected from a quarterly listing of publications in 12 of the most prestigious science journals.

Biochemistry and Biophysics

Borchers CH, Marquez VE, Schroeder GK, Short SA, Snider MJ, Speir JP, Wolfenden R. Fourier transform ion cyclotron resonance MS reveals the presence of a water molecule in an enzyme transition-state analogue complex. *Proc Natl Acad Sci USA* 101(43):15341–15345, 2004.

Wu ZR, Maderia M, Barchi JJ, Marquez VE, Bax A. Changes in DNA bending induced by restricting nucleotide ring pucker studied by weak alignment NMR spectroscopy. *Proc Natl Acad Sci USA* 102(1):24–28, 2005.

Cell and Tumor Biology

Bhoomik A, Gangi L, Ronai Z. Inhibition of melanoma growth and metastasis by ATF2-derived peptides. *Cancer Res* 64(22):8222–8230, 2004.

Cellular Immunology and Immune Regulation

Nijhara R, van Hennik PB, Gignac ML, Kruhlak MJ, Hordijk PL, Delon J, Shaw S. Rac1 mediates collapse of microvilli on chemokine-activated T lymphocytes. *J Immunol* 173(8):4985–4993, 2004.

Vaidya SV, Stepp SE, McNerney ME, Lee JK, Bennett M, Lee KM, Stewart CL, Kumar V, Mathew PA. Targeted disruption of the 2B4 gene in mice reveals an in vivo role of 2B4 (CD244) in the rejection of B16 melanoma cells. *J Immunol* 174(2):800–807, 2005.

Yang D, Chen Q, Rosenberg HF, Rybak SM, Newton DL, Wang ZY, Fu Q, Tchernev VT, Wang MJ, Schweitzer B, Kingsmore SF, Patel DD, Oppenheim JJ, Howard OMZ. Human ribonuclease A superfamily members, eosinophil-derived neurotoxin and pancreatic ribonuclease,

induce dendritic cell maturation and activation. *J Immunol* 173(10):6134–6142, 2004.

Yu Q, Erman B, Park JH, Feigenbaum L, Singer A. IL-7 receptor signals inhibit expression of transcription factors TCF-1, LEF-1, and ROR gamma T: Impact on thymocyte development. *J Exp Med* 200(6):797–803, 2004.

Chemokines

Biragyn A, Ruffini PA, Coscia M, Harvey LK, Neelapu SS, Baskar S, Wang JM, Kwak LW. Chemokine receptor-mediated delivery directs self-tumor antigen efficiently into the class II processing pathway in vitro and induces protective immunity in vivo. *Blood* 104(7):1961–1969, 2004.

DNA Dynamics and Chromosome Structure

Lee BS, Grewal SIS, Klar AJS. Biochemical interactions between proteins and Mat1 Cis-acting sequences required for imprinting in fission yeast. *Mol Cell Biol* 24(22):9813–9822, 2004.

Enzyme Catalysis and Regulation

Liang XD, Young JJ, Boone SA, Waugh DS, Duesbery NS. Involvement of domain II in toxicity of anthrax Lethal Factor. *J Biol Chem* 279(50):52473–52478, 2004.

Plafker SM, Plafker KS, Weissman AM, Macara IG. Ubiquitin charging of human class III ubiquitin-conjugating enzymes triggers their nuclear import. *J Cell Biol* 167(4):649–659, 2004.

Experimental Therapeutics, Molecular Targets, and Chemical Biology

Alley MC, Hollingshead MG, Pacula-Cox CM, Wand WR, Hartley JA, Howard PW, Gregson SJ, Thurston DE, Sausville EA. SJG-136 (NSC 694501), a novel rationally designed DNA minor groove interstrand cross-linking agent with

potent and broad spectrum antitumor activity. Part 2: Efficacy evaluations. *Cancer Res* 64(18):6700–6706, 2004.

Kim HW, Park IK, Cho CS, Lee KH, Beck GR, Colburn NH, Cho MH. Aerosol delivery of glucosylated polyethylenimine/phosphatase and tensin homologue deleted on chromosome 10 complex suppresses Akt downstream pathways in the lung of K-Ras null mice. *Cancer Res* 64(21):7971–7976, 2004.

Lederman MM, Veazey RS, Offord R, Mosier DE, Dufour J, Mefford M, Piatak M, Lifson JD, Salkowitz JR, Rodriguez B, Blauvelt A, Hartley O. Prevention of vaginal SHIV transmission in Rhesus macaques through inhibition of CCR5. *Science* 306(5695):485–487, 2004.

Rapisarda A, Zalek J, Hollingshead M, Braunschweig T, Uranchimeg B, Bonomi CA, Borgel SD, Carter JP, Hewitt SM, Shoemaker RH, Melillo G. Schedule-dependent inhibition of hypoxia-inducible factor-1 alpha protein accumulation, angiogenesis, and tumor growth by Topotecan in U251-HRE glioblastoma xenografts. *Cancer Res* 64(19):6845–6848, 2004.

Smyth MJ, Swann J, Kelly JM, Cretney E, Yokoyama WM, Diefenbach A, Sayers TJ, Hayakawa Y. NKG2D recognition and perforin effector function mediate effective cytokine immunotherapy of cancer. *J Exp Med* 200(10):1325–1335, 2004.

Genomics, Proteomics, and Bioinformatics

Daelemans D, Costes SV, Cho EH, Erwin-Cohen RA, Lockett S, Pavlakis GN. In vivo HIV-1 Rev multimerization in the nucleolus and cytoplasm identified by fluorescence resonance energy transfer. *J Biol Chem* 279(48):50167–50175, 2004.

Nelson GW, Martin MP, Gladman D, Wade J, Trowsdale J, Carrington M. Cutting-edge: Heterozygote advantage in autoimmune disease: Hierarchy of protec-

tion/susceptibility conferred by HLA and killer Ig-like receptor combinations in psoriatic arthritis. *J Immunol* 173(7):4273–4276, 2004.

Rozenblatt-Rosen O, Hughes CM, Nanepaga SJ, Shanmugam KS, Copeland TD, Guszczynski T, Resau JH, Meyer-son M. The parafibromin tumor suppressor protein is part of a human Paf1 complex. *Mol Cell Biol* 25(2):612–620, 2005.

Genes: Structure and Regulation

Iwasaki M, Kuwata T, Yamazaki Y, Jenkins NA, Copeland NG, Osato M, Ito Y, Kroon E, Sauvageau G, Nakamura T. Identification of cooperative genes for NUP98-HOXA9 in myeloid leukemogenesis using a mouse model. *Blood* 105(2):784–793, 2005.

O’Sullivan TN, Wu XFS, Rachel RA, Huang JD, Swing DA, Matesic LE, Hammer JA, Copeland NG, Jenkins NA. dsu functions in a MYO5A-independent pathway to suppress the coat color of dilute mice. *Proc Natl Acad Sci USA* 101(48):16831–16836, 2004.

Roca AL, Georgiadis N, O’Brien SJ. Cytonuclear genomic dissociation in African elephant species. *Nat Genet* 37(1):96–100, 2005.

Srisodsai A, Kurotani R, Chiba Y, Sheikh F, Young HA, Donnelly RP, Kimura S. Interleukin-10 induces uteroglobin-related protein (UGRP) 1 gene expression in lung epithelial cells through homeodomain transcription factor T/EBP/NKX2.1. *J Biol Chem* 279(52):54358–54368, 2004.

Immunobiology

Chen B, Blair DG, Plisov S, Vasiliev G, Perantoni AO, Chen Q, Athanasiou M, Wu JY, Oppenheim JJ, Yang D. Cutting edge: Bone morphogenetic protein antagonists Drm/Gremlin and Dan interact with slits and act as negative regulators

of monocyte chemotaxis. *J Immunol* 173(10):5914–5917, 2004.

Graveel C, Su YL, Koeman J, Wang LM, Tessarollo L, Fiscella M, Birchmeier C, Swiatek P, Bronson R, Vande Woude G. Activating Met mutations produce unique tumor profiles in mice with selective duplication of the mutant allele. *Proc Natl Acad Sci USA* 101(49):17198–17203, 2004.

Lekstrom-Himes JA, Kuhns DB, Alvord WG, Gallin JI. Inhibition of human neutrophil IL-8 production by hydrogen peroxide and dysregulation in chronic granulomatous disease. *J Immunol* 174(1):411–417, 2005.

Picker LJ, Hagen SI, Lum R, Reed-Indersbitzin EF, Daly LM, Sylwester AW, Walker JM, Siess DC, Piatak M, Wang CX, Allison DB, Maino VC, Lifson JD, Kodama T, Axthelm MK. Insufficient production and tissue delivery of CD4(+) memory T cells in rapidly progressive Simian Immunodeficiency Virus infection. *J Exp Med* 200(10):1299–1314, 2004.

Zhang X, Rodriguez-Galan MC, Subleski JJ, Ortaldo JR, Hodge DL, Wang JM, Shimozato O, Reynolds DA, Young HA. Peroxisome proliferator-activated receptor-gamma and its ligands attenuate biologic functions of human natural killer cells. *Blood* 104(10):3276–3284, 2004.

Hemostasis, Thrombosis, and Vascular Biology

Embury SH, Matsui NM, Ramanujam S, Mayadas TN, Noguchi C, Diwan HA, Mohandas N, Cheung ATW. The contribution of endothelial cell P-selectin to the microvascular flow of mouse sickle erythrocytes in vivo. *Blood* 104(10):3378–3385, 2004.

Lan Q, Zhang LP, Li GL, Vermeulen R, Weinberg RS, Dosemeci M, Rappaport SM, Shen M, Alter BP, Wu YJ, Kopp W, Waidyanatha S, Rabkin C, Guo WH, Chanock S, Hayes RB, Linet M, Kim S,

Yin SN, Rothman N, Smith MT. Hematotoxicity in workers exposed to low levels of benzene. *Science* 306(5702):1774–1776, 2004.

Medical Science

Finnegan CM, Rawat SS, Puri A, Wang JM, Ruscetti FW, Blumenthal R. C-ramide, a target for antiretroviral therapy. *Proc Natl Acad Sci USA* 101(43):15452–15457, 2004.

Fong LG, Ng JK, Meta M, Cote N, Yang SH, Stewart CL, Sullivan T, Burghardt A, Majumdar S, Reue K, Bergo MO, Young SG. Heterozygosity for Lmna deficiency eliminates the progeria-like phenotypes in Zmpste24-deficient mice. *Proc Natl Acad Sci USA* 101(52):18111–18116, 2004.

Hiby SE, Walker JJ, O’Shaughnessy KM, Redman CWG, Carrington M, Trowsdale J, Moffett A. Combinations of maternal KIR and fetal HLA-C genes influence the risk of pre-eclampsia and reproductive success. *J Exp Med* 200(8):957–965, 2004.

Mannon PJ, Fuss IJ, Mayer L, Elson CO, Sandborn WJ, Present D, Dolin B, Goodman N, Groden C, Hornung RL, Quezado M, Neurath MF, Salfeld J, Veldman GM, Schwertschlag U, Strober W. Anti-Interleukin-12 antibody for active Crohn’s disease. *N Eng J Med* 351(20):2069–2079, 2004.

Ono A, Ablan SD, Lockett SJ, Nagashima K, Freed EO. Phosphatidylinositol (4,5) bisphosphate regulates HIV-1 Gag targeting to the plasma membrane. *Proc Natl Acad Sci USA* 101(41):14889–14894, 2004.

Molecular and Structural Immunology

Gonsky R, Deem RL, Bream J, Young HA, Targan S. Enhancer role of STAT5 in CD2 activation of IFN-gamma gene expression. *J Immunol* 173(10):6241–6247, 2004.

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Dr. Joseph Kates: Academia to Technology Research and Development

Editor's note: Our "Science Today" editor, Dr. Paul Nisson, wrote this article in appreciation and in recognition of Dr. Kates' stellar career.

Does anyone know someone whose career in the life sciences has bridged academia and private industry, and who also supported government research and technology development efforts as a contractor? Perhaps not, but NCI-Frederick has had one in the person of Dr. Joseph Kates. Dr. Kates has been successful in all three areas. He has managed to integrate his varied experiences in basic science research, and pharmaceutical and technology program development to benefit in an exemplary way those people and institutions with whom he has worked. By publication time, Dr. Kates will have stepped down as Director of the Research Technology Program (as of March 2005) to become a consultant to SAIC-Frederick, Inc., and to explore other opportunities that foster the development of biotechnology in his newly adopted home of Vancouver, BC.

The Academic Years

Dr. Kates' career can be divided into three phases: academic science, pharmaceutical development, and government contracting. With undergraduate training in biology from the University of Pennsylvania and a doctoral degree from Princeton, his academic contributions were in the fields of DNA replication, transcription, and neuroscience. While at Princeton, Dr. Kates confirmed the model of semi-conservative replication of DNA in eukaryotes, which had recently been shown in prokaryotes by Meselson and Stahl. Semi-conservative replication, one of the tenets of molecular biology, is when the parental DNA is used as a template to produce

the next generation of nucleic acid: if you think of DNA as a zipper, it copies itself by separating its strands, and each strand becomes a template for a daughter strand. Each round of semi-conservative replication results in two copies of the original genome.

Dr. Kates also showed that eukaryotic messenger RNA molecules are polyadenylated: That is, they have a string of adenine nucleotides at their 3' ends. That observation led to the development of cDNA



technology, since the poly A tail could be used as a synthetic priming site with a complementary, poly dT oligonucleotide primer. He followed this up with a seminal discovery in the field of virology, where he showed that the viral genome encodes the enzyme that replicates its RNA genome, the so-called RNA-dependent DNA reverse transcriptase. This work

was cited by the 1975 Nobel Prize-winning trio of David Baltimore, Renato Dulbecco, and Howard Temin and resulted in Dr. Kates receiving the prestigious Eli Lilly Award for Microbiology and Immunology in 1974. As a result of this work and his activities as a journal editor and study section participant, he was named Chairman of the Biology Department of the State University of New York at Stony Brook. Only 33 when named, he literally built the department of 12 faculty and 100 other staff from scratch during his seven years in that job.

Pharmaceutical Development

Those familiar with the drug development process know that a drug can take more than 10 years to bring to market and cost close to one billion dollars in the process. Following his academic work, Dr. Kates became Director of Research and Development at Bayer Pharmaceuticals for a 10-year period, 1988 until 1998. During that time, he worked in Berkeley, CA, focusing primarily on biological therapeutic development; consequently, he became well versed in the pre-clinical and clinical development processes outlined by the FDA for biologicals and small-molecule drugs. In addition to directing a large

group of individuals in drug development, he was instrumental in developing strategic collaborations and business relationships with colleagues at companies such as Millenium Pharmaceuticals during his tenure. Dr. Kates was involved in the development of Factor VIII, a successfully marketed drug for the treatment of hemophilia.

Government Contracting

Dr. Kates was recruited to the National Cancer Institute at Frederick by the then-SAIC Frederick, Inc., Principal Investigator, Dr. Peter Fischinger, and Dr. John Deutsch, former CIA Director and a member of SAIC's Technology Board. Dr. Kates' broad experience helped the NCI identify key areas where SAIC-Frederick, Inc., could support and strengthen the intramural program at NCI.

Tasked with providing senior leadership for the contractor, Dr. Kates' first mission was to identify and recruit

someone to lead the Laboratory Animal Sciences Program—Dr. Hendrick “Rick” Bedegian, from The Jackson Laboratories, Bar Harbor, Maine.

Following meetings with Drs. Carl Barrett (Deputy Director for Science) and Robert Wiltrout (Director of CCR), and collaborating closely with Dr. David Goldstein (CCR Associate Director for Partnerships), Dr. Kates started building and directing what is now known as the Research Technology Program (RTP) from a foundation of dedicated cores at NCI-Frederick, including expertise in proteomics, genomics, protein

expression, gene expression, image analysis and protein chemistry, as well as the Advanced Biomedical Computer Center.

From the beginning, Dr. Kates' and the RTP's mission has been twofold: to support the research efforts of the NCI intramural programs and to adapt to NCI's evolving needs and the current budgetary challenges. Dr. Kates has provided masterful leadership, giving the government outstanding value in these areas. We thank him for his contributions and wish him well in his future endeavors. ♦

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Molecular Biology, Pathology, and Genetics

Daelemans D, Costes SV, Lockett S, Pavlakis GN. Kinetic and molecular analysis of nuclear export factor CRM1 association with its cargo in vivo. *Mol Cell Biol* 25(2):728–739, 2005.

Gold B, Kalush F, Bergeron J, Scott K, Mitra N, Wilson K, Ellis N, Huang H, Chen M, Lippert R, Halldorsson BV, Woodworth B, White T, Clark AG, Parl FF, Broder S, Dean M, Offit K. Estrogen receptor genotypes and haplotypes associated with breast cancer risk. *Cancer Res* 64(24):8891–8900, 2004.

Li F, Wang F, Haraldson K, Protopopov A, Duh FM, Geil L, Kuzmin I, Minna JD, Stanbridge E, Braga E, Kashuba VI, Klein G, Lerman MI, Zabarovsky ER. Functional characterization of the candidate tumor suppressor gene NPRL2/G21 located in 3p21.3C. *Cancer Res* 64(18):6438–6443, 2004.

Waalkes MP, Liu J, Goyer RA, Diwan BA. Metallothionein-I/II double knockout mice are hypersensitive to lead-induced kidney carcinogenesis: Role of inclusion

body formation. *Cancer Res* 64(21):7766–7772, 2004.

Zhao L, Hart S, Cheng JG, Melenhorst JJ, Bierie B, Ernst M, Stewart C, Schaper F, Heinrich PC, Ullrich A, Robinson GW, Hennighausen L. Mammary gland remodeling depends on gp130 signaling through Stat3 and MAPK. *J Biol Chem* 279(42):44093–44100, 2004.

Oncogenes

Raafat A, Bargo S, Anver, MR, Callahan R. Mammary development and tumorigenesis in mice expressing a truncated human Notch4/Int3 intracellular domain (H-Int3sh). *Oncogene* 23(58):9401–9407, 2004.

Protein Structure, Expression, And Function

Gerber D, Pritsker M, Gunther-Ausborn S, Johnson B, Blumenthal R, Shai Y. Inhibition of HIV-1 envelope glycoprotein-mediated cell fusion by a DL-amino acid-containing fusion peptide—Possible recognition of the fusion complex. *J Biol Chem* 279(46):48224–48230, 2004.

Ma BY, Nussinov R. Release factors Erf1 and RF2—A universal mechanism controls the large conformational changes. *J Biol Chem* 279(51):53875–53885, 2004.

Nanda A, Buckhaults P, Seaman S, Agrawal N, Boutin P, Shankara S, Nacht M, Teicher B, Stampfl J, Singh S, Vogelstein B, Kinzler KW, Croix BS. Identification of a binding partner for the endothelial cell surface proteins TEM7 and TEM7R. *Cancer Res* 64(23):8507–8511, 2004.

Signal Transduction

Catalano A, Rodilossi S, Rippo MR, Caprari P, Procopio A. Induction of stem cell factor/C-Kit/Slug signal transduction in multidrug-resistant malignant mesothelioma cells. *J Biol Chem* 279(45):46706–46714, 2004.

Hussain SP, Trivers GE, Hofseth LJ, He PJ, Shaikh I, Mechanic LE, Doja S, Jiang WD, Subleski J, Shorts L, Haines D, Laubach VE, Wiltrout RH, Djurickovic D, Harris CC. Nitric oxide, a mediator of inflammation, suppresses tumorigenesis. *Cancer Res* 64(19):6849–6853, 2004.

Lennartsson J, Shivakrupa R, Linnekin D. Synergistic growth of stem cell factor and granulocyte macrophage colony-stimulating factor involves kinase-dependent and -independent contributions from C-Kit. *J Biol Chem* 279(43):44544–44553, 2004. ♦

Best Places to Work

NCI Rated Third among “Best Places to Work” in Third Annual Poll

In a recent press release from *The Scientist*, the NCI once again was voted as having one of the best work environments for life sciences postdocs. In fourth place last year, this time NCI Frederick and Rockville were rated third best out of 191 multinational institutions surveyed.

The top two places went to the United States Environmental Protection Agency campus in Research Triangle Park, NC, and the Fred Hutchinson Cancer Research Center in Seattle.

In the United States, government institutions and private research centers landed 11 of the top 15 places. “In general, there’s more incentive for government and for-profit institutions to take care of their employees,” says Dr. Keith Micoli, chair of the National Postdoctoral Association and a postdoc in pathology at the University of Alabama, Birmingham. Twelve of the U.S. top 15 have a postdoc office, association, or advisor to help raise awareness of postdocs’ needs and facilitate dialogue between postdocs and administrators. Dr. Micoli says that the number of postdoc associations has tripled in the past 15 years.

The University of North Carolina in Chapel Hill, Washington University in St. Louis, Missouri, and the Massachusetts Institute of Technology in Cambridge, landed the top three spots for U.S. academic institutions, while Umea Plant Science Center and Uppsala University, both in Sweden, and the Netherlands Cancer Institute earned top honors for institutions outside the United States. “*The Scientist* is pleased to be able to provide these survey results to our readers again this year,” says Richard Gallagher, editor and publisher of *The Scientist*, adding that he hopes the results will challenge “all

institutions to continuously improve the sometimes appalling working conditions for postdocs, arguably science’s most valuable players.”

Important Factors for Workplace Satisfaction

Institutions in Canada, Scandinavia, and The Netherlands occupy 11 of the top 15 slots for non-U.S. institutions. Each of these institutions has adequate funding resources, and good networking and career development opportunities, which foreign postdocs consider important factors for workplace satisfaction, according to *The Scientist*’s survey.

Although NCI rated highly, many postdocs in other institutions expressed dissatisfaction, noting inadequate compensation and difficulties transitioning to independence within a reasonable time frame. “The abuse of postdoc researchers originates from their lack of recognition and place in the system,” explains Christine Heller del Riego of EuroScience, a grassroots organization that aims to be the voice of science in Europe.

More than 3,500 Participate in Survey

The more than 3,500 postdocs who responded to this year’s survey rated a valuable training experience, access to research equipment and library resources, and a good mentoring relationship as the ingredients that make for a great workplace. Full survey results were detailed in the article “Best Places to Work for Postdocs: 2005,” appearing in *The Scientist* on February 14, 2005 (go to <http://www.the-scientist.com/>).

Participants in the survey had to be non-tenured life scientists working at non-commercial research institutions in the United States, Canada, Western Europe, or Israel. More than 40,000 survey invitations were sent to individuals who had

previously registered online. The magazine received 3,533 valid responses representing 769 individual institutions. From those, *The Scientist* evaluated the 125 U.S. institutions and 66 non-U.S. institutions that had five or more responses.

For more information about *The Scientist*’s Best Places to Work surveys, you can go to http://www.the-scientist.com/info/bptw/bptw_home. ♦

The top overall results for U.S. institutions are:

1. U.S. Environmental Protection Agency, Research Triangle Park, NC
2. Fred Hutchinson Cancer Research Center, Seattle, WA
3. National Cancer Institute, Bethesda, Rockville, Frederick, MD
4. National Institute of Environmental Health Sciences, Research Triangle Park, NC
5. Trudea Institute, Saranac Lake, NY
6. University of North Carolina, Chapel Hill, NC
7. Wadsworth Center, Albany, NY
8. Cedars-Sinai Medical Center, Los Angeles, CA
9. Woods Hole Oceanographic Institution, Woods Hole, MA
10. Washington University, Saint Louis, MO
11. The University of Texas MD Anderson Cancer Center, Houston, TX
12. The J. David Gladstone Institutes, San Francisco, CA
13. Massachusetts Institute of Technology, Cambridge, MA
14. Michigan State University, East Lansing, MI
15. National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD

Campus Improvement Committee

Volunteers Plant 400 Geraniums

Shovel dirt into 48-compartment flat for seedlings. Smooth away excess dirt. Move flat to cart where others dig holes, drop in cuttings, and gently anchor them in dirt. Move tray to another cart to be transferred to a greenhouse. Water plants, and let nature take its course. Repeat.

By the time you read this, you may already have participated in the latest campus improvement project: planting cuttings and seeds for flowers to beautify the NCI-Frederick campus. In late February, 12 volunteers joined Tim Rowe, Life Safety and Fire Prevention Officer, in planting 400 geranium cuttings at the USDA greenhouses on Ditto Street. With smooth teamwork, the group finished in an hour!

As this article went to press, plans had been made to plant several more hundred seeds for a riot of color and variety of flowers to grace the buildings. Stay alert for further volunteer requests—if you didn't get a chance to plant seeds, perhaps you'd like to help with the resulting full-grown plants to be transferred outdoors in early May.

The project is a collaborative effort of the Campus Improvement Committee with the USDA, which is lending tables, planting soil, and one of its unused greenhouses and will help volunteers with watering and light requirements as the seedlings emerge.

Other projects include banners for the NCI-Frederick utility poles and possibly a pavilion to be built outside Building 538. ♦



Did You Know...?

Your Recipes Needed Now!

Spicy Chinese dumplings. Succulent herb-roasted French chicken. Savory Russian cabbage rolls. Tender Irish stew. Do you have a favorite family recipe or one that represents your country's culture?

The Frederick Employee Diversity Team (FEDT) is looking for tempting recipes from all over the world for its *Fourth Annual Multi-cultural Recipe Book*. Each year, the cookbook comprises recipes donated by NCI-Frederick employees. This year, we'd like to include your recipe. What's your favorite comfort food? What dish do you look forward to when you go home to visit family? Write it down

and indicate the category (appetizer, salad, main dish, soup, vegetable, dessert, or other category) under which your recipe falls. Include a few sentences about the recipe's national or ethnic derivation. For example, is this a dish handed down for generations in your family, or one that is representative of your hometown region?

As in previous years, this collection will be given out at the Spring Research Festival. Please send your submission to Teri Cecil, Building 578, or e-mail it to tcecil@ncifcrf.gov by April 29. ✦



Did You Know?

A Look Back

1983

Dr. George F. Vande Woude was appointed Director of the LBI-Basic Research Program.

The NCI-FCRF AIDS Task Force was created to provide specialized support to investigators working on AIDS.

Two new support laboratories, Nucleic Acid and Protein Synthesis and Clinical Immunology Services, became fully operative.

Activities planned by the ERC included a Halloween Party, a trip to Atlantic City, going to the races at Charlestown, a whitewater rafting trip, and—we're not making this up—a Beer Blast.

1984

Animal care and technical support and veterinary functions were consolidated into the Laboratory Animal Sciences Program (LASP).

A 3-bedroom, 1-1/2 bath townhouse with finished basement rented for \$435 per month.

1985

The Frederick facility was officially designated as a Federally Funded Research and Development Center (FFRDC).

Construction of the Scientific Library and Conference Center began in November.

A new retirement/savings plan was introduced for all employees.

The cost of adult admission to Busch Gardens at Williamsburg was \$14.95. Hershey Park and King's Dominion each cost \$14.50.

1986

In March, the CRAY X-MP 2/2 supercomputer was put into operation. This was one of only about 115 such units in the country and the only

supercomputer dedicated solely to the biomedical sciences. It contained about 65 miles of wire and 70,000 soldered connections, and took seven months to build – did we mention it was built entirely by hand?

The Scientific Library and Conference Center was completed in August.

NIH began its centennial celebration in October, which lasted until October 1987.

All Coke machine prices were increased from 35 to 40 cents to cover the rising cost of stocking the machines.

1987

The cardkey system was activated to increase security for all buildings.

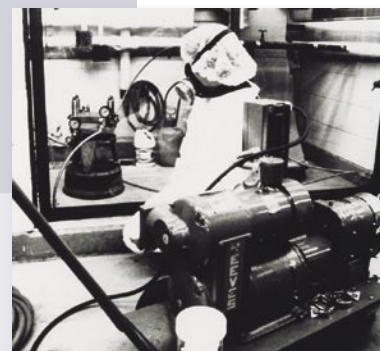
Data Management Services, Inc., (DMS) was named the new contractor for Computer and Statistical Services (C&SS).

The Central Clerical Pool replaced its Lexitron equipment with IBM-PC workstations equipped with WordPerfect software.

The "Beer Blast" (see 1983, above) was renamed the "Summer Social Hour." Per Army regulations, beer was available only until 6:00 p.m.

What's Your Favorite Memory of Working at NCI-Frederick?

We're always looking for more stories on the people and events that have made NCI-Frederick what it is today. If these notes on the past nudge your memory about colleagues, events (whether minor or significant, humorous or serious), or of pictures you've tucked away in a desk drawer, drop us a line at SPGM@ncifcrf.gov (put *The Poster* in the subject line) and tell us, or call the editors: Maritta Grau, 301-846-5248, graum@ncifcrf.gov; Nancy Parrish, 301-846-6281, parrishn@ncifcrf.gov. We'd love to hear from you. ♦



Environment, Health, and Safety Program

OHS Sponsors Smoking Cessation Open House

Anybody who thinks quitting smoking is easy has never tried to quit. But, if you're a smoker at NCI-Frederick and you're trying to quit, you're lucky. Because you have access to a huge network of support to help you through this difficult process.

Early in February, OHS sponsored a lunch-hour open house to introduce the types of services and products available to assist with the challenges of quitting smoking. Kitty Nalewaik, Clinical Manager, OHS, was pleased with the turnout. "It's our first open house and you never know if anyone will come," she commented. However, the event drew about 30 attendees, "which is more than we expected," according to Ms. Nalewaik. In addition to a healthy lunch, the open house included live demonstrations, free literature, and open discussions with specialists on the physical, emotional, biological, and even intellectual aspects of trying to quit smoking.

To help with the physiological aspect of quitting, OHS provided a display of the various aids that are available through OHS—including gum, lozenges, the patch, and even an alternative to smokeless tobacco. Lois Minchoff, Nurse Practitioner, explained that various tools are used to match the specific aid to the individual user. Different people, with different needs

and habits, will require different aids. In some cases, an antidepressant is prescribed to assist in the cessation process. "The best part, though, is that the nurses here really care about

behavioral aspects of smoking—including what the triggers are, when you feel the need for the cigarette, and what needs smoking satisfies. Mr. Cooper also indicated that a support group has been formed to provide additional help for people during the cessation process, and beyond.

Emotional needs may also be addressed through hypnosis therapy, as explained by Jill Cody, MA, LCPC. In the first of two sessions, the



what happens to each person. We really want them to be successful," Ms. Minchoff commented.

Emotional needs in quitting smoking run high, and Selden Cooper, EAP counselor, was on hand to explain how counseling can help in the process. Counseling sessions focus on the

therapist and client cover such topics as the client's history of smoking, the behaviors associated with smoking, the triggers for smoking, and the needs that are met with smoking. Specific goals in seeking to quit are

Environment, Health, and Safety Program

also discussed. The second session involves the actual hypnosis, which Ms. Cody defines as an “internally focused state of awareness.” The client is never unconscious. In fact, during this session, the client may talk with the therapist to explore alternative ways of meeting needs that were previously met by smoking. Suggestions are always consistent with the client’s individual values. The key is that the therapist draws only on what’s important to the client.

Laura Mannis, L.Ac., Dipl.Ac., explained the ways that acupuncture can address the biological aspect of smoking. Acupuncture, according to Ms. Mannis, stimulates the endocrine system, which, because it is repressed by nicotine, no longer responds appropriately to the toxins

being consumed. With acupuncture treatments, many clients notice that cigarettes start to taste bad. Acupuncture also revives the body’s ability to produce endorphins, a function that is also interfered with in smokers. In an 8-week program known as “Tobacufree,” Ms. Mannis combines acupuncture with behavior modifications to help make quitting a more natural process and helps the client remain tobacco-free long after treatment.

Endorphins are also released during massage, and Leslie Hornung, CMT, massage therapist/stress reduction therapist, helped people experience this phenomenon by actually providing massages on site. She explained that she uses a holistic approach to relaxation, by working on the whole body and not just a specific area. And,

reducing stress through massage is another way to help in the smoking cessation process.

To appeal to the intellect, Chris Miller, from the Scientific Library’s Center for Health Information, displayed some of the many resources on the effects of smoking that can be found in our own library on campus. He also offered free literature on the subjects of smoking and health.

Special thanks go to Carol Tobias, Manager, OHS Operations, for organizing a successful open house. For more information on any of the therapies or support programs, contact OHS at 301-846-1096, or ohs@ncifcrf.gov. ♦

Laboratory Animal Sciences Program

New LASP Managers Provide Expert Guidance

The **Laboratory Animal Sciences Program** provides the highest quality animal care and animal support services for all animal research at NCI-Frederick and NCI-Bethesda. The staff of more than 300, divided into Animal Colonies Oversight, Scientific Support Services, and Program Administration, meet investigators’ needs for biomedical research activities, ensuring that healthy animals are provided, and that the animals are housed, handled, and cared for humanely.

JanNean Williams began work in January as Manager of Facility Operations, managing the animal facilities in Buildings 550, 539-1CB, 567, 571, 1022, and 1048.



Mark Shrader (far left) and Dr. Bishop Curry (second from right) gather with two of the newest LASP managers, JanNean Williams and Roland Jones, Jr. Not pictured is Richard Jackson.

Roland Marshall Jones, Jr., became manager of the Receiving and Quarantine Facility, Building 429, in November. An experienced animal facility manager, Mr. Jones will contribute much to this part of LASP.

Richard Jackson is a supervisor, working with Dr. Terri McClellan, Manager of Technical Operations for 539-1-CB, and her team. More about these LASP members will follow in June ♦

Community Outreach

EOP Reaches Out to Future Scientists

The 2004-2005 school year hasn't ended yet, but already NCI-Frederick's **Elementary Outreach Program (EOP)** is preparing for the next school year. Not only do the participants in the EOP need to wrap up activities for this year, but they need to gather materials and review notes for next year's program.

Among those changes has been the transfer of leadership from longtime EOP administrator Barbara Birnman to Julie Hartman, OSO (Office of Scientific Operations). In addition to her regular duties, Ms. Hartman will now focus on the myriad tasks of coordinating volunteers with schools, gathering materials and lesson plans, among other things. Ms. Hartman has worked at NCI-Frederick since 1997, beginning as a "Stay in School" intern with the ARC (Administrative Resource Center) while she attended college. With a degree in elementary education, earned in 2002, Ms. Hartman said recently that "EOP is right up my alley. I love children and I was a volunteer, starting in 2002, and a third grade team leader for two years."

In addition, Ms. Hartman said, "As the new Program Administrator for the EOP, I am very excited about the opportunities we are giving to our future scientists. Barbara Birnman has handed the program over to me after several years of dedicating her time as the EOP Program Administrator. Barbara is still very much involved, coaching me along the way as well as continuing to be the fifth grade team leader."

Looking ahead to summer, Ms.

Hartman noted that July and August will be busy months for her, as well as for Colleen Mayo, the Frederick County Public School Math/Science Facilitator, and the team leaders. "That is when we do logistical things, such as most of the scheduling for the year and ordering supplies.



Each team is visiting four schools in Frederick County and some may visit more if one of the volunteers' children attends another school. In the past, we have even traveled out of the county to teach at one of our volunteers' children's schools."

The lessons are hands-on and correspond with the county's curriculum for each grade. For example, the first grade does a lesson on solids; second grade, changes; third grade, algae; fourth grade, bacteria; and fifth grade, food chemistry.

Each NCI-Frederick volunteer is grouped with about 4 to 6 students, usually working around a table or desks that have been placed closely together. The volunteers have detailed lesson plans to follow and guide the children through the scientific explorations.

"The students are very excited when they see all the manipulatives out on their desks and always enjoying learning once we begin the lesson." "Manipulatives" include, for first graders, "solids" such as a ball, a spoon, washers, and a cork.

The children "pick up the solids and try to build with them, and talk with their peers about what they think the item is used for. The third and fourth grade students get to use microscopes and make a vial of algae as part of their lesson, and the fifth graders use protein and glucose test strips. The manipulatives definitely encourage conversation between the students. Sometimes the students name their algae. It's hilarious!" Ms. Hartman said.

At the end of each school year, the EOP volunteers hold a picnic at the post pond to celebrate the year and reminisce about the year's events. "There always seem to be a few funny stories shared!" Ms. Hartman said.

Sound like fun? If so, please consider volunteering. The NCI-Frederick Elementary Outreach Program is looking for volunteers from all areas here, whether administrative or scientific. Go to the EOP Web site (<http://web.ncifcrf.gov/campus/outreach/eop/>) for more information, or contact Ms. Hartman at eop@ncifcrf.gov. "We always need new volunteers and new ideas!" she said. ♦

Community Outreach

Inspire Future Scientists!

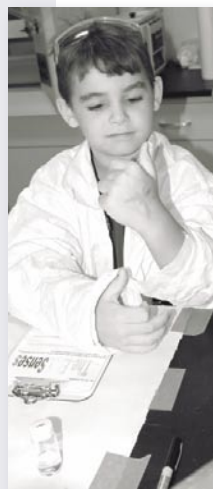
How often does your child get to see what you do? Probably not too often. But on July 13, your child and others have an opportunity to see real science at work “up close and personal” during the eighth annual **Take Your Child to Work Day**, jointly sponsored with Fort Detrick.

More than 1,000 children have participated in the event to date. TYCTW Day 2004 alone hosted more than 300. With so many wanting to attend TYCTW Day, we need you to sponsor a program in your area. After all, these may be future scientists who will carry on your work. Your participation is easy and tailored to suit your needs.

- As a program sponsor, you determine the age range and the number of children you can accommodate.
- You may sponsor a program in your work area or in the “Hub” area.
- The TYCTWD Planning Committee will help you develop a program and will provide supplies.
- While the day runs from 8:30 a.m. to 3:00 p.m., each session lasts only 45 minutes. All are well-spaced: 9:00–9:45 a.m., 10:30–11:15 a.m., and 1:00–1:45 p.m.
- The children and their parents or guardians come to you, escorted by a volunteer. If necessary, the Logistics Committee will arrange transportation.

“Hub” activities are centrally located in the grassy area outside Building 426 and include a variety of both educational and entertaining activities, from computer- and science-related projects to exploration of military vehicles.

Sign-up is easy! Just access the TYCTWD 2005 Web site (<http://kidsday.ncifcrf.gov>); there, you’ll also find a telephone hotline and photos from the 2004 event (Photo Gallery). A member of the Planning Committee will contact you once your information has been received. Questions? E-mail kidsday@ncifcrf.gov. ♦



Frederick Employee Diversity Team

Diversity Team Needs You

Who knows better than those of us working at NCI-Frederick the wealth of differences—and similarities—found in the world, whether we're looking through a microscope or through an office window? The **NCI-Frederick Employee Diversity Team (FEDT)** offers you many opportunities to explore these differences and similarities as they apply to you and your colleagues.

Would you like people at NCI-Frederick to learn more about the culture of your country? If so, perhaps the Frederick Employee Diversity Team (FEDT) could help. The FEDT is looking for people willing to help, even if only an hour or two each month, with committee work and sponsored events. ♦



The NCI-Frederick Poster

Ongoing Projects

The FEDT sponsors several ongoing projects to help make people more aware of the diversity within our workplace.

- You can explore the **Diversity Web site** at http://diversity.ncifcrf.gov/alt_content/. Among other things, the Web site provides a calendar of diversity events, offers you opportunities to volunteer and provides links to related sites.
- The **monthly movies** shown in the NCI-Frederick Café, in conjunction with the Scientific Library, explore different cultures through cinema. Often, the movie may be shown over a two-day period. Sometimes there is follow-up discussion after the movie. After the showing, the movies are available for borrowing in the Scientific Library.
- Also in the NCI-Frederick Café is the Diversity team's **display case**, in place since 2000 and exhibiting items that represent the wonderful complexity of cultures co-existing at NCI-Frederick. Displays range from posters to art objects and collectibles that NCI-Frederick employees donate or loan for various months. The displays change about every four to eight weeks. February and March, for example, focused on minority and women's health issues.
- Next to the display case is a large **world map**, where NCI-Frederick and Fort Detrick "families" are encouraged to place pins locating their geographic origins.
- This year, for the fourth year in a row, the Diversity Team will distribute **cookbooks** filled with international recipes contributed by NCI-Frederick employees (see related article on page 14). Send your favorite recipe to Teri Cecil by April 29. ♦

Special Events

Throughout the year, the FEDT sponsors special events; in the past, these have included a presentation by the Bernetta R. Brown Young, Gifted and Black Dance Troupe; step-dancing; a reggae festival; an Octoberfest celebration; and others.

The Diversity Team also collaborates with the Army's EEO office to promote camaraderie between civilian and military personnel. These have included participation in various monthly celebrations and an annual ticket raffle for the Army-sponsored Hawaiian luau, traditionally held on the Friday following the Spring Research Festival. ♦

The FEDT's Mission

The FEDT's mission is to create opportunities, sponsor activities, and develop outreach and education initiatives that

- Foster respect for all employees at NCI-Frederick;
- Celebrate the rich diversity that age, race, gender, ability, personality, culture, national origin, religious beliefs, sexual status, job classification, and other personal and organizational characteristics bring to the workplace;
- Create and maintain a work environment that values differences and similarities among all employees, and promotes productivity, work quality, equity, and respectful communication.

If you would like to join the FEDT, contact Paul Miller, Building 427, 301-846-5660, or e-mail him at millerp@ncifcrf.gov. ♦

Summer Student Seminar Series

Summer Student Seminar Series a Success

Since 1997, NCI scientists, in partnership with USAMRIID scientists, have presented their research to NCI and USAMRIID summer students. Supported by a grant from the NCI Gift Fund, the 2004 Summer Student Seminar Series comprised talks given from June through August. Topics included cell biology, cancer biology, immunology, HIV genetics, and molecular biology, as well as anthrax, Ebola vaccines, and glanders.

The NCI-Frederick Scientific Library, thanks to the efforts of Martha Summers, gave students free literature and CD-ROMs on various biomedical research topics. One such item was the Mill Hill Essays, a compilation of essays on different topics in biomedical research that is published yearly by the National Institute for Medical Research in London (access current essays, as well as archived ones, at <http://www.nimr.mrc.ac.uk/millhill essays/>). In addition, the University of Delaware Department of Biochemistry and Molecular Biology provided a credit card-style pocket reference tool with the standard genetic code on one side and the periodic table on the reverse side.

The “freebies” and all the other information provided proved very useful to the students during their internships and upon their return to classes. Special thanks go to Lin Grove, Laboratory of Experimental Immunology, for her hard work in ensuring that the “light refreshments” were ready every week. ♦

Interested in Helping with the 2005 Program?

The success of this seminar series relies on the efforts of the people here. Anyone interested in helping with the 2005 Summer Student Seminar Series should contact Dr. Howard Young at youngh@ncifcrf.gov. ♦

2005 NCI-Frederick - USAMRIID Summer Student Seminar Series

All seminars are at 12 p.m. in the Building 549 main auditorium.

June 14 Dr. Kei Amemiya

Enhancing the Immune Response to Vaccine Candidates with Immune Modulators

June 21 Dr. Michael Dean

Are Stem Cells the Key to Understanding Cancer?

June 28 Dr. Sandra Ruscetti

Extreme Makeover: How a Mouse Retrovirus Transforms Red Blood Cell Precursors into Leukemic Cells

July 5 Dr. Shyam Sharan

Functional Dissection of Human Breast Cancer Susceptibility Genes

July 12 Dr. C. Dahlem Smith

An Introduction to Pathology for the Young Scientist

July 19 Dr. Douglas Kuhns

Chronic Granulomatous Disease: A Classic Model for the Study of Genetic Diseases

July 26 Dr. Kathryn Jones

A Tale of Two Retroviruses: HIV and HTLV

August 2 Dr. Lisa Hensley

Development of Animal Models for Ebola and Marburg Virus Infections

August 9 Dr. Mansour Mohamadzadeh

Dendritic Cells: In the Forefront of Vaccine Development

This seminar series is supported by a grant from the NCI Gift Fund and is open to all NCI-Frederick and USAMRIID students and employees. Students from outside the NCI-Ft. Detrick community are also welcome. Refreshments are for students only.

Technology Transfer Branch (TTB)

NIH Approves New Material Transfer Agreement

The recently revised NIH “Policy for the Sharing of Model Organisms for Biomedical Research” encourages the sharing and dissemination of important research resources developed with NIH funding. Under this policy, NIH expects new, genetically modified model organisms and related resources, such as vectors, non-human embryonic stem cells, established cell lines, and protocols for genetic and phenotypic screens, generated with the aid of NIH funding, to be distributed to and shared with the scientific community in a timely manner. “Timely” means upon publication of the primary results announcing the development of the genetically modified model organisms. “Model organisms” include mammalian models, such as the mouse and rat, and non-mammalian models, such as budding yeast, social amoebae, roundworm, Arabidopsis, fruit fly, zebra fish, and frog.

Through the concerted efforts of NCI’s Technology Transfer Branch (NCI-TTB), NIH recently approved and introduced a new “Material Transfer Agreement for the Transfer of Model Organisms to Academic and Non-Profit Agencies” (MTA-TO), simplifying the process of including additional terms that may be needed in an MTA that covers the transfer of animals.

The MTA-TO provides an easy way to include language for sharing animals or model organisms that were created using Dupont-owned Cre-Lox or OncoMouse technologies and for including an Animal Transfer Agreement (ATA), which the NIH Animal Research Advisory Committee recommends accompany the MTA-TO for all transfers of live animals from NIH to outside institutions.

Implementation Guidelines

For all transfers of genetically modified animals, the NIH Animal Models Working Group (AMWG) strongly recommends that animal welfare terms be included in the terms of the MTA-TO for the transfer. The best way to accomplish this need is to attach a fully signed animal transfer agreement to the MTA for the transfer. As an alternative, the AMWG created an “Animal Transfer Addendum” which includes the necessary animal welfare terms in an addendum format. Although the NIH ATA (as a separately signed agreement) is not required to be attached to the MTA-TO, a fully signed ATA should be completed by the parties prior to the shipment of any live animal from NIH to outside institutions. The appropriate NCI-Frederick veterinary/animal staff may execute and independently document the signed ATA.

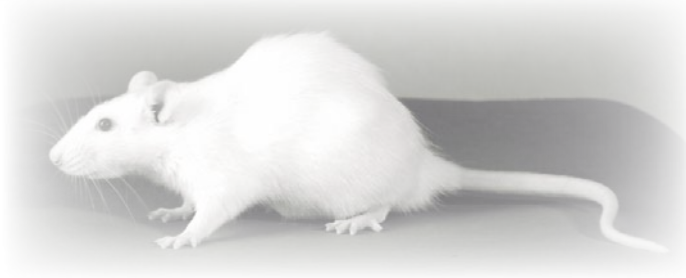
Signature Authority

Because the MTA-TO was approved by the NIH Technology Transfer Policy Board, it is considered an “NIH-approved” transfer agreement just like the Simple Letter Agreement (SLA). Therefore, the signature authority for the MTA-TO is the same as for the SLA, which delegates signature authority to the NCI lab/branch chief level.

Although your lab/branch chief may sign an unmodified MTA-TO, NCI-TTB encourages you, if you are an investigator, to contact your technology transfer specialist for assistance in completing the MTA-TO for the transfer of animals. The MTA-TO is available online at: <http://ttb.nci.nih.gov/forms.html>.

The NIH “Policy for Sharing of Model Organisms for Biomedical Research” is published online at: www.nih.gov/science/models/. Guidelines for sharing research resources are also available in the *NIH Intramural Research Sourcebook* under “Ethical Conduct—NIH Guide for Sharing Research Resources” at: <http://www1.od.nih.gov/oir/sourcebook/ethic-conduct/resources.htm>.

You can visit NCI-TTB and find your laboratory’s tech transfer specialist online at: <http://ttb.nci.nih.gov>. ♦



Data Management Services (DMS)

C&SS

Web Development Team

The Web Development team designs, develops, and implements Web-based applications and promotional Web sites to facilitate internal communications and activities as well as provide information to entities outside NCI-Frederick.

The services offered by the Web Development team consist of, but are not limited to:

- Web site design utilizing technologies such as Flash, Shockwave, and Streaming Media, along with the latest HTML standards;
- Database interaction and reporting using SQL server and ASP; and
- Web site development utilizing technologies such as ASP, XML, dHTML, CSS, ActionScript, and JavaScript.

The C&SS Web Development team maintains over 30,000 Web pages. No project is too small or too large for this diverse and skilled team. From the quick posting of a Request for Proposal to the facilitywide online shipping system, this team can handle it all.

While best known for the NCI-Frederick Web site (<http://www.ncifcrf.gov>), which contains user favorites such as the online phone



Front Row L to R: Patrick Moloney, Tim Siford, Zack Thomas, Kristy O'Neal, Jim Miller
Back Row L to R: Josh Lehman, Galen Mayfield, and Brian Hanshew

book and the Campus page, the Web team is also responsible for the development and maintenance of the Center for Cancer Research Web site (<http://ccr.cancer.gov>). Other popular sites include the interactive campus map, the NCI-Frederick calendar, the Recycling Web site, and the property database.

Web Development services are freely available to all members of the NCI-Frederick community. To obtain services, contact the Web Development team at 301-846-6700 or send an e-mail to webmaster@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

IMPORTANT NOTICE: WE'RE IN A NEW LOCATION

Microcomputer and Communications Support (MCS) and the Computer Services Helpdesk have moved from Trailer 363 to Trailer 360.

Dr. Joseph Kates Leaving Post as Director of the RTP

At the SAIC-Frederick, Inc., Winter Staff Meeting, Principal Investigator Dr. Larry Arthur announced that Dr. Joseph Kates, director of the Research Technology Program, would be retiring in March (see "Science Today," page 10, which features Dr. Paul Nisson's profile of Dr. Kates).

In 1999, then-SAIC-Frederick, Inc., Principal Investigator, Dr. Peter Fischinger, and Dr. John Deutsch, former CIA Director and a member of SAIC's Technology Board, recruited Dr. Kates to join SAIC-Frederick, Inc. Dr. Kates quickly made use of his broad experience in academia, pharmaceuticals, and business management to help the NCI identify key areas where SAIC-Frederick, Inc.'s support could strengthen the intramural program.

Working closely with NCI leaders, Dr. Kates began building and directing what is now known as the Research Technology Program (RTP). "He put together an NCI resource that enabled NCI principal investigators to perform twenty-first century research by using RTP platforms and expertise," said Dr. Gary Muschik, assistant director of the RTP. Some of the programs, their missions evolving to better meet NCI's needs, were blended from what in 1996 had been grouped under "Investigator-initiated Basic Research Programs" and "Technical Resources"; others were new.



Currently, the RTP, now one of nine directorates at SAIC-Frederick, Inc., includes 10 critically important laboratories: the Advanced Biomedical Computing Center, Clinical Monitoring Research Program,

Clinical Proteomics Reference Laboratory, Gene Expression Laboratory, Image Analysis Laboratory, Laboratory of Molecular Technology, Laboratory of Proteomics and Analytical Technologies, NCI Molecular Imaging Program, Protein Chemistry Laboratory, and the Protein Expression Laboratory. Support services include Central Glassware

Services, as well as Visual Communications, which includes Scientific Publications, Graphics & Media; the Conference Center; and Conference Planning Services.

Charged with providing senior leadership for SAIC-Frederick, Inc., Dr. Kates recruited Dr. Hendrick Bedigian, from The Jackson Laboratories, Bar Harbor, Maine, to lead the Laboratory Animal Sciences Program. In addition, Dr. Kates was instrumental in recruiting and hiring Dr. George Mitra, Biopharmaceutical Development Program; Dr. David Munroe, Laboratory of Molecular Technology; Dr. Timothy Veenstra, Laboratory of Proteomics and Analytical Technologies; Ken Michaels, Visual Communications; Dr. Stephen Lockett, Image Analysis Laboratory; Drs. Jim Hartley and Deb Chatterjee, Gene Expression Laboratory; and other staff members. ♦

Dr. Stephen Lockett Wins 2005 ESTC Award



Congratulations to Dr. Stephen Lockett, Image Analysis Laboratory. He was part of the team that recently won the prestigious 2005 Executive Science and Technical Council Award. His colleagues on the article included Koei Chin, Carlos Ortiz de Solorzano, David Knowles, Arthur Jones, William Chou, Enrique Garcia Rodriguez, Wen-Lin Kuo, Britt-Marie Ljung, Karen Chew, Kenneth Myambo, Monica Miranda, Sheryl Krig, James Garbe, Martha Stampfer, Paul Yaswen, and Joseph Gray. Their article, "In Situ Analyses of Genome Instability in Breast Cancer," was published in *Nature Genetics*, 36:984-988, 01 Sept 2004. ♦



AIDS Vaccine Program Hosts Popular Author Greg Bear

Greg Bear, the best-selling, award-winning science fiction author of more than 30 books, including most recently, *Darwin's Radio* and *Darwin's Children*, spoke to a packed house on February 15, in a program commemorating the 196th birthday of Charles Darwin. Introduced by AVP director Dr. Jeff Lifson, Mr. Bear spoke for about 30 minutes before fielding questions and exchanging information with NCI-Frederick scientists.

Mr. Bear described the in-depth research he does in preparation for writing. In addition to reading extensively in scientific journals, Mr. Bear also talks with leading researchers working in the scientific



areas relevant to his books. During his talk, Mr. Bear used refreshing analogies in presenting his ideas about meta-evolution, in which he proposes that rather than just being pathogens, some viruses may serve a positive function by providing useful genetic information, serving as a sort of "Fed Ex" for genes. "Evolution," he said, "is all about genetic exchange and communication, as well as competition."

In 2000, *Darwin's Radio* won the Endeavor Award, an annual juried prized for the best novel of speculative fiction by a Northwest author.

In 2001, it won the Nebula award, given by the Science Fiction Writers of America. The book also was nominated for a Hugo award. *Darwin's Children*, published in 2003, follows some of *Radio's* characters 11 years later as they deal with a world changed and possibly threatened by a retrovirus

that causes genetic mutations.

According to Dr. Lifson, "While this was the first time the AVP has hosted a science fiction author as a speaker, based on the enthusiastic reception Mr. Bear received and the lively discussion his presentation engendered, it may not be the last." ♦

Two Heads Are Better than One!

In the December 2004 *Poster*, we weren't quite accurate in recounting the information about the recent technical and scientific writing workshops held last November and in January 2005. Sukanya Bora organized the January workshop for contract personnel, while Cheryl Nolan organized the November one for NCI employees. Our apologies to both Ms. Bora and Ms. Nolan. ♦

In Memoriam: Robert MacKenzie

Robert D. MacKenzie, a maintenance electronics technician III with Facilities Maintenance and Engineering, died on February 27 at Frederick Memorial Hospital. He was the husband of Jody MacKenzie, who works in Financial and Administrative Systems. They were married for 33 years.

Bob served in the U.S. Army Reserves as a member of the 698th Supply Unit. He coached his sons in both the Shookstown and Frederick Babe Ruth baseball leagues. A charter member of the Mid-Atlantic Region Plymouth Club, Bob loved his 1934 Plymouth Rumble Seat Coupe, "Ol'

Joy." He and Jody drove Ol' Joy to various events sponsored by the Antique Automobile Club of America (AACA) and the Plymouth Owners Club, to which they both belonged.

In fact, it was his interest in cars that helped him get his job at SAIC-Frederick, Inc. Al Spade, his supervisor of 15 years, says he recognized right away that Bob's interest in antique cars meant he had the ability to work with his hands. "With talented hands like that, plus his education, he'd make an excellent technician. And, boy, did he exceed my expectations." Bob was a modest

man, who, according to one of his co-workers, always wanted to stand back and stay out of the spotlight. He was talented and well liked by all 16 of his co-workers, and, says Mr. Spade, "we are all grieving and sorely miss him."

His colleagues and friends at SAIC-Frederick, Inc., extend sincere sympathies to Jody, their sons James and Kenneth, and the rest of their family and friends. Memorial contributions may be made to St. Jude Children's Research Hospital, 501 St. Jude Place, Memphis, TN 38015, or to the charity of one's choice. ♦

Wilson Information Services Corporation (WISCO)

Check Out These Services at the Scientific Library

Check Out the Classes

The Scientific Library offers FREE, hands-on training throughout the year on topics of interest. Taught by library staff or guest instructors, most classes are held in the library's Microcomputer Lab in Building 549.

Scientific Library orientation sessions are held every month, usually on the second Wednesday. New employees are encouraged to attend to find out what's available, and seasoned employees may want to drop by to find out what's new (or what has changed since they started here). During Orientation, attendees see a demonstration of the library's Online

Catalog, practice navigating the library's Web page, learn about library services, and tour the library.

Interested? Please call 301-846-5840, or stop by the library to register. For more information about a class or the orientation, check the library Classes Web page at <http://www-library.ncifcrf.gov/libclass.asp>.

Parents, note! Special orientation sessions are held every June for high school and college students. Call the library for dates and information. ♦



Check Out the Center for Health Information:

Web Site Spotlight

Need information on a specific medical condition, like diabetes? Lyme disease? Breast cancer? Or maybe you want to learn about lowering your cholesterol, get tips on quitting smoking, or find out about a medication your doctor just prescribed for you.

Turn to MedLinePlus, at www.medlineplus.com. Created for consumers by the National Library of Medicine and recommended by the Center for Health Information, MedLinePlus has free, high-quality information from reliable sources, written in language you can understand.

You can find information on over 650 health topics, look up information on literally thousands of drugs, and learn through interactive tutorials. Use the directories to find doctors, dentists, and hospitals. Read the latest health news stories and learn about new drugs and treatments, or check the online medical encyclopedia for articles and pictures relating to hundreds of health issues.

For accurate health information, written in easy-to-understand language, check out MedLinePlus, at www.medlineplus.gov. ♦

Schedule of Classes Available from the Scientific Library

Introduction to Web of Science/ PORPOISE

Thursday, March 31, 2005
9:30 a.m.–11:30 a.m.

Unmasking Genes in the Human Genome

NCBI Mini Course
Lecture and Hands-on Practice
Guest Instructor
Thursday, April 14, 2005
Time to be announced

Staying Current with the Literature

Thursday, April 21, 2005
9:30 a.m.–11:30 a.m.

Introduction to EndNote

Thursday, May 12, 2005
9:00 a.m.–11:30 a.m.

Intermediate EndNote

Thursday, May 12, 2005
2:00 p.m.–4:30 p.m.

Reference Manager Overview

Thursday, May 5, 2005
9:30 a.m.–11:30 a.m.

Check Out the Films

Beginning with this issue, *The Poster* will feature a few of the films that are sponsored by the NCI-Frederick Employee Diversity Team and may be borrowed from the Scientific Library. Stop by the Circulation Desk to request them—you may borrow them for seven days at no cost, or view them in the Scientific Library. All are in DVD format. ♦



Scientific Library Orientation Sessions

Location:

Building 549, Microcomputer Lab

Time:

2:30 p.m.–4:00 p.m.

Wednesday, April 13

(National Library Week)

Wednesday, May 11

Wednesday, June 8

(tentative; may change)

Wednesday, July 13

Special student orientations are offered in June. Check the Web site for information: <http://www-library.ncifcrf.gov/libclass.asp>. ♦

Feature Films

Amistad

Directed by Steven Spielberg, 1997

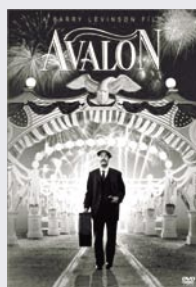
Chronicles the 1839 revolt on board the slave ship *Amistad* bound for America. Much of the story involves the courtroom drama about the slave who led the revolt. Rated R



Avalon

Written and directed by Barry Levinson, 1990

The story of several generations of a Jewish family, whose members go from poverty to prosperity. The world changes around them, but their love and humor hold the family together. Rated PG



Bend it Like Beckham

Directed by Gurinder Chadha, 2003

Eighteen-year-old Jesminder's parents want her to be a nice, conventional Indian girl. But she just wants to play soccer like her hero, David Beckham. For Jess, that means kicking a ball around the local park with the lads until she's spotted by Jules, who invites her to join the local women's team. Rated PG-13, for language and some sexual situations



The Commitments

Directed by Alan Parker, 1991

Fueled by raw talent and driven by dreams of glory, a dozen dead-enders from Dublin's gritty North Side share a passion for soul music that takes their band on a wild rollercoaster ride from the streets to superstardom. Rated R



Other Films Available

A Christmas Story

The Education of Little Tree

Finding Nemo

The Gods Must Be Crazy

Gorillas in the Mist:

The Story of Dian Fossey

A Great Wall

In America

Japanese Story

The Matchmaker

Mississippi Masala

Monsoon Wedding

Mostly Martha

My Big Fat Greek Wedding

Osama

Remember the Titans

Shrek

Smoke Signals

Songcatcher

The Station Agent

To Kill a Mockingbird

Tortilla Soup

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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.html>

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:

Spring Research Festival — Wednesday and Thursday, May 18 and 19

Opening of the Farmers' Market — Tuesday, June 21

Take Your Child to Work Day — Wednesday, July 13

Campus Improvement Committee Projects

The National Cancer Institute at Frederick

Poster

Frederick, MD 21702-1201