



Poster

NATIONAL CANCER INSTITUTE AT FREDERICK

FALL 2013

Partnership to Explore New Drug Combination for Pancreatic Cancer

By Frank Blanchard, Staff Writer

Scientists at NCI and Frederick National Laboratory for Cancer Research (FNLCR) are partnering with the Lustgarten Foundation to test whether a vitamin D derivative will make a difference when combined with a conventional anticancer drug in treating tumors of the pancreas.

The preclinical trials will be carried out in genetically engineered mice and represent the first in a series of new therapeutic approaches to be developed and evaluated under a collaboration between the NCI Center for Advanced Preclinical Research (CAPR) and the foundation, the nation's largest private funder of pancreatic cancer research. CAPR is headed by NCI's Terry Van Dyke, Ph.D., and staffed by FNLCR researchers.

The initial study will test the effectiveness of combining calcipotriol, a synthetic derivative of vitamin D, and gemcitabine, a drug used in cancer care, in extending the lives of patients with pancreatic cancer.



Terry Van Dyke, Ph.D., director, NCI Center for Advanced Preclinical Research

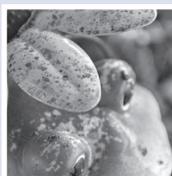
Using a genetically engineered mouse model for pancreatic cancer, the study will assess how well calcipotriol and gemcitabine can penetrate the notoriously stubborn connective tissue in pancreatic cancer. If the approach works in mice, it is expected to be tried in human clinical trials.

The study is being led by Lustgarten grantee Ronald M. Evans, Ph.D., a professor at the Salk Institute for Biological Studies, and Van Dyke. Evans previously examined the effectiveness of calcipotriol in preventing scarring (fibrosis) in the liver, which is similar to the changes that occur to the connective tissue, or stroma, in pancreatic tumors. He found that the vitamin D synthetic derivative prevented liver fibrosis. The question is whether the effect can be derivative repeated in pancreatic cancer stroma.

“Our partnership with the Lustgarten Foundation enables us to extend promising discoveries from expert scientists, as with the Evans project, and, in collaboration, apply them to the development of treatments for cancer patients,” Van Dyke said. The approach takes advantage of CAPR's vast expertise in preclinical model evaluation, along with the extensive integrated technologies of FNLCR.

“If this study confirms that this therapeutic

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From the Executive Editor



Melissa Porter,
Executive Editor

Coming Soon: An All-New Poster

The Poster is changing, in some very significant ways.

First, as you know, the Poster is no longer being printed; it is being posted on the NCI at Frederick staff website – allowing you to see your favorite stories in color, and to link to other articles and websites of interest. It also saves money in the printing and delivery costs.

But more changes are in store.

In 2014, we will launch the all-new, web-based Poster, located on the NCI at Frederick staff website. The new Poster will be fully interactive, with links to websites, videos, social media sites, and more. And the site will be updated regularly, so you'll find a steady stream of timely features, new discoveries, and important announcements.

We're still in the development stages, so look for more information in the last issue of the year, scheduled to be posted to the NCI at Frederick website in late December.

Until then, the Poster staff joins me in wishing you a happy holiday season, and an exciting and productive new year!

Melissa Porter, Executive Editor

Partnership

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combination designed by the Evans group has a positive impact, it could be the key to unlocking further improvements in treating this deadly disease,” she said.

Lustgarden Executive Director Kerri Kaplain said, “We are honored to combine our funding and expertise with NCI’s prestigious CAPR program for this important study, which will provide critical data for identifying and developing new treatment options for those diagnosed with pancreatic cancer.” ■



Novel Vaccine Approach Achieves “Functional Cure” of AIDS Virus in Monkeys

By Frank Blanchard, Staff Writer, and Jeff Lifson, Guest Writer

Scientists at the Oregon Health & Science University and the AIDS and Cancer Virus Program of the Frederick National Laboratory for Cancer Research have used a novel vaccine approach to achieve a “functional cure” and apparent eradication of infection with a monkey version of the AIDS virus.

In a paper published online in *Nature*, the group reported success with an experimental vaccine for simian immunodeficiency virus (SIV), an AIDS-inducing virus that infects rhesus macaques and is so similar to HIV that it is a widely used model for AIDS studies in monkeys.

Vaccinated animals that were experimentally infected via rectal, vaginal, and intravenous routes—the principal routes of HIV transmission—were able to control the infection with a highly pathogenic strain of SIV, reducing the amount of virus in the blood to below detectable levels.

After up to three years of follow-up, the investigators were unable to demonstrate the presence of SIV, despite extensive analysis of many necropsy tissues, using ultra-sensitive, state-of-the-art assays.

To further investigate the apparent clearance of infection, the investigators studied several animals in detail, taking repeated tissue samples from the animals, starting as soon as they first showed evidence of controlling the virus. Results showed they were definitely infected, with clear initial evidence of virus in the sampled tissues. The animals also developed new immune responses against parts of SIV that were not included in the vaccine. Over time, however, the scientists could no longer detect evidence of the virus or culture it, or measure the new infection-dependent immune responses. In contrast, immune responses



From left: Jeff Lifson, M.D., director of the AIDS and Cancer Virus Program; Brandon Keele, Ph.D., head, Viral Evolution Core; Jacob Estes, Ph.D., head, Tissue Analysis Core; and Michael Piatak, Jr., Ph.D., head, Quantitative Molecular Diagnostics Core. This group collaborated with scientists at the Oregon Health & Science University to advance the line of research culminating in the *Nature* publication describing a novel vaccine approach that achieved a function cure of the AIDS virus in monkeys.

induced by the vaccine remained robust and stable.

Perhaps most dramatically, when investigators transferred large numbers of cells to new uninfected animals, using cells from infected donors that were either rare animals that showed spontaneous control of SIV infection, or animals receiving suppressive antiretroviral drug treatment, the recipients rapidly showed evidence of high levels of infection. In striking contrast, using the same cell transfer procedure from vaccinated animals that appeared to have cleared their infections, there was no evidence of infection in the recipients over extended follow-up.

The research team stopped short of saying that the virus was completely gone, but they wrote, “these data strongly support progressive immune-

mediated clearance of an established lentivirus infection, leading to a situation meeting criteria for a functional cure and consistent with possible viral eradication.”

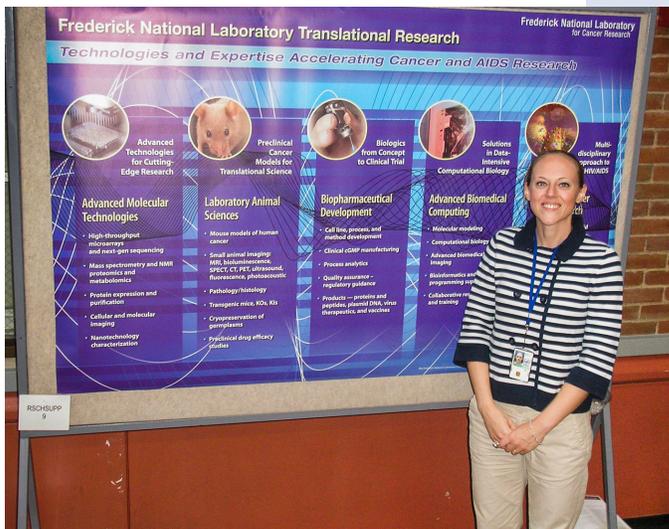
The milestone, published in *Nature* the week of September 11, is the latest step in an ongoing line of collaborative research in which the investigators have been testing a new approach for developing an AIDS vaccine.

To read the whole paper, go to <http://www.nature.com/nature/journal/vaop/ncurrent/full/nature12519.html>. ■

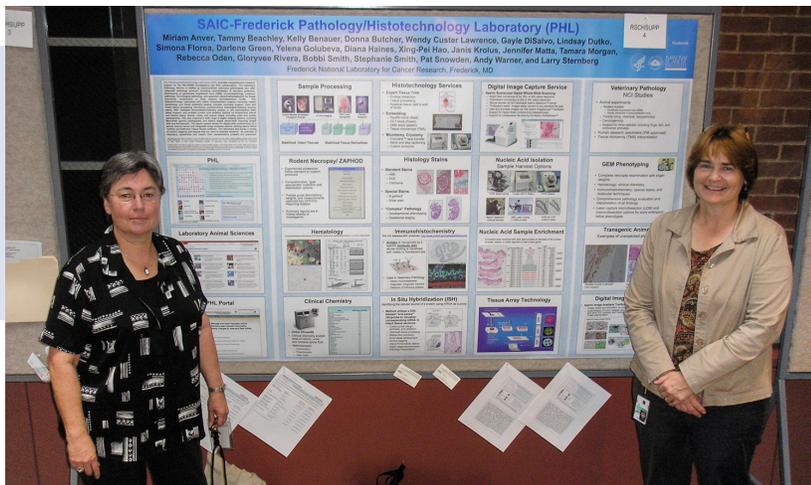
Jeff Lifson, M.D., is the director of the AIDS and Cancer Virus Program.

NIH Research Festival

NCI at Frederick was represented at the 27th NIH Research Festival, held November 6–8 in the NIH Clinical Center, Building 10.



Photos courtesy of Andrea Frydl.



New Approach for Producing and Purifying IL-15 Heterodimers That Have Potent Immune Effect

By Nancy Parrish, Staff Writer

Cytokines are proteins that play a crucial role in the human immune system by delivering messages that trigger the activation of immune cells to fight off attacks from viruses or other invaders.

Cristina Bergamaschi, Ph.D., NCI Center for Cancer Research, has been studying the mechanism of expression and function of a cytokine known as interleukin-15 (IL-15) for the last five years, in collaboration with Elena Chertova, Ph.D., and other researchers in the Retroviral Protein Chemistry Core (RPCC) of the AIDS and Cancer Virus Program (ACVP), Frederick National Laboratory for Cancer Research.

A form of human IL-15 produced in *Escherichia coli* (*E. coli*) is in initial testing in the clinic, but, according to Bergamaschi, staff scientist in Human Retrovirus Pathogenesis Section (HRPS), Vaccine Branch, “it poses multiple challenges for clinical use due to its instability and rapid plasma clearance.”

The group’s previous findings revealed that “circulating IL-15 exists exclusively in association with soluble IL-15R alpha (sIL-15R α),” Bergamaschi said. This type of structure is known to biochemists as a heterodimer. These findings suggest that the “IL-15 heterodimer is the natural, biologically relevant form of the cytokine in vivo,” she added.

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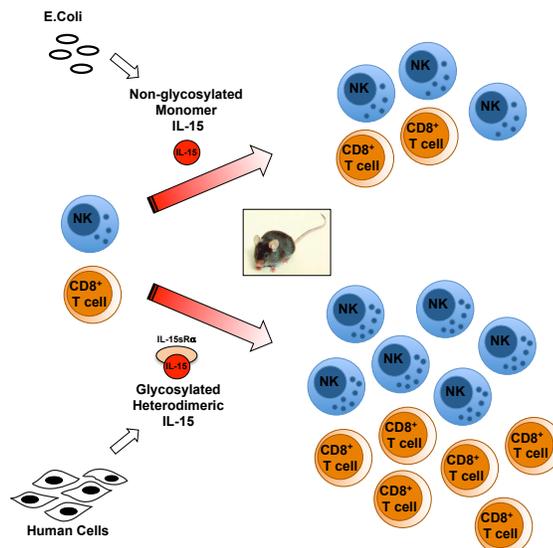


From left: Elena Chertova, Ph.D., head, Retroviral Protein Chemistry Core, AIDS and Cancer Virus Program, Frederick National Laboratory for Cancer Research, and Cristina Bergamaschi, Ph.D., staff scientist, Human Retrovirus Pathogenesis Section, Vaccine Branch, Center for Cancer Research.

Characterization and Favorable In Vivo Properties of Heterodimeric Soluble IL-15-IL-15R α Cytokine Compared to IL-15 Monomer

Elena Chertova, Cristina Bergamaschi, Oleg Chertov, Raymond Sowder, Jenifer Bear, James D. Roser, Rachel K. Beach, Jeffrey D. Lifson, Barbara K. Felber, and George N. Pavlakis
J Biol Chem 288(25):18093-18103, 2013

Interleukin-15 (IL-15), a 114-amino acid cytokine related to IL-2, regulates immune homeostasis and the fate of many lymphocyte subsets. We reported that, in the blood of mice and humans, IL-15 is present as a heterodimer associated with soluble IL-15 receptor α (sIL-15R α). Here, we show efficient production of this noncovalently linked but stable heterodimer in clonal human HEK293 cells and release of the processed IL-15•sIL-15R α heterodimer in the medium. Purification of the IL-15 and sIL-15R α polypeptides allowed identification of the proteolytic cleavage site of IL-15R α and characterization of multiple glycosylation sites. Administration of the IL-15•sIL-15R α heterodimer reconstituted from purified subunits resulted in sustained plasma IL-15 levels and in robust expansion of NK and T cells in mice, demonstrating pharmacokinetics and in vivo bioactivity superior to single-chain IL-15. These identified properties of heterodimeric IL-15 provide a strong rationale for the evaluation of this molecule for clinical applications. ■



Human-derived IL-15•sIL-15R α is shown to have stronger effects on the immune system than *E. coli*-derived monomeric IL-15.

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In a 2013 paper published in the *Journal of Biochemistry*, co-authors Chertova, head, RPCC, and Bergamaschi describe the development of a systematic way to reproduce the natural steps of production and processing of IL-15/sIL-15R α in engineered human cells. They also describe a method for efficiently purifying these heterodimers, which, in mice, were shown to last longer in the bloodstream, to be more stable, and to produce a more potent immune response than IL-15 monomers.

This complex of IL-15 and sIL-15R α “prolongs the bioavailability of IL-15 in the organism,” Chertova said. Such heterodimers “could be more potent than monomeric IL-15 for stimulating the

immune system against diseases, such as cancer,” Bergamaschi said, and their properties “provide a strong rationale for the evaluation of this molecule for clinical applications.”

Chertova, who earned her doctorate at Shemyakin Institute of Bioorganic Chemistry, Russian Academy of Sciences, Moscow, joined ACVP in 1994 and became head of the RPCC in 2004. Bergamaschi earned her doctorate in molecular medicine, specializing in immunology, from the University of Milan, Italy, in 2008. Following a postdoc under the supervision of George N. Pavlakis, M.D., Ph.D., she became a staff scientist in the HRPS, headed by Barbara K. Felber, Ph.D., in 2012.

The next step in their research is the evaluation of the effects of IL-15 heterodimers in macaques, to guide the clinical development of IL-15/sIL-15R α . They will also work on large-scale production and purification of the heterodimers to generate current Good Manufacturing Practice (cGMP) material that may be used in additional studies; develop methods to test the material’s stability, purity, and activity; and design a Phase I clinical trial against cancer. IL-15/sIL-15R α will be the first recombinant protein that is a non-covalently linked heterodimer to be produced under cGMP regulations. ■

Editor’s note: The following 56 articles have been selected from 14 of the most prestigious science journals published during the six-month period from April to October 2013.

Blood

Astermark J, Donfield SM, et al. The polygenic nature of inhibitors in hemophilia A: results from the Hemophilia Inhibitor Genetics Study (HIGS) Combined Cohort. *Blood* 121(8):1446-1454, 2013. <http://bloodjournal.hematologylibrary.org/content/121/8/1446.long>

Klion AD, Mejia R, et al. Chronic active Epstein-Barr virus infection: a novel cause of lymphocytic variant hypereosinophilic syndrome. *Blood* 121(12):2364-2366, 2013. <http://bloodjournal.hematologylibrary.org/content/121/12/2364.long>

Kuehn HS, Niemela JE, et al. Loss-of-function of the protein kinase C delta (PKC delta) causes a B-cell lymphoproliferative syndrome in humans. *Blood* 121(16):3117-3125, 2013. <http://bloodjournal.hematologylibrary.org/content/121/16/3117.long>

Purdue MP, Hofmann JN, et al. A prospective study of 67 serum immune and inflammation markers and risk of non-Hodgkin lymphoma. *Blood* 122(6):951-957, 2013. <http://bloodjournal.hematologylibrary.org/content/122/6/951.long>

Wolff M, Schwinn S, et al. Src-kinase inhibitors sensitize human cells of myeloid origin to Toll-like-receptor-induced interleukin 12 synthesis. *Blood* 122(7):1203-1213, 2013. <http://bloodjournal.hematologylibrary.org/content/122/7/1203.long>

Cancer Research

Ittmann M, Huang J, et al. Animal models of human prostate cancer: The Consensus Report of the New York meeting of the Mouse Models of Human Cancers Consortium Prostate Pathology Committee. *Cancer Res* 73(9):2718-2736, 2013. <http://cancerres.aacrjournals.org/content/73/9/2718.long>

Cell

Nussinov R, Tsai CJ. Allostery in disease and in drug discovery. *Cell* 153(2):293-305, 2013. <http://www.sciencedirect.com/science/article/pii/S0092867413003917>

Journal of Biological Chemistry

Chen KQ, Liu MY, et al. Signal relay by CC chemokine receptor 2 (CCR2) and formylpeptide receptor 2 (Fpr2) in the recruitment of monocyte-derived dendritic cells in allergic airway inflammation. *J Biol Chem* 288(23):16262-16273, 2013. <http://www.jbc.org/content/288/23/16262.long>

Chertova E, Bergamaschi C, et al. Characterization and favorable in vivo properties of heterodimeric soluble IL-15 center dot IL-15R alpha cytokine compared to IL-15 monomer. *J Biol Chem* 288(25):18093-18103, 2013. <http://www.jbc.org/content/288/25/18093.long>

Chung S, Miller JT, et al. Examining the role of the HIV-1 reverse transcriptase p51 subunit in positioning and hydrolysis of RNA/DNA hybrids. *J Biol Chem* 288(22):16177-16184, 2013. <http://www.jbc.org/content/288/22/16177.long>

Oguariri RM, Dai L, et al. Interleukin-2 inhibits HIV-1 replication in some human t cell lymphotropic virus-1-infected cell lines via the induction and incorporation of APOBEC3G into the virion. *J Biol Chem* 288(24):17812-17822, 2013. <http://www.jbc.org/content/288/24/17812.long>

Patki M, Chari V, et al. The ETS domain transcription factor ELK1 directs a critical component of growth signaling by the androgen receptor in prostate cancer cells. *J Biol Chem* 288(16):11047-11065, 2013. <http://www.jbc.org/content/288/16/11047.full>

Singh A, Winterbottom EF, et al. Abelson interactor 1 (Abi1) and its interaction with Wiskott-Aldrich syndrome protein (Wasp) are critical for proper eye formation in xenopus embryos. *J Biol Chem* 288(20):14135-14146, 2013. <http://www.jbc.org/content/288/20/14135.long>

Tsutsui Y, Ramakrishnan B, et al. Crystal structures of beta-1,4-galactosyltransferase 7 reveal conformational changes and substrate binding. *J Biol Chem* [Epub ahead of print] <http://www.jbc.org/content/early/2013/09/19/jbc.M113.509984.long>

Wei H, Bera TK, et al. A modified form of diphthamide causes immunotoxin resistance in a lymphoma cell line with a deletion of the WDR85 gene. *J Biol Chem* 288(17):12305-12312, 2013. <http://www.jbc.org/content/288/17/12305.long>

Zhang SF, Schones DE, et al. High mobility group protein N5 (HMGN5) and lamina-associated polypeptide 2 alpha (LAP2 alpha) interact and reciprocally affect their genome-

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wide chromatin organization. *J Biol Chem* 288(25):18104-18109, 2013. <http://www.jbc.org/content/288/25/18104.long>

Journal of Clinical Investigation

Chen KD, Liu MY, et al. Formylpeptide receptor-2 contributes to colonic epithelial homeostasis, inflammation, and tumorigenesis. *J Clin Invest* 123(4):1694-1704, 2013. <http://www.jci.org/articles/view/65569>

Onnis B, Fer N, et al. Autocrine production of IL-11 mediates tumorigenicity in hypoxic cancer cells. *J Clin Invest* 123(4):1615-1629, 2013. <http://www.jci.org/articles/view/59623>

Journal of Experimental Medicine

Hasan UA, Zannetti C, et al. The human papillomavirus type 16 E7 oncoprotein induces a transcriptional repressor complex on the toll-like receptor 9 promoter. *J Exp Med* 210(7):1369-1387, 2013. <http://jem.rupress.org/content/210/7/1369.long>

Kiviranta R, Yamana K, et al. Coordinated transcriptional regulation of bone homeostasis by Ebf1 and Zfp521 in both mesenchymal and hematopoietic lineages. *J Exp Med* 210(5):969-985, 2013. <http://jdr.sagepub.com/content/early/2013/08/01/0022034513500306.full>

Singh SK, Williams CA, et al. Sirt1 ablation promotes stress-induced loss of epigenetic and genomic hematopoietic stem and progenitor cell maintenance. *J Exp Med* 210(5):987-1001, 2013. <http://jem.rupress.org/content/210/5/987.full>

Journal of Immunology

Alvarez M, Sungur CM, et al. Contrasting effects of anti-Ly49A due to MHC class I cis binding on nk cell-mediated allogeneic bone marrow cell resistance. *J Immunol* 191(2):688-698, 2013. <http://www.jimmunol.org/content/191/2/688.long>

Dauphinee SM, Clayton A, et al. SASH1 is a scaffold molecule in endothelial TLR4 signaling. *J Immunol* 191(2):892-901, 2013. <http://www.jimmunol.org/content/191/2/892.long>

Park H, Adamson L, et al. Polyinosinic-polycytidylic acid is the most effective TLR adjuvant for SIV gag protein-induced t cell responses in nonhuman primates. *J Immunol* 190(8):4103-4115, 2013. <http://www.jimmunol.org/content/190/8/4103.long>

Schreiner J, Kretschmer D, et al. Staphylococcus aureus phenol-soluble modulins peptides modulate dendritic cell functions and increase in vitro priming of regulatory T cells. *J Immunol* 190(7):3417-3426, 2013. <http://www.jimmunol.org/content/190/7/3417.long>

www.jimmunol.org/content/190/7/3417.long

Shenderov K, Barber DL, et al. Cord factor and peptidoglycan recapitulate the Th17-promoting adjuvant activity of mycobacteria through Mincle/CARD9 signaling and the inflammasome. *J Immunol* 190(11):5722-5730, 2013. <http://www.jimmunol.org/content/190/11/5722.long>

Shi GP, Vistica BP, et al. Differential involvement of Th1 and Th17 in pathogenic autoimmune processes triggered by different TLR ligands. *J Immunol* 191(1):415-423, 2013. <http://www.jimmunol.org/content/191/1/415.long>

Tewary P, de la Rosa G, et al. beta-defensin 2 and 3 promote the uptake of self or CpG DNA, enhance IFN-alpha production by human plasmacytoid dendritic cells, and promote inflammation. *J Immunol* 191(2):865-874, 2013. <http://www.jimmunol.org/content/191/2/865.long>

Molecular and Cellular Biology

Huggins CJ, Malik R, et al. C/EBPgamma suppresses senescence and inflammatory gene expression by heterodimerizing with C/EBPbeta. *Mol Cell Biol* 33(16):3242-58, 2013. <http://mcb.asm.org/content/33/16/3242.long>

Nature

Creighton CJ, Morgan M, et al. Comprehensive molecular characterization of clear cell renal cell carcinoma. *Nature* 499(7456):43-49, 2013. <http://www.nature.com/nature/journal/v499/n7456/full/nature12222.html>

Lammermann T, Afonso PV, et al. Neutrophil swarms require LTB4 and integrins at sites of cell death in vivo. *Nature* 498(7454):371-+, 2013. <http://www.nature.com/nature/journal/v498/n7454/full/nature12175.html>

Nature Genetics

Berndt SI, Gustafsson S, et al. Genome-wide meta-analysis identifies 11 new loci for anthropometric traits and provides insights into genetic architecture. *Nat Genet* 45(5):501-U69, 2013. <http://www.nature.com/ng/journal/v45/n5/full/ng.2606.html>

Chung CC, Kanetsky PA, et al. Meta-analysis identifies four new loci associated with testicular germ cell tumor. *Nat Genet* 45(6):680-+, 2013. <http://www.nature.com/ng/journal/v45/n6/full/ng.2634.html>

Eeles RA, Al Olama AA, et al. Identification of 23 new prostate cancer susceptibility loci using the iCOGS custom genotyping array. *Nat Genet* 45(4):385-391, 2013. <http://www.nature.com/ng/journal/v45/n4/full/ng.2560.html>

[nature.com/ng/journal/v45/n4/full/ng.2560.html](http://www.nature.com/ng/journal/v45/n4/full/ng.2560.html)

Lonsdale J, Thomas J, et al. The genotype-tissue expression (GTEx) project. *Nat Genet* 45(6):580-585, 2013. <http://www.nature.com/ng/journal/v45/n6/full/ng.2653.html>

Monda KL, Chen GK, et al. A meta-analysis identifies new loci associated with body mass index in individuals of African ancestry. *Nat Genet* 45(6):690-+, 2013. <http://www.nature.com/ng/journal/v45/n6/full/ng.2608.html>

Savage SA, Mirabello L, et al. Genome-wide association study identifies two susceptibility loci for osteosarcoma. *Nat Genet* 45(7):799-+, 2013. <http://www.nature.com/ng/journal/v45/n7/full/ng.2645.html>

Nature Medicine

Cubas RA, Mudd JC, et al. Inadequate T follicular cell help impairs B cell immunity during HIV infection. *Nat Med* 19(4):494-+, 2013. <http://www.nature.com/nm/journal/v19/n4/full/nm.3109.html>

Lucas D, Scheiermann C, et al. Chemotherapy-induced bone marrow nerve injury impairs hematopoietic regeneration. *Nat Med* 19(6):695-+, 2013. <http://www.nature.com/nm/journal/v19/n6/full/nm.3155.html>

Ranasinghe S, Cutler S, et al. Association of HLA-DRB1-restricted CD4(+) T cell responses with HIV immune control. *Nat Med* 19(7):930-+, 2013. <http://www.nature.com/nm/journal/v19/n7/full/nm.3229.html>

Wang X, Zhao YJ, et al. Loss of sorting nexin 27 contributes to excitatory synaptic dysfunction by modulating glutamate receptor recycling in Down's syndrome. *Nat Med* 19(4):473-+, 2013. <http://www.nature.com/nm/journal/v19/n4/full/nm.3117.html>

Oncogene

Aprelikova O, Palla J, et al. Silencing of miR-148a in cancer-associated fibroblasts results in WNT10B-mediated stimulation of tumor cell motility. *Oncogene* 32(27):3246-3253, 2013. <http://www.nature.com/onc/journal/v32/n27/full/onc2012351a.html>

Hudson RS, Yi M, et al. MicroRNA-106b-25 cluster expression is associated with early disease recurrence and targets caspase-7 and focal adhesion in human prostate cancer. *Oncogene* 32(35):4139-4147, 2013. <http://www.nature.com/onc/journal/v32/n35/full/onc2012424a.html>

Tang Y, Horikawa I, et al. Downregulation of splicing factor SRSF3 induces p53 beta, an alternatively spliced isoform of p53 that promotes cellular senescence. *Oncogene*

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Students Share Their Research at Student Poster Day

By Ashley DeVine, Staff Writer

More than 50 Werner H. Kirsten student interns and college interns presented their research at Summer Student Poster Day on August 6 in the Building 549 lobby.

Joseph Bergman, a high school intern in the Center for Cancer Research Nanobiology Laboratory, participated in the event “for the opportunity to present my summer research. It allowed me to meet people and get the experience of sharing and explaining my work.” ■



See more photos on page 9.

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32(22):2792-2798, 2013. <http://www.nature.com/ncj/journal/v32/n22/full/ncj2012288a.html>

Proceedings of the National Academy of Sciences

Alazawi W, Heath H, et al. Stat2 loss leads to cytokine-independent, cell-mediated lethality in LPS-induced sepsis. *Proc Natl Acad Sci U S A* 110(21):8656-8661, 2013. <http://www.pnas.org/content/110/21/8656.long>

Chen J, Feigenbaum L, et al. Insulin-dependent diabetes induced by pancreatic beta cell expression of IL-15 and IL-15R alpha. *Proc Natl Acad Sci U S A* 110(33):13534-13539, 2013. <http://www.pnas.org/content/110/33/13534.long>

Feng MQ, Gao W, et al. Therapeutically targeting glypican-3 via a conformation-specific single-domain antibody in hepatocellular carcinoma. *Proc Natl Acad Sci U S A* 110(12):E1083-E1091, 2013. <http://www.pnas.org/content/110/12/E1083.long>

Lin DC, Xu L, et al. Genomic and functional characterizations of phosphodiesterase sub-type 4D in human cancers. *Proc Natl Acad*

Sci U S A 110(15):6109-6114, 2013. <http://www.pnas.org/content/110/15/6109.long>

Rein A. Murine leukemia virus p12 functions include hitchhiking into the nucleus. *Proc Natl Acad Sci U S A* 110(23):9195-9196, 2013. <http://www.pnas.org/content/110/23/9195.long>

Stavrou S, Nitta T, et al. Murine leukemia virus glycosylated Gag blocks apolipoprotein B editing complex 3 and cytosolic sensor access to the reverse transcription complex. *Proc Natl Acad Sci U S A* 110(22):9078-9083, 2013. <http://www.pnas.org/content/110/22/9078.long>

Sundararaman SA, Liu WM, et al. Plasmodium falciparum-like parasites infecting wild apes in southern Cameroon do not represent a recurrent source of human malaria. *Proc Natl Acad Sci U S A* 110(17):7020-7025, 2013. <http://www.pnas.org/content/110/17/7020.long>

Varadarajan J, McWilliams MJ, et al. Treatment with suboptimal doses of raltegravir leads to aberrant HIV-1 integrations. *Proc Natl Acad Sci U S A* 110(36):14747-14752, 2013. <http://www.pnas.org/con->

[tent/110/36/14747.long](http://www.pnas.org/content/110/36/14747.long)

Science

Chaigne-Delalande B, Li FY, et al. Mg²⁺ regulates cytotoxic functions of NK and CD8 T cells in chronic EBV infection through NKG2D. *Science* 341(6142):186-191, 2013. <http://www.sciencemag.org/content/341/6142/186.long>

Grohman JK, Gorelick RJ, et al. A guanosine-centric mechanism for RNA chaperone function. *Science* 340(6129):190-195, 2013. <http://www.sciencemag.org/content/340/6129/190.long>

Hansen SG, Sacha JB, et al. Cytomegalovirus vectors violate CD8(+) T Cell epitope recognition paradigms. *Science* 340(6135):940+, 2013. <http://www.sciencemag.org/content/340/6135/1237874.full>

McLellan JS, Chen M, et al. Structure of RSV fusion glycoprotein trimer bound to a prefusion-specific neutralizing antibody. *Science* 340(6136):1113-1117, 2013. <http://www.sciencemag.org/content/340/6136/1113.long> ■

Student Interns Tour Two NIH Facilities

Thirty-five Werner H. Kirsten student interns toured the National Library of Medicine and the National Institutes of Health Clinical Center in Bethesda in August to learn about the services and opportunities available. ■



Shana Potash, director of the National Library of Medicine Visitor Center, at left, spoke to students about the history of the library. Behind her is “The Evolution of the Library of Medicine,” a display of the library’s previous locations. Photos courtesy of Julie Hartman



Students looked at two plexiglass “books” in the National Library of Medicine. These “books” are part of the library’s Visible Human Project, which aims to create three-dimensional representations of male and female bodies. (http://www.nlm.nih.gov/research/visible/visible_human.html).



Elementary Outreach Program

Is This Your Year to Inspire a Child?

By Julie Hartman, Guest Writer

The Elementary Outreach Program (EOP) is looking for volunteers for the 2013–2014 school year.

This program is designed to bring science into the classrooms of Frederick County students in grades 1 through 5. You'll have a chance to work with small groups of children, presenting hands-on lessons that are coordinated with the school curriculum.

Volunteer teams in each grade are scheduled to visit four schools in Frederick County this year.

Minimal Time Commitment

Being an EOP volunteer requires a minimal time commitment – you are asked to commit to two days (more if you like) over the course of the school year. Since each day requires no more than four hours, you will be giving a maximum of eight hours to the children of Frederick County.

Your reward will be in the smiles on the faces of the children when they do their experiments with “real scientists.” All of our volunteers, no matter what their positions, are “real scientists” while in the classroom.

Because this program is supported by NCI at Frederick, your volunteer time is considered part of your work day. With supervisory approval, Leidos Biomed employees are authorized to charge Administrative Leave during the hours they participate in the program.

It's Not Too Late to Volunteer

If you would like to make a difference in a child's school experience and possibly even inspire a few future scientists, you can [sign up online](#).

If you know which grade level you are interested in, you can indicate it on the registration form. Otherwise, leave that section blank, and an EOP coordinator will contact you with more information. Together, you can determine which grade level will be right for you.

For more information or if you have any questions, please visit the [EOP website](#) or contact eop@mail.nih.gov. ■

Julie Hartman, program analyst, NCI Office of Scientific Operations, is the director of the Elementary Outreach Program.



"This is the generation that will take the scientific accomplishments of today and extend them into unimaginable realms of creativity and discovery."

*— Frank Blanchard,
Director of Public Affairs,
Leidos Biomedical Research*



Working with elementary school students is rewarding to Gary Krauss, senior subcontracts specialist, Contracts and Acquisitions, because he can demonstrate that there are lots of career paths in science. Shown here with Myersville Elementary School fifth-graders, Krauss said, “I was never a science major and I let the kids know you don't always have to work in a lab or wear a lab coat to contribute towards finding a cure for cancer. There are other administrative support roles that are crucial to the success of the team.”

Before You Collaborate, You Should Partner with NCI TTC

By Karen Surabian, Thomas Stackhouse, and Jeffrey W. Thomas, Contributing Writers

As the fall and winter seasons progress, you may be attending more scientific conferences, where you may find a number of opportunities for research collaborations.

To assist your lab in reaching its research goals through collaborations, the staff of the National Cancer Institute Technology Transfer Center (NCI TTC) can guide you through a tool box of agreements you may need for protecting your intellectual property (IP) and effectively managing your collaboration.

NCI TTC is the IP and partnership liaison for the NCI laboratories and scientists. NCI TTC manages the NCI patent portfolio and negotiates transactional agreements with outside parties (universities, pharmaceutical and biotechnology companies, and other research organizations) to formalize collaborative partnerships.

Employee Discovery and Invention Reports (EIRs) describe your invention, list the possible inventors, and assign patent ownership to the U.S. government.

Managing discoveries through future research collaboration must be balanced with any potential commercial development. Moving your discovery into the hands of physicians and patients, where it can be of most benefit, is a critical, yet complex, process requiring a team of experts from many different fields. The starting line for this process is the reporting of your discovery.

A reportable invention includes, but is not limited to, organisms, such as mice, as well as compounds, assays, machines, software, methods of manufacture, and methods of use.



NCI Technology Transfer Center (TTC) staff (Frederick). Center: Tom Stackhouse, Ph.D., associate director; surrounded by (left to right) Rose Freel, Jasmine Yang, Heidi Bowman, Kevin Brand, Chris Sappington, Jeff Thomas, Mike Currens, Joseph Miles, Kathy Higinbotham, Donna Bialozor, and Karen Surabian.

A disclosure may include, but is not limited to, posters, presentations, abstracts and journal articles (including electronic), and even job interviews with non-NIH personnel. You are advised to submit an EIR before—preferably three months before—a disclosure.

To ensure that the EIR is filled out and managed properly, your NCI TTC specialist will assist you in completing the EIR form; coordinate the reviews of EIRs; work on your behalf with the NIH Office of Technology Transfer regarding filing and licensing of your patent applications; and work with other NIH offices such as the Office of General Counsel and other NIH institute technology transfer offices.

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NCI Technology Transfer Center

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Types of Collaborative Agreements

NCI TTC staff is experienced in negotiating several types of transactional agreements, as outlined below. Your situation will be assessed individually, so that the proper agreement(s) may be drafted with your goals, as well as those of your collaborator, in mind.

1. Confidential Disclosure Agreements (CDAs) are used for various situations in which confidential, proprietary, and/or unpublished information will be disclosed between parties. The flow of the information may be in one direction (e.g., from your laboratory to the collaborating organization) or may be in multiple directions (e.g., back and forth between your laboratory and multiple collaborating organizations).

Disclosure of confidential information before filing a patent application may have an adverse impact on certain patent rights and other IP issues. This is especially true now that we are operating under the new patent law of the America Invents Act. Therefore, when submitting your EIR, you also should think about your communications associated with unpublished information/data. That is where the Confidential Disclosure Agreement (CDA) becomes important to protect your work.

If you are considering disclosure of confidential proprietary and/or unpublished information to an outside party, please contact NCI TTC for assistance in executing the most appropriate agreement.

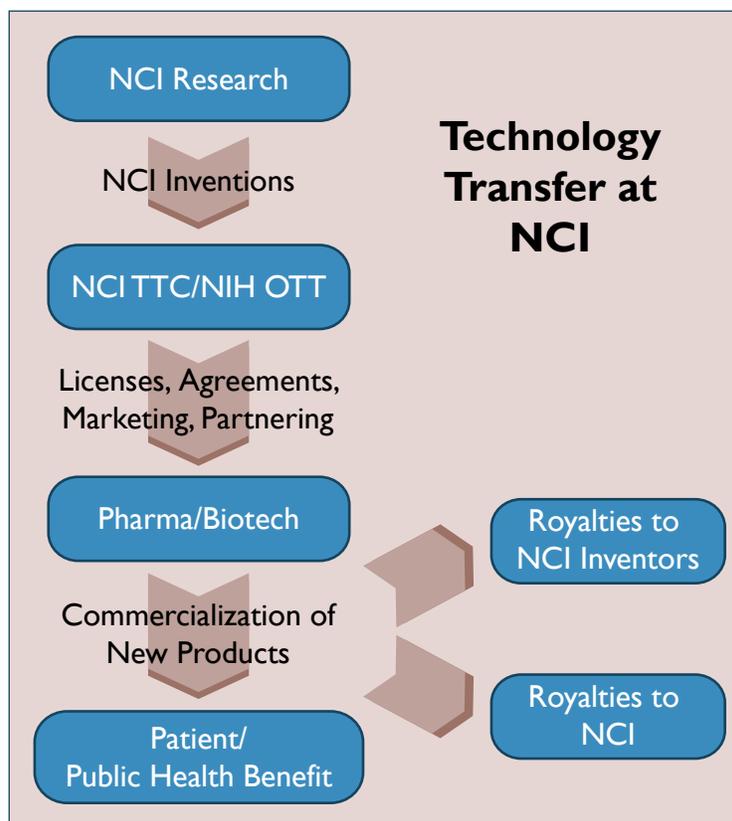
2. Material Transfer Agreements (MTAs) are used to exchange proprietary research materials either into or out of NCI and to document the source of the materials. These agreements are important because they offer NCI scientists protection related to issues of publication and use of materials for research purposes; MTAs may also include terms to protect confidential and/or unpublished information.

NCI TTC recognizes that the exchange of important, and often unique, research materials is critical to your work. Some materials require special attention because they may be related to human subject materials or other special circumstances. Before transferring or exchanging materials with outside organizations, contact NCI TTC, whose staff is trained to navigate you through any unique transfer situations.

One special type of MTA is a Collaboration Agreement (CA), which contains a jointly defined research plan and permits the exchange of confidential information, as well as materials, both to and from the collaborator.

3. Clinical Trial Agreements (CTAs) are used for studies conducted in humans to determine the safety and efficacy of agents and devices brought in from outside parties.

If your laboratory becomes involved in working on research that leads to clinical trials, you should contact NCI TTC for help in negotiating CTAs. These agreements enable you to transfer a



Technology transfer is one of the ways to develop and commercialize new products to bring science from the laboratories to the patient and further the public health mission of NIH.

patented, investigational agent only from a collaborator to NCI for NCI-sponsored clinical trials.

CTAs offer no promises to future IP rights, but do allow for access to data for filings with the U.S. Food and Drug Administration. These agreements are executed with the expectation that the collaborator has already completed preclinical and Investigational New Drug-directed toxicity studies. They specify the use of the investigational agent in humans and reporting requirements for adverse drug reactions.

4. Cooperative Research and Development Agreements (CRADAs) are collaboration agreements, usually with a commercial partner, that specify terms of confidentiality and an exclusive option to the collaborator to license future inventions. The CRADA allows for funds to be provided to the NIH laboratory to support its part of the research being conducted under the CRADA. However, NIH is not permitted to provide funding to the outside collaborator under the CRADA.

CRADAs provide for the exchange of material, equipment, and personnel, and are used when NIH and industry collaborate to develop a technology for commercialization. There are many types of CRADA collaborations, and NCI TTC will assist your team in navigating them and negotiating the best terms to protect your research while advancing the discovery.

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NCI Technology Transfer Center

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If You Are Not Sure, Ask

If you have any questions or are not sure which agreement is appropriate for your research situation, contact the NCI Technology Transfer Center office:

Telephone: 301-845-5465

Website: <http://ttc.nci.nih.gov/>

Follow Us on Twitter 
<http://twitter.com/NCITechTransfer>

Join our LinkedIn Group 
<http://www.linkedin.com/groups/NCITechTransfer-NCI-Technology-Transfer-Network-4688463/about>

Announcing the First Breast Cancer Start-up Challenge

The National Cancer Institute, the Avon Foundation, and the Center for Advancing Innovation have partnered to create a “first-of-a-kind” Breast Cancer Start-up Challenge.

The challenge features breast cancer inventions (nine from NCI and one from the Avon Foundation) that have commercial viability and are important to public health. The primary goal of the challenge is to stimulate the creation of start-up businesses based upon these inventions.

Please support the effort by spreading the word or nominating a judge/mentor. Visit the following website for more information: <http://www.breastcancerstartupchallenge.com>.



Employee Diversity Team

What Does the Employee Diversity Team Have in Store for Fall?

By Andrea Frydl, Contributing Writer

Fall Activities

The Employee Diversity Team (EDT) is out and about this fall, making the NCI at Frederick community aware of various cultural traditions and events around Frederick County that employees can participate in. The team is working with staff members of Native American descent to feature a display case and movie selection celebrating Native American Heritage Month in November. The team will keep you informed about Frederick events taking place in November and December. Keep a look out for EDT e-mails.

Display Cases

November is Native American Heritage Month, and to celebrate, the EDT is featuring artifacts from various Native American tribes in the EDT display case located in the Building 549 lobby. Other heritages that were highlighted throughout the year included the Women of NCI at Frederick; Caribbean Display – Dreamin’ of the Islands; and Indian Independence – Celebrate India.

The EDT’s display case provides an opportunity to showcase the diverse cultures represented by NCI at Frederick staff. The display case also provides an opportunity to win two free movie tickets to Regal Cinemas. The latest ticket winners are Jeanne Warfield (Leidos Biomed) and Robert Koogle (NCI). To enter for a chance to win, visit the EDT display case each time it is updated, answer the questions, and place your answers in the box located next to the display case. The questions are distributed via the List-Events listserv.



The Sioux Indian tribe and others are represented in the EDT display case for November.

Photo credit: Library of Congress.

New Members and Fresh Ideas

The EDT is always looking for new ideas and perspectives. If you would like the team to feature a specific culture or cultural event, please contact any EDT member. The team meets on the first Thursday of every month, and is always looking for new members.

Movies

Each month the EDT features a movie for staff to watch during lunchtime in Building 549. These movies celebrate a variety of cultures.

If you can't make it in person, the movies are available to rent through the Scientific Library. Currently, there are more than 100 titles to choose from. Find out more by visiting the Scientific Library website: <http://www-library.ncifcrf.gov/>.

Members

Current EDT members are: Andrea Frydl (chair), Laura Geil (past chair), Ethel Armstrong, Peter Boving, Molly Buehn, and Myla Spencer (Advanced Technology Research Facility representative). ■

NCI at Frederick and Frederick National Laboratory Are on Facebook

To find out about the latest news, events, and more, “Like” the page on Facebook at: <https://www.facebook.com/pages/Frederick-National-Laboratory-for-Cancer-Research/153635784684280>.

The screenshot shows the Facebook page for the Frederick National Laboratory for Cancer Research. The page header includes the Facebook logo and login fields. The profile picture is a brick pillar with the lab's name. The cover photo is a large, modern building. The page has 192 likes and a location tag for Frederick. A post from November 14 celebrates a staff member's award. The right sidebar shows recent posts by others and a list of liked pages including NIH, Frederick County Public Schools, and WFMD.

Golf Tournament Drives in a Win for the Children's Inn

By Carolynne Keenan, Contributing Writer

On September 23, golfers took to the Clustered Spires golf course in Frederick, Md., for a cause. The R&W Club Frederick hosted its inaugural golf tournament, with proceeds benefiting the National Institutes of Health (NIH) Children's Inn.

The event raised about \$1,000 for the Children's Inn. Located in Bethesda on the main campus of NIH, the Children's Inn gives families of seriously ill children the ability to stay nearby at no cost while their child receives treatment. Since opening its doors in June 1990, the Inn has remained open 24 hours a day, seven days a week, 365 days a year – its doors never close.

"The event went really well," said Tanya Ransom, of the NCI Center for Cancer Research (CCR). Ransom is the secretary of the R&W Club Frederick and the event's main organizer. "We filled the course...with a team on every hole. Everything ran smoothly."

"Fellowship toward a Common Goal"

Marc Hollander, president of Arlington-based Integrity Federal Solutions, LLC, retired from the National Institute of Environmental Health Sciences in 2010, but during his federal career, he served as the government co-chair for the Children's Inn Gala, sponsored by AFCEA. Over the last 15 years, Hollander explained, that annual event raised nearly \$6 million for the charity. He's still an advocate for the organization.

Hollander's company sponsored a four-person team in the tournament "as a way to support both the R&W of Frederick as well as the Children's Inn, and to have a great day of fellowship towards a common goal," he said.

He was also the guest speaker at the tournament. "His comments to the group made a big impression," Ransom said.

Hollander said he was "excited" to talk to the players about the Children's Inn, "...as well as inform the golfers of the incredible things that are done at the Inn in support of children that have been diagnosed with incurable illnesses and come to the NIH Clinical Center as a last resort, to use their unique illnesses to advance scientific research for others," he said.

Hollander explained that the Children's Inn is funded exclusively by donations from companies, individuals, and fund-raising events like the R&W Club Frederick's Golf Tournament.

Supporting the Inn Prompted Many to Play

Many players participated because the event benefited the Children's Inn. Nancy Garren, NCI, said she signed up for the tournament because she wanted to support the charity and loved the course. Garren ended up winning a prize for the Longest Drive (Women).

Dianna Kelly, NCI, agreed. "It was for a great cause," she said, explaining that her team comprised herself, her husband, and her mother and stepfather, both avid golfers. "All four of us had fun, loved the course...and it was just nice to be able to golf with my mom and stepdad," she said.

Linwood "Woody" Johnson, who works as a contractor for the Navy and

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Recreation and Welfare Club Frederick

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who won the Longest Drive (Men), was invited to join his team of coworkers. "And charity golf events are always fun," he said, adding that the tournament went well and he would definitely play again. "The golf course was a good fit for that type of event," Johnson said. "It is not particularly long or difficult, but is well maintained."

Praise for the Organizers

Maureen Barolet, head golf professional for Clustered Spires Golf Club, said she is always interested in hosting fundraising events for worthy causes at the facility. "We pride ourselves [in] making the events fun for everyone," she said.

Barolet said Ransom and the organizers did a great job. While this was Ransom's first time organizing a golf tournament, participants and organizers were pleased with the experience overall. Ransom thanked her fellow organizers, Amy H. Imming, a guest volunteer with NCI at Frederick; Mary Jane McWilliams, CCR; Kathy Norris, Nymeo; and Melissa Porter, NCI at Frederick.

McWilliams and her husband also participated in the event. "To raise funds for such a worthwhile organization is a wonderful thing to do," she said.

Second Annual Tournament in the Works

Plans are already under way to make this event annual. "My husband and I are the first to register for next year,"

McWilliams said with a laugh.

Barolet said Clustered Spires would love to host the event again, and hopes the tournament would be bigger and better. Hollander agreed. "I will do whatever I can to make sure there is a second annual event!" ■



R&W Club Frederick Golf Tournament September 23, 2013

First Place – Team VPP FME: Bill Brady, Tim Brown, Mike McMahon, Rich Tucker

Second Place – Team Hillbilly Golfers: Troy Brawner, Joe Lucas, Wayne Rinehart, Brett Stark

Closest to the Pin – Chris Barr (Men); Kathy Bolte (Women)

Longest Drive – Linwood "Woody" Johnson (Men); Nancy Garren (Women)

Team with the Best Name – Don't Quit Your Day Job: Kathy Bolte, Ginny Brace, Diane Negley, Carol Zehnacker

Door Prize Winners – Chris Barr: \$50 gift card to Middletown Sportsland; Michelle Freund: \$25 gift card to Main Cup; Dianna Kelly: drizzle stick; Toad Smith: round of golf for two at Hollow Creek Golf Club

Sponsors – MD National Golf Club; Nymeo (federal credit union); CIGNA Health Care; Middletown Sportsland; Main Cup; 4Imprint

Organizers – Tanya Ransom (main organizer); Amy H. Imming; Mary Jane McWilliams; Kathy Norris; Melissa Porter

Green Team

Green Team Hosts Plant Swap to Encourage Gardening

By Carolynne Keenan, Contributing Writer

What started out as a way for Howard Young, Ph.D., to thin out his garden last fall turned into the NCI at Frederick Green Team's Plant Swap. The group held its Fall Plant Swap on October 24, encouraging all members of the Fort Detrick community to pick up a free plant or swap a plant of theirs for another.

"Those who love to garden introduce others to the joy of gardening," said Dolores Winterstein, a member of the Green Team and the coordinator of the Fall Plant Swap.

About 40 people participated in the Plant Swap, either by donating plants, exchanging theirs for others, or picking up free plants to help spruce up their yards.

"It's easier to start when materials are free," Winterstein said, adding, "It gives people a chance to consider growing plants."

The Green Team, which promotes ways for the community to better the environment, hosted the free event. The team started the Plant Swap last fall and hosted one in the spring. The Plant Swaps are open to everyone at Fort Detrick.

Participants could bring in whichever plants they wanted to swap for different kinds—but bringing a plant to swap wasn't a requirement. "You don't need to bring a plant to take a plant," Winterstein explained.

There were no restrictions on the number of plants donated. Plants not swapped had to be picked back up by the donor, but for this swap, no plants were left. "In fact, someone brought plants that barely touched the table before they were taken," Winterstein said, adding that the October plant swap was "excellent."



Green Team members Howard Young and Dolores Winterstein received an *Oxalis triangularis* from one of the participants in the team's Fall Plant Swap.

Any healthy plant was welcome to be swapped for another or donated, as long as the plants were not diseased and/or full of bugs. Winterstein advised plant donors to include instructions on proper care, such as how often to water and how much sunshine the plants might need.

The swap featured a variety of plants—everything from bulbs and house plants to trees and shrubs, plus perennials (such as irises).

The Plant Swap was a way to bring the Fort Detrick community together because anyone could participate. "Plants are beneficial to the environment, both indoors and outside," Winterstein said.

Idea Sprouted from Garden Clean-up

Young, also a Green Team member, came up with the idea for the swap last year when he was preparing his own

yard for fall. After thinning out several overgrown plants, he left a handful of bagged plants marked "free" on his sidewalk.

Two hours later the bags on his sidewalk were gone. "It was a good way for me to clear out excess plants," Young explained. He brought the idea up at a Green Team meeting last fall, and the rest is history.

This won't be the Green Team's last Plant Swap. As long as interest is high for the event, "We will continue to hold them," Winterstein said.

"We were happy to have employees from the Army and USDA participate," Young said. "It is our hope that this will turn out to become a campus-wide event." ■

Fitness Challenge

Walking to Wellness Spring/Summer Competition Winners

By Ashley DeVine, Staff Writer

Top Three Teams:

1. Team Walkabout: 5,541,535 steps walked = 2,770 miles
Robin Bender, Amy Blumhardt, Terri DeLloyd, Teresa Ewing, and Pam Young
2. The Seasoned Soles: 5,034,287 steps walked = 2,517 miles
Beth Baseler, Nancy Becker, Corina May, Lisa Timmer, and Jeremy Wilhide
3. Team QMO: 3,389,611 steps walked = 1,694 miles
Karen Cowden, Andi Gnuschke, Steve Harshman, Sheri Miles, and Teresa Stitely

Top Three Individuals Not on a Team:

1. Guity Mohammadi: 1,427,671 steps walked = 713 miles
2. Roberta Matthai: 979,908 steps walked = 489 miles
3. Yuko Yuki: 960,515 steps walked = 480 miles

Top Three Overall Winners:

1. Beth Baseler: 1,469,424 steps walked = 734 miles
2. Robin Bender: 1,452,647 steps walked = 726 miles
3. Guity Mohammadi: 1,427,671 steps walked = 713 miles



First place individual winner, Guity Mohammadi.



First place overall winner, Beth Baseler.



The first place Walking to Wellness winning team, Team Walkabout. Front to back: Amy Blumhardt, Pam Young, Teresa Ewing, Robin Bender, and Terri DeLloyd.

Ronald H. Defelice Golf Tournament

Leidos Reclaims Defelice Cup at Annual Golf Tournament

By Ashley DeVine, Staff Writer

Leidos Biomedical Research reclaimed the Defelice Cup trophy from NCI at the eighth annual Ronald H. Defelice golf tournament, held October 14.



Ronald Defelice, for whom the golf tournament is named, hit the ceremonial first drive of the competition.

The final score was 15-7, with Leidos Biomed tying the series 4 to 4. Fourteen players on each team battled it out at Rattlewood golf course in Mount Airy, Md.

“After eight years and a 4-4 tie, this Defelice cup has been established as a serious competition and a fixed annual tradition,” said Denny Dougherty, assistant captain of the Leidos Biomed team and a retired senior subcontracts advisor at what was formerly SAIC-Frederick. Leidos Biomed President Dave Heimbrook, Ph.D., was the team captain.

“It was close after the morning matches, and while Leidos Biomed pulled away during the afternoon action, it was good-natured and entertaining throughout,” Heimbrook said.

Jim Cherry, Ph.D., scientific program director, NCI Office of Scientific Operations,

was captain of the NCI team, along with Marc Foltz as assistant captain.

“We look forward to next year’s match and bringing the cup back home, where it belongs,” Cherry said.

Most valuable player (MVP) awards went to Mike Tucker (NCI) and Bill Utermahlen (Leidos Biomed), and the sportsmanship award went to Svetlana Nazarenko (Leidos Biomed).

The tournament is named after Ronald H. Defelice, retired chief of the Management Operations and Support Branch, NCI at Frederick. ■



Bill Gillette (front), Bill Utermahlen (back, left), and Bill Brady (back, right).



From left, Marc Foltz and Barry O’Keefe.



From left, Denny Dougherty, Jim Cherry, and Marc Foltz.



The Defelice Cup trophy was handed over to Leidos Biomedical Research. From left, Jim Cherry, Craig Reynolds, Denny Dougherty, and Dave Heimbrook.



Front row, from left, Mike Tucker received the MVP award for NCI; Svetlana Nazarenko received the sportsmanship award for Leidos Biomed; and Bill Utermahlen received the MVP award for Leidos Biomed. Back row, from left, Craig Reynolds, Jim Cherry, Denny Dougherty, and Dave Heimbrook.

Softball Game

NCI and Leidos Play Ball

By Carolynne Keenan, Contributing Writer

The ping of an aluminum bat off a ball or the thump of a pop-up fly ball caught in a glove are two sounds familiar to baseball fans. Slow-pitch softball sounds—like those in the August game between mixed teams of NCI and Leidos Biomedical Research (formerly SAIC-Frederick) players—are similar.

The game was the first time in two years that teams took the field to play. A previous game pitted NCI versus Leidos Biomed—and Leidos Biomed delivered a beating in runs over NCI. This time around Chris Ohler, a Leidos Biomed employee and coordinator for the softball game, mixed up players from both organizations to evenly spread the teams.

Ohler divvied up players onto four teams: Gray, Blue, White, and Red. Teams played for seven innings each (standard for slow-pitch softball). Two games were played at a time: Blue versus Red, and Gray versus White. Both Blue and Gray won their first games, and played each other in the second game, while Red and White played each other in the second round. Gray was the overall winner of two games, while both Blue and White went 1–1; and Red was 0 for 2.

Playing for Bragging Rights

Previous games awarded the winner with a trophy, but this year the Gray team earned bragging rights.

“This year it’s more for a good time,” Ohler said. “You get to know the people you work with.”

The games included lots of plays worthy of the pros—solid line drive hits caught by attentive players, a player tagged out after sliding into second while another player slides in at home, and crowd-pleasing double plays to close out innings.

“The games were equal parts competition and good-natured fun,” said Howard Stotler, a Leidos Biomed employee on the Blue team. “Everyone seemed to put forth great effort, whether they were seasoned softball competitors

or playing the game for the first time,” he explained, adding that he will definitely play next time around.

Joy Beveridge, a Leidos Biomed player on the White team, said she had a blast. “Everyone was in high spirits,” she said, adding that there was lots of laughing and supporting among the players, whether they did well or struck out and made errors. “It was great to hang out with new friends from other programs and work locations.”

“The overall experience was amazingly fun,” agreed Jim Cherry, an NCI employee on the Red team. Julie Hartman, a fellow NCI employee who played for Blue, added, “It shows that NCI and [Leidos Biomed] employees can work/play together to accomplish a goal.” Both plan on participating in the softball game again.

Leidos Biomed employee Troy Taylor played for the winning team (Gray). “It was a great experience and nice to see old faces as my lab was relocated to the ATRF,” Taylor said. “I really enjoyed interacting with a mix of NCI and [Leidos Biomed] employees.”

Ohler agreed. “The night was a great success,” he added.

Plans are under way for the softball game to become an annual event. ■



The winning team (Gray). Front row, from left: Andi Gnuschke; Kyle Beard; Shawn Kelly; Anna Trofka. Standing, from left: Peggy Pearl (coach); Brooks Brenkus; Troy Taylor; Chris Ohler; Bob Barber; Chris McLeland; Will Sheffield; Tim Gower; Trent McKee; Jeff Strathern.

Halloween



1-From left, Debbie Dixon, Lisa Virts, Cheryl Dodd, Shawn Palmer, Betsy Brawner, Carrie Jennings, Tippy Jennings, and Codi Cover (in front), of the Center for Cancer Research Frederick Administrative Resource Center.

2-Barbara Brooks, Vaccine Pilot Plant, dressed as Flo from Progressive insurance commercials, and her partner, Woody Huffman, dressed as the Geico "money man."

3-Quarters, Christina Burks' (Clinical Monitoring Research Program) dog, dressed as a turtle.



4-From left, Laura Geil, NCI Office of Scientific Operations, dressed in Halloween punk, and Deb Fitzgerald, NCI Mouse Repository, dressed as the Evil Queen from "Snow White" (or the evil queen of other fairy tales).

5-Julie Hartman's (NCI Office of Scientific Operations) children dressed for Halloween. From left: Mylee, 3, dressed as "Mylee" Mouse; Haylee, 7, dressed as "Haylstorm" the Clown; and Gavin, 9, dressed as Uncle Si from "Duck Dynasty."



6-Chris Hayter, Gene Regulation and Chromosome Biology Lab, dressed her dog, Zoey, as a witch.

7-Mary Beth Hilton, Laboratory Animal Sciences Program, dressed her cat, Amos, as Yoda from "Star Wars."

8-Karen Lau, Applied and Developmental Research Directorate, dressed her dog, Cooki, as a lobster.

9-Pat Marshall's (Vaccine Clinical Materials Program) grandson, Donnegan, dressed as Elmo.



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Halloween



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10-Terri McLellan's (Laboratory Animal Sciences Program) cat, Bolt, dressed as a police officer.

11-Terri McLellan's dog, Cullowhee, dressed as an English hound.

12-Laura Mendez, Applied and Developmental Research Directorate, her husband, Gregg, and her son, Davy, dressed as characters from Despicable Me 2.

13-Joe Meyer, Scientific Publications, Graphics & Media, dressed as Flint Lockwood from "Cloudy with a Chance of Meatballs," along with his girlfriend, Amanda Tickner, dressed as Sam Sparks.

14-Christine Pacula-Cox, Developmental Therapeutics Program, dressed her miniature pinscher, Anna, as Tigger from "Winnie the Pooh."

15-High school intern Swathi Penumutthu dressed as Minnie Mouse. Penumutthu is an intern in the Molecular Mechanisms in Development Group, Laboratory of Cell and Developmental Signaling.

16-Kris Pike, Cancer Research Technology Program, dressed her dogs, Kooper and Kamden, in tuxes.

17-Ratchet dressed as a pirate. Ratchet's owner is the daughter of Debbie Shores, Scientific Publications, Graphics & Media.

18-Debbie Shores' (Scientific Publications, Graphics & Media) daughter, Lisa, dressed as Spiderman.

19-Ann Wiegand's (Drug Resistance Program) dog, Tiger, and cat, Murphy, dressed in their Ravens gear. ■



Parents: Ease Your Stress during Holidays

Courtesy of Business Health Services

While holidays can be a wonderful time for family togetherness and making memories, it can also be a time of great stress on parents, especially when school is out, relatives are visiting, and expectations are running high.

The reality of the holiday season is that many parents can become exhausted, overworked, and stressed, and those emotions can be picked up and reflected in the children's behavior. Here are a few universal guidelines to help you be the best parent you can be, during the holidays and throughout the year.

When Extended Family Come for a Visit

Cousins are often the persons with whom children first learn to create trusting, lifelong friendships. With many families spread over hundreds, or even thousands, of miles, cousins often remain a constant in a child's life, even when the visits occur only during the holidays.

As a parent, you should communicate with your siblings about household rules and expectations, whether you are visiting your relatives or you are the host. Harmony between the aunts and uncles encourages harmony between the cousins during childhood.

Answer Questions Honestly

Giving honest and open answers to your child's questions, even when the answers make you feel uncomfortable, will help create a trusting relationship. Your children will believe that you take their questions and concerns seriously.

When your children ask about Santa, try to determine why they are asking. You might also ask them, "What do you think?" How they answer may help you form the most appropriate response.

Ask Questions about Tough Topics

Ask questions about difficult issues, and then listen—really listen—to your child's responses. Ask follow-up questions and give encouragement when you believe they are making the right choices. Experts agree that children are more likely to follow your rules if you ingrain your values in them before they're faced with difficult decisions.

Do not worry about bringing up tough topics. You are not putting ideas into their heads; you are simply letting them know about potential dangers, so that they will know what to do when confronted with them.

Plan Regular Time Together

Creating regular rituals with your children will allow each child to count on personal time with you. Schedule weekly family meetings to discuss anything that your children wish to discuss. Make Tuesday evenings ice cream night. Go to the library on Saturdays. Even chatting for a couple of minutes while cleaning up after dinner can keep important lines of communication open between you and your children.



Set Clear Rules

Keep the number of house rules to a minimum: just enough to ensure that children do their homework, complete their chores, and stay involved with friends who are good influences. These rules are especially important when school is out during the holidays or other breaks in the school year.

Be sure to also set up specific and proportionate consequences for breaking them. Do not wait for major misbehaviors before following through on consequences, and feel free to ignore any negative reaction that follows.

Your children want to know that you care enough to set rules and go to the trouble of enforcing them. Believe it or not, rules make children feel loved and secure.

Give Plenty of Praise

It is never too early to make a habit of giving praise. Emphasizing what children do right (rather than focusing on what is wrong) will teach children and teenagers to feel good about themselves and improve their self-confidence. For example, let your young child decide what to wear, and then praise the outfit. Even if the clothes don't quite match, you will reinforce your child's ability to make decisions. ■

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NCI at Frederick Computer Software Training Schedule

To register for a class, view the course description, or obtain more information, visit the C&SS training website at <http://css.ncifcrf.gov/Training/>.

NCI at Frederick employees, supervisors, or managers can arrange exclusive, regular or custom classes for a minimum of four students at any time during the year. For general questions, or if you are interested in scheduling a class for your group, contact Cathy McClintock, 301-846-5776, or Cathy.McClintock@nih.gov, for more information.

Note: Schedule updates are e-mailed monthly during each session via the NIH ListServ. If you are not receiving Computer Software Training e-mails, contact the C&SS Help Desk for assistance, at 301-846-5115, or fredhelpdesk@nih.gov; or visit the website: <http://css.ncifcrf.gov/helpdesk>.

Help Desk Assists with Computer-Related Problems

Computer users at NCI at Frederick may contact the Frederick Help Desk with IT-related requests for service and support, or with any computer-related questions, including:

- General desktop computer support
- Account password resets and e-mail assistance
- Support for applications, systems, and websites used at NCI at Frederick
- Assistance with suspected virus or IT security problems
- Assistance with purchasing IT equipment
- Access to site-licensed software
- Information regarding PIV cards and PIN resets

The Help Desk is staffed from 8 a.m. to 5 p.m., Monday through Friday, excluding holidays. Users can expect most desktop support requests to be addressed within five to seven

December	Class
5	Creating 508 Compliant Word & PDF Docs*
6	Excel 2010 Level 3
9	Skype/WebEx Online Communication* <i>New</i>
10	Excel 2010 Data Analysis Workshop (AM)
13	Access 2010 Level 3
16	Word 2010 Level 3*

*Upcoming classes at risk of cancellation due to insufficient enrollment.

working days; “urgent” requests are addressed within one working day.

PIV Cards

PIV card PINs and digital certificates can be reset at any of the following three NCI at Frederick Lifecycle Workstation locations:

Fort Detrick Campus:

Building 426, room 159: call 301-846-4500 to schedule an appointment

Building 362, room 40: call 301-846-1060 to schedule an appointment

Advanced Technology Research Facility:

Wing E, room 2212: call 301-846-5566 to schedule an appointment

To contact the Frederick Help Desk, call 301-846-5115, e-mail fredhelpdesk@nih.gov, or visit the website: <http://css.ncifcrf.gov/helpdesk>. ■

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Employee Assistance Program Helps You When You Need It

The Employee Assistance Program provides NCI at Frederick employees and their dependents with free, confidential assistance to help with family, personal, and work-related problems.

Administered by Business Health Services (BHS), a workplace wellness provider that has delivered employee assistance for the past 30 years, the program offers short-term counseling

services with a licensed professional in your area, legal and financial consultation, an extensive online library, and other problem-solving solutions to you and your household members in need.

You may access the BHS online resource library for a wealth of articles about physical and emotional wellness concerns. You can browse through articles, videos, health assessment tools, quizzes, and a listing of thousands of pre-screened childcare and eldercare programs, tax forms, and interactive

tools such as financial calculators.

Search www.bhsonline.com and enter either “NCIF” or “FNL” as the user name to open the site.

To contact a BHS counselor, call 800-327-2251. BHS counselors are available 24 hours a day, seven days a week, to provide confidential assistance for personal or work-related problems of any kind.

Business Health Services administers the Employee Assistance Program for all employees at NCI at Frederick.

2013 Student Science Jeopardy Tournament a Big Success

By Robin Meckley, Contributing Writer

The category was “General Science,” and the clue read: “Named for an Italian scientist, it is the scientific number of molecules in 1 gram mole of any substance.” Everything depended on knowing the correct response and wagering enough points.

The top three teams in the Scientific Library’s seventh annual Student Science Jeopardy Tournament, two of which were tied, faced this Final Jeopardy clue head-on, hoping to come out on top. All three teams had the correct response, “What is Avogadro’s number?”, but only one team bet all their points, 14,400, to win the tournament.

Eighteen interns from local high schools and colleges competed in teams of two in the annual July science event for students, which mirrors the popular TV show “Jeopardy.” Students were challenged with mastering the signaling devices and knowing the correct responses. An audience of more than 70 people attended to support the students.



Madelyne Xiao, the returning champions from 2012, with a score of 17,100 points.

The other players in the tournament included Janine Bahsali, Esther Shafer, Joseph Bergman, Colin Burr, Katie Goetz, Monica Gouzoulis, Dahlia Kronfli, Megan Mounts, Harrison Boyce, Avilash Das, Ayush Goyal, and Amil Sahai. The two players on the alternate team were Swathi Penumutchu and Renee Purtscher.

The First-Place Team

Hofmann, a senior from Tuscarora High School and a drum major in the marching band, is an intern in the Center for Cancer Research (CCR) Nanobiology Program under the supervision of Kirill Afonin, Ph.D. Afonin said that Hofmann is “learning the basic techniques of RNA biology,” and is helping on “several research projects dealing with RNA-based therapeutic nanoparticles.” Afonin said that he chose to work with Hofmann because she exhibited an excitement for science. “Her desire to be a part of our team made her stand out from the other applicants. She was able to cohesively answer my interview questions in a knowledgeable manner,” he said.

Hofmann said she enjoyed playing

in the Student Science Jeopardy Tournament, and was surprised by how close the contest was. “I certainly didn’t anticipate it to be such a down-to-the-wire competition,” she said. “Although



my partner, Theo, and I knew almost every answer, we were having trouble buzzing in time.” Hofmann was no stranger to “Jeopardy.” “Being a long-time ‘Jeopardy’ fan, I have always wanted to say ‘Let’s make it a true Daily Double, please.’ And because luck was on our side, I ended up saying it twice in the span of a few hours,” she said.

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The Winning Teams

This year, Team E, Jen Hofmann and Theo Nikolaitchik, came in first, with 28,800 points; second place went to Team D, Pushkar Aggarwal and Edward Liang, with 19,400 points; and third place went to Team B, Nikhil Gowda and

Wilson Information Services Company (WISCO)

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Nikolaitchik, also a Tuscarora High School senior, joined the Gene Regulation and Chromosome Biology Laboratory, CCR, under mentor Tom Schneider, Ph.D., as a student intern in June. “Theo is using our information-theory-based tools, including sequence logos and sequence walkers, to construct a model of the gene CTCF,” Schneider said.

Both Nikolaitchik and Hofmann were involved in academic teams in school, so when they heard about the Student Science Jeopardy Tournament, they signed up as a team. On tournament day, Nikolaitchik was unsure about his team’s success because he and Hofmann were facing “some of the brightest kids from the surrounding schools.” Although Nikolaitchik said that his team “won because of a great influx of luck,” audience members said they watched a bold and smart team take advantage of opportunities to earn the victory.



Participants in the seventh annual Student Science Jeopardy Tournament included Pushkar Aggarwal, Janine Bahsali, Joseph Bergman, Harrison Boyce, Colin Burr, Avilash Das, Katie Goetz, Monica Gouzoulis, Nikhil Gowda, Ayush Goyal, Jen Hofmann, Dahlia Kronfli, Edward Liang, Megan Mounts, Theo Nikolaitchik, Swathi Penumutchu, Renee Purtscher, Amil Sahai, Esther Shafer, Madelyne Xiao. The judges were Dina Sigano and Jim Cherry. Some participants were not present for the photo.



The winning teams: from left, Team E, Theo Nikolaitchik and Jen Hofmann; Team D, Edward Liang and Pushkar Aggarwal; and Team B, Nikhil Gowda and Madelyne Xiao.

“... One of the highlights of my summer ...”

Hofmann and Nikolaitchik hope to compete in the 2014 Jeopardy Tournament. “Competing in the ... tournament was definitely one of the highlights of my summer, and I would highly recommend it to any [student intern] next year,” Hofmann said. Nikolaitchik said “that hour shall stand as one of the most nail-biting in my life. I hope to enter again next year and ... match wits with some of the most intelligent people around.”

Returning judges Dina Sigano, Ph.D., technical laboratory manager, Chemical Biology Laboratory, Center for Cancer Research, and Jim Cherry, Ph.D., scientific advisor, NCI Office of Scientific Operations, were able to resolve the few disputes that arose over questionable responses. “It was great to see so many students attend and be so into the contest,” Cherry said. Sigano said she enjoyed her participation this year and is looking forward to next year’s event.

“The Scientific Library staff was very pleased with the attendance at this year’s event,” said Sue Wilson, principal manager of the Scientific Library. “At the exciting climax of the contest, the audience cheered loud and long for the three teams, bringing the noise to an eardrum-shattering level.” ■

New Hires at the NCI at Frederick

Two-hundred and eighty one people joined the facility during the months of January through August 2013.

The National Cancer Institute welcomes...

Pushkar Aggarwal ▪ Francesca Aiello ▪ Masahiko Ajiro ▪ Kabamba Alexandre ▪ Katherine Alwan ▪ Erin Anderson ▪ Muthukumar Balasubramaniam ▪ Marilia Barros ▪ Ian Barry ▪ Joseph Bergman ▪ Yuba Bhandari ▪ Kajal Biswas ▪ Harrison Boyce ▪ Laura Brown ▪ Mikhail Bubunenko ▪ Colin Burr ▪ Luke Burton ▪ Lauren Canizales ▪ Xiang Chen ▪ Nathan Clements ▪ Mauricio Comas Garcia ▪ Aaron Condon ▪ Adrian Cuenca ▪ Victoria Cunningham ▪ Frank Cuttitta ▪ Marcos Da Cunha ▪ Lynne Darby ▪ Avilash Das ▪ Adrian Davey ▪ Belete Desimmie ▪ Christian Diaz ▪ Hibiki Doi ▪ Ravi Doshi ▪ Rami Doueiri ▪ Veronica Farmer ▪ Andrew Femiano ▪ Joseph Fischer ▪ Lyric Forney ▪ Kevin Franco ▪ Benjamin Freed ▪ Rose Freel ▪ Olivia Fritz ▪ Rosana Garay ▪ Vasuk Gautam ▪ Sam Giannakoulis ▪ Melissa Glover ▪ Paulina Gomez-Demine ▪ Alexander Gorka ▪ Patrick Hall ▪ Junko Hattori ▪ Fahu He ▪ Jennifer Hofmann ▪ Levi Hooper ▪ Jiaqiang Huang ▪ Lauren Huggins ▪ Kacey Hughes ▪ Jordan Irvin ▪ Arjun Iyer ▪ Jerome Izard ▪ Michal Jakob ▪ Dontcho Jelev ▪ Xing Jing ▪ Alani Johnson ▪ Abhishek Kapoor ▪ Karina Keefe ▪ Adam Ketchum ▪ Rinat Khannanov ▪ Satyajeet Khare ▪ Jeongkyu Kim ▪ Loren Kozar ▪ Malika Kuzembayeva ▪ Christopher Lamont ▪ Michelle Lathrop ▪ Jessica Law ▪ Janet Lee ▪ Louis Levine ▪ Edward Liang ▪ Kim Liang ▪ Hanzhi Lin ▪ Fen Liu ▪ Jinping Liu ▪ Alexander Mahlandt ▪ Vladimir Majerciak ▪ Ryan Marina ▪ Hanna Marks ▪ Hiroshi Matsuo ▪ Andrew May ▪ Elisabeth McClatchie ▪ Jordan Meier ▪ David Montgomery ▪ Megan Mounts ▪ Roger Nani ▪ Theodore Nikolaitchik ▪ Mariia Novikova ▪ Mila Oasan ▪ Prateek Paul ▪ Swathi Penumutthu ▪ Suzanne Phillips ▪ Ekaterina Posokhova ▪ Anna Purtscher ▪ Renee Purtscher ▪ Francisco De Asis Quilesvidal Sr ▪ Stephanie Ragar ▪ Leah Randles ▪ Seth Reid ▪ Scott Roan ▪ Maria Rodriguez Herrera ▪ Rosalba Salcedo ▪ Emilee Senkevitch ▪ Esther Shafer ▪ Hirsh Shah ▪ Nishi Sharma ▪ Brittany Shepherd ▪ Yan-Hong Shi ▪ Animesh Shukla ▪ Troy Shuman ▪ Casey Silver ▪ Francesco Simonetti ▪ Mackensie Smith ▪ Richard Smith ▪ He Song ▪ Cem Sonmez ▪ Priya Stepp ▪ Jessica Stimely ▪ Christopher Szot ▪ Derek Thayer ▪ Sara Thomas ▪ Andy Tran ▪ Akriti Trehan ▪ Rachel Van Duyn ▪ Fanie Van Heerden ▪ Divya Varde ▪ Kira Vasquez ▪ Parthibane Velayoudame ▪ Marta Vives ▪ Ashlee Vrzak ▪ Yvonne Walker ▪ Kylie Walters ▪ Xiaohong Wang ▪ Sarah Ward ▪ Whitney Wright ▪ Yuji Yamada ▪ Jasmine Yang ▪ Jessica Yau ▪ Baohong Zhang ▪ Sylvia Zhang ▪ Jimin Zhao

Leidos Biomedical Research welcomes...

Vishakha Ambardekar ▪ Carlos Argueta Segovia ▪ Michelle Baracz ▪ Katalin Baranji ▪ Jade Basile ▪ Aaron Bouk ▪ Tiffany Bowie ▪ Kelli Brown ▪ Christina Burks ▪ Corinne Camalier ▪ Rodulfo Cana ▪ Stefanie Carey ▪ Victoria Caulkins ▪ Zipora Chepkoit ▪ Carla Chorley ▪ Charles Chung ▪ Lauryn Clarke ▪ Patrick Clester ▪ Angela Combs ▪ Matthew Costello ▪ Oyvind Dahle ▪ Vivekananda Datta ▪ Craig Davis ▪ Amanda Day ▪ Fannie Delauter ▪ Claire Deleage ▪ Farrah Denis ▪ Yuri Dinh ▪ Yvonne Edwards ▪ Ange-Danielle Elangue ▪ David Evans ▪ Bradley Eye ▪ George Farias Jr ▪ Amanda Fleming ▪ Charlee Franklin ▪ Candice Garner-Groves ▪ Edward Gauvreau ▪ Oksana German ▪ Evan Gilius ▪ Thomas Glass ▪ Peter Glover ▪ Sucheta Godbole ▪ Marsha Greene ▪ Joshua Grove ▪ Liang Guo ▪ Goran Halusa ▪ Brittany Hammond ▪ Tiffanie Hammond ▪ Elizabeth Hankinson ▪ Adam Harned ▪ Robin Harrington ▪ Cynthia Haupt ▪ Martin Henry ▪ Paul Herbert ▪ Christopher Hester ▪ John Hirt ▪ Van Hngaka ▪ Jennifer Hoffman ▪ Matthew Hohn ▪ Horace Holley Jr ▪ Thomas Hutchison ▪ Nkechi Ileka ▪ Avanti Iyer ▪ Katherine Jaffee ▪ Danilo Juezan ▪ Sarah Kattakuzhy ▪ Karrell Kennedy ▪ Krishnakumar Kuntipuram ▪ Melissa Law ▪ Rosangela Lazaneo ▪ Heather Leonard ▪ Amanda Linebaugh ▪ Elena Lita ▪ Jia Liu ▪ Tania Lombo Rodriguez ▪ Kayla Lynch ▪ Vikas Mangipudi ▪ Michelle McCarthy ▪ Rosemary McConnell ▪ Sunita Menon ▪ Joseph Meyer ▪ Alejandra Miranda ▪ Brian Morrison ▪ Charles Na ▪ Bethany Nagy ▪ Nandita Niranjana ▪ Emeka Ochuba ▪ Pius Okeyo ▪ Alen Ovejera ▪ Mark Parta ▪ Alan Pernatin ▪ Julia Poms ▪ Raymond Raab ▪ Yu Rao ▪ Camille Rees ▪ Brenda Revell-Lewis ▪ Jeffrey Rife ▪ JoyAnn Rohan ▪ Patricia Runge ▪ Toyotaka Sato ▪ April Schlude ▪ Linda Sciuto ▪ Sharon Segal ▪ Bhavana Shivakumar ▪ Adam Shurnitski ▪ Shilpi Singh ▪ Thomas Skelly ▪ Barbara Slick ▪ Tatyana Smirnova ▪ Emily Smith ▪ Tiffany Sparkman ▪ Sally Steinbach ▪ Richard Stely ▪ Catherine Stern ▪ Jesse Strong ▪ Robert Sui Nawl ▪ Tha Sui ▪ Shalabh Suman ▪ Nishant Tembhare ▪ Poonam Tewary ▪ Tin Tran ▪ Ferdinand Udoye ▪ Lee Unger ▪ Stephanie Van Werry ▪ Tzu Fang Wang ▪ Laurie Wantz ▪ Ellen Wertheimer ▪ Justin Wolfe ▪ Shan Yang ▪ Allison Younkins

Data Management Services welcomes...

Pengyu Lin ▪ Deborah Lomb ▪ Christopher Robinson ■



Getting the Picture

By Ken Michaels, Guest Writer

Recently, I attended the annual meeting of the BioCommunications Association in Asilomar, Calif. Not surprisingly, the speakers, all professional communicators, were very good and spoke knowledgeably on their various topics.



But something else impressed me during the informal times between presentations, and at mealtimes. These folks not only tended to speak well, but they also tended to listen well.

And there's a very strong case to be made for the importance of listening in effective communication.

Ken Blanchard, co-author of the bestseller *The One Minute Manager* (William Morrow, 2003) and other works, tells the story of an exchange between a mother and young son overheard at a shopping mall. As they pass a store window, the child remarks, "Boy, would I like to have that bicycle!" As it happens, Mom had bought the youngster a new bicycle for Christmas only months before and instantly went into a towering rage about how greedy and selfish he was, and how he didn't appreciate everything she did for him. Severely chastened, the child went silent and trailed along with his hand in hers, quietly crying.

While this may sound like an anecdote leading up to a lesson on parenting, Blanchard sees it as an example of failed listening. His take is that the kid wasn't stupid. He knew he'd just gotten a new bicycle recently and wasn't expressing

his desire for another; that wasn't what he was talking about. According to Blanchard, the child was saying something else, but Mom didn't hear it, and thus the opportunity for the two to communicate was completely lost.

So what happened?

To begin with, Mom was not in *listen-to-my-son* mode; rather, she was in *see-things-from-my-own-viewpoint* mode. Blanchard suggests that if she had been in *listen-to-my-son* mode, she might instead have reacted to his remark by pausing and asking him, "What is it about this bicycle that you like so much, honey?"

Maybe his answer would have been, "I really like those cool streamers coming from the handle grips," or perhaps, "This one has a real neat shiny bell on the handlebars." And the conversation that may have followed could have turned out to be a real bonus for Mom when it came time to pick out his next birthday present. But instead, no meaningful communication took place.

In Mom's defense, it's easy to say that she should have been better tuned in to her son, but it's a lot easier to say it than to actually do it. For most people, the default mode is to see, and hear, things through our own personal filters, rather than find our way into the head of the person we're interacting with and see—really see—what they're telling us.

Listening to Understand

The reality is that the example of the little boy and his mother is by no means the only time one person said something and another missed the message completely. Unfortunately, it happens a lot. For most people, really listening to others is something they have to make a conscious effort to do.

You've probably heard, at one time or another, about the techniques of "active listening"; these are the things we concentrate on doing when a conversation is important to us. They include:

- giving the person speaking your undivided attention;
- showing that you're listening (with eye contact, body language);

- providing occasional feedback (by paraphrasing, or asking questions);
- reserving judgment until you've heard everything; and
- responding appropriately.

Active listening is taken a step further by Captain D. Michael Abrashoff, author of *It's Your Ship: Management Techniques from the Best Damn Ship in the Navy* (Business Plus, 2012), in which he uses the term "aggressive listening" to describe his approach to effectively commanding a U.S. Navy missile destroyer.

Tom Peters, well-known co-author of *In Search of Excellence* (Harper and Row, 1982), advocates "strategic listening"; he asserts that effective leaders must make it a goal to become "professional listeners" and that study and practice are needed to make that happen.

He goes on to suggest that in business, good listening should be considered a core competency and is the bedrock underpinning a commitment to excellence. He also tells us that an obsession with listening is the ultimate demonstration of respect. And who doesn't want to be treated with respect?

Listening is more than simply hearing; it's about actually understanding what's being said. As one cynic in the early days of television put it, "Are you getting the picture yet, or are you still just stuck with the sound?"

Really good listening is about getting the picture. ■

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Additional Reading:

1. James Manktelow and Amy Carlson, "Active Listening." www.mindtools.com/CommSkill/ActiveListening.htm
2. Tom Peters, "Strategic Listening." <http://excellencenow.com/part-5/>
3. "Tom Peters' Leadership Thoughts: Listening." <http://www.youtube.com/watch?v=IwB7NAvKPeo>

Ken Michaels, retired manager of Visual Communications, Leidos Biomedical Research, is a special volunteer for NCI at Frederick.

The Holiday Markets will be held in Building 549 on Tuesday, November 26, and Wednesday, December 18, from 11 a.m. to 2 p.m.

For more information, including any contact info for vendor pre-ordering, call 301-846-1956 or e-mail farmersmkt@mail.nih.gov.

Check off Names on Gift Lists at the Holiday Markets

By Carolynne Keenan, Contributing Writer

The first of the season's Holiday Markets is right around the corner. The Thanksgiving Holiday Market will be November 26, from 11 a.m. to 2 p.m., in Building 549. Get a head start on holiday shopping, finish up gift lists, or treat yourself to handmade crafts, organic and healthy products, plus an assortment of other goodies.

The Holiday Markets bring together the Farmers' Market vendors and other local crafters to sell their wares to the Fort Detrick community for the holiday season. These markets are held once in late November, to coincide with

Thanksgiving, and once in December, near Christmas.

Vendors include many Farmers' Market favorites, including Cat's Paw Farm, Waltz Farm, Two Acre Farm, Frugal Bee, Gallery in the Woods, and Slice of Heaven Farms, who will also be selling turkeys.

Also included in the vendor list for the November Market are Two Girls Granola, PB Jewelry, Fresh Relic Designs, Origami Owl, Three D Gems, Clustered Spires Quilt Guild, Kathleen Cook's Dream Catchers, Enlighten Soy Products, Stone Meadow Alpaca, Sue's Handmade Baskets, and Robin Bockol's

Handmade Bags, among others.

Fudgie Wudgie plans to be at the Holiday Market as a vendor—but with a twist. A percentage of their sales for the day will benefit the Recreation & Welfare Club Frederick. Stop by for a treat and help support Club Frederick.

Starting this year, customers interested in placing pre-orders need to do so directly with the vendors.

For more information on the 2013 Holiday Markets, including any contact info for vendor pre-ordering, call 301-846-1956 or e-mail farmersmkt@mail.nih.gov. ■



Announcements

Frederick National Laboratory Programs

Frederick National Laboratory and Fort Detrick
Fitness Challenge 2013

<http://saic.ncifcrf.gov/fitnesschallenge/>

Frederick National Laboratory Suggestion Committees

<http://ncifrederick.cancer.gov/campus/committees/>

Upcoming Events and Dates to Note

Holiday Farmers' Markets November 26 and December 18,
11 a.m. to 2 p.m., Building 549

Thanksgiving Day, NCI at Frederick closed November 28

Christmas Day, NCI at Frederick closed December 25

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Reminder: When you have a change in staff, be sure to change the information in the Frederick National Laboratory database. You can do this online by logging on to <http://ncifrederick.cancer.gov/campus/phonebook/>, or by contacting your human resources representative. For more information, you may refer to the inside front cover of the Frederick National Laboratory Telephone & Services Directory.

Comments or suggestions for the *Poster* may be directed to poster@mail.nih.gov.



Weather Advisory

You peer out the bedroom window and see softly falling snow or the gleam of ice. Is the base closed? Here's how to find out. Call the Fort Detrick Weather Information Line (301-619-7611) or tune in to local radio/television stations for information.

Closed or Delayed Opening

When Fort Detrick is closed, NCI at Frederick is also closed; when Fort Detrick has a delayed opening, NCI at Frederick has a delayed opening. NCI at Frederick does not follow weather closings or delayed opening advisories for the NIH-Bethesda campus or the Washington metropolitan area.

Early Dismissal

For early dismissals, NCI at Frederick operates independently of Fort Detrick; therefore, your supervisor will notify you if NCI at Frederick closes during working hours.

Telephone Numbers

Recorded weather line 301-619-7611
Fort Detrick toll-free number 1-800-256-7621, Press 1

Internet

Fort Detrick's home page: <http://www.detrick.army.mil/>
Weather announcements are posted near the top of the page.

Radio/TV

Baltimore, MD
WBAL AM 1090
WCAO AM 600
WPOC FM 93.1
WIYY FM 97.9
WYPR FM 88.1
WCBM AM 680
WLIF FM 101.9
WWMX FM 106.5
WRBS FM 95.1
WERQ FM 92.3
WMAR ABC2 (TV)
WBAL NBC 11 (TV)
WJZ CBS 13 (TV)
WBFF FOX 45 (TV)

Frederick, MD
WAFY FM 103.1
WFMD AM 930
WFRE FM 99.9
WTLF FM 103.9
WWEF FM 106.9
WYPF FM 88.1

Hagerstown, MD
WARK AM 1490
WAYZ FM 104.7
WDLD FM 96.7

WJEJ AM 1240
WHAG NBC 25 (TV)

Thurmont, MD
WTHU AM 1450

Williamsport, MD
WCRH FM 90.5
WICL FM 95.9

Chambersburg, PA
WQCM 94.3
WIKZ FM 95.1
WCHA AM 800

Gettysburg, PA
WGET AM 1320
WGTY FM 107.7

Greencastle, PA
WBHB FM 101.5
WNUZ FM 92.1

Martinsburg, WV
WEPM AM 1340
WLTF FM 97.5
WRNR AM 740

Washington, DC
WFED AM 1500
WMZQ FM 98.7
WRXQ FM 107.3
WTOP FM 103.5
WUSA NBC 9 (TV)

Winchester, VA
WINC FM 92.5 ■



Weather Advisory

Winter Driving Safety Tips

Driving in cold weather presents special weather-related driving hazards. As you drive your vehicle this winter, here are some winter driving tips to keep in mind:

- Stopping distance on a snowy/icy surface can be up to 10 times that of a dry road, so drive with extra caution on slick or snowy surfaces.
- Turn your headlights on during periods of low visibility.
- Wear your seat belts. Secure children under age four in child safety seats.
- Allow extra time for winter trips. If you are running late, do not rush.
- It is a Maryland law that all windows and mirrors on vehicles be cleared of snow and ice. Do not go down the road with only a peephole to see through. Fort Detrick police will cite this infraction.
- Clear all snow off the hood and roof of your vehicle so snow does not blow onto your windshield or rear window (or those of the vehicle behind you) and obscure driving vision.
- It is a good idea to carry an emergency kit that may include an ice scraper and brush, jumper cables, a shovel, a tow chain, tire chains, a blanket, gloves, a flashlight, and rock salt or kitty litter for traction.



Make sure that your vehicle is mechanically sound. The following checklist will help ensure a safe trip each day this winter:

- Cold weather is especially demanding on batteries. Check and replace your battery if needed.
- Install all-weather tires or snow tires and check to see that tire pressure meets the recommendations of your owner's manual.
- Test your antifreeze against the recommendations of your owner's manual.
- Check the integrity of your exhaust system for leaks into the passenger area.
- Be sure your wiper blades are in good condition.

Coordinated Highways Action Response Team (CHART)

<http://www.chart.state.md.us>

View current traffic and emergency road conditions across the state. Under "Severe Weather Information," you'll find several links to help you during a weather emergency.

These tips have been provided courtesy of Environment, Health, and Safety (EHS). If you have any questions or would like more information, contact EHS at 301-846-1451. ■