

LMT Forges New Technologies



*Dr. David Munroe,
director of the LMT*

With every research challenge that is resolved at NCI-Frederick, a new question arises whose answer takes scientists closer to finding cures for cancer and infectious diseases like AIDS or

influenzas. The Laboratory of Molecular Technology (LMT), Research Technology Program, a group devoted to developing cutting-edge technologies, has created several new technologies just in the past year or so to help scientists in their research.

Dr. David Munroe, director of the LMT, noted in a recent interview that LMT has developed four new major technologies: a virus microarray, a monoclonal antibody microarray, an miRNA microarray, and a virus integration site mapping tool. In addition, in collaboration with Affymetrix, the lab has developed a high-throughput microarray.

Virus Microarray

The virus “microarray was designed to identify and detect all known human and avian pathogenic viruses, as well as to detect new viruses that could arise by recombination,” Dr. Munroe said. It includes both RNA and

DNA virus. The array is highly sensitive; with DNA virus, it can identify 20-200 virus particles; with RNA virus, 5-10 particles.

Dr. Munroe and his staff developed the all-encompassing oligonucleotide array “because of the likelihood of an influenza pandemic and the bird flu. We actually put a lot of effort into the influenza and bird flu portions; their whole genome is represented, so it will be very easy to distinguish between the subgroups and to pinpoint exactly where recombination occurs.”

Monoclonal Antibody Microarray

LMT also developed a monoclonal antibody microarray that contains more than 1,000 features and over 150 antibodies directed against cytokines. The microarray

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Garrison Owens (foreground) and Dr. Chang Hee Kim, LMT scientists, work at an Affymetrix high-density microarray work station, an instrument used for cancer gene discovery and detection studies.

Make a Beeline to the Tenth Annual Spring Research Festival

On May 17 and 18, the corner of Sultan Street and Ditto Drive will be buzzing with activity. That’s when the tenth annual Spring Research Festival is being held, and it will be swarming with fascinating exhibits and lively events.

Held in conjunction with Armed Forces Week, the NCI-Frederick–Ft. Detrick festival is open to everyone on campus as well as to the public. The purpose of the festival is to communicate to colleagues and neighbors the basic nature of our research, recent discoveries we have made, and challenges we face in the fight against cancer, AIDS, and infectious diseases

that threaten the quality of life worldwide.

This Year’s Symbol: The Honeybee

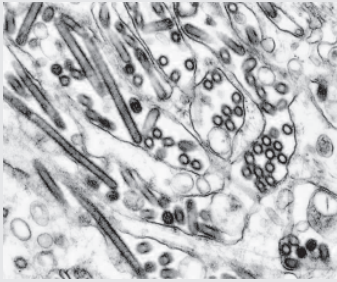
In keeping with the Spring Research Festival tradition of adopting as a symbol a plant or animal known to have disease-fighting characteristics, this year’s emblem is *Apis mellifera*, or the honeybee. Well-known for its organizational abilities, architectural prowess, and industriousness, the



(continued on page 6)

Arthur's Corner

Don't Panic; Be Prepared



Subbarao K, Katz J. Avian influenza viruses infecting humans. *Cell. Mol. Life Sci.* 57(12): 1770-1784, 2000.

A lot of media attention has been devoted to a potential flu pandemic—a worldwide epidemic (hence, “pandemic”). Michael Leavitt, Secretary of Health and Human Services, has stated that “Pandemics are global in nature, but their impact is local. When the next pandemic strikes, as it surely will, it is likely to touch the lives of every individual, family, and community. Our task is to make sure that when this happens, we will be a nation prepared.” At NCI-Frederick, we recognize that a pandemic would have a major impact on our operation; thus, it’s only common sense to ask “what if” and plan as much as is feasible for all eventualities. With that in mind, we are planning for the possibility of a pandemic.

Many aspects must be considered in planning for any emergency situation that results in high absenteeism and disrupts normal operations. Could telecommuting be implemented on a large scale? How would workloads be reassigned, work schedules reconfigured? Would some projects have to be triaged? What essential functions would remain staffed?

How Are We Preparing?

In his role as Chair of the Emergency Preparedness Committee, Dr. Craig Reynolds, Associate Director of NCI-Frederick, asked SAIC-Frederick, Inc., to develop an avian flu preparedness plan late last year. Dr. Randall Morin, director of Environment, Health, and Safety, noted in a recent e-mail that a working group composed of representatives from each of the contractor employers as well as the government was formed, and the NIH is providing guidelines to augment those of the NCI-Frederick group.

“In the meantime,” Dr. Morin stated, “we have already developed a questionnaire to collect information from each laboratory/program/office that will be useful in developing our plan....Some of the more difficult issues to deal with are those that involve family commitments such as child care and transportation.”

Dr. Morin’s task force has set up a Web site, <http://web.ncifcrf.gov/campus/emergency/pandemicflu.asp>, that links to the national pandemic flu information Web site. As guidelines are developed, necessary information will be posted on the Web site.

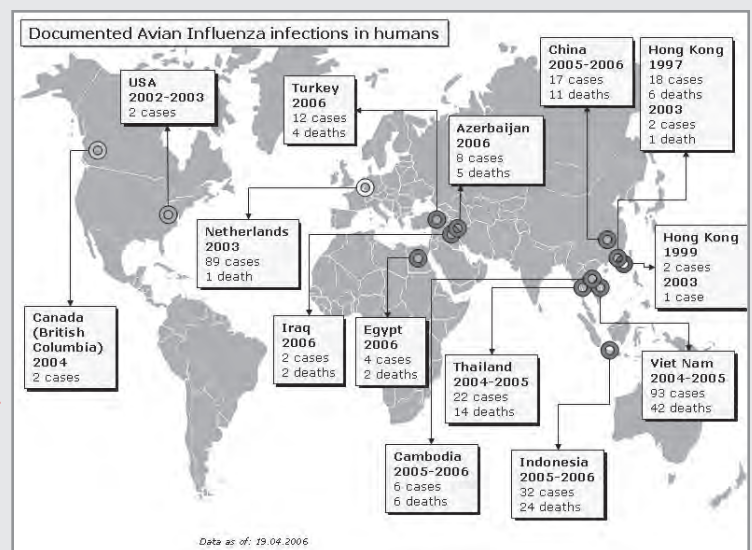
You may find additional helpful information in the March *Poster* article, “EHS Spearheads Emergency Response Plans for NCI-Frederick,” <http://web.ncifcrf.gov/ThePoster/>.

This article focused on emergency communications and security clearances.

What Is Avian Flu?

According to the Centers for Disease Control and Prevention (CDC) Web site, <http://www.cdc.gov/flu/avian/gen-info/qa.htm>, wild birds are viral hosts for avian flu: the virus lives in the saliva, nasal secretions, and feces of the birds, making it very easy for the disease to spread among them. Although wild birds serve as hosts, they rarely become ill with avian flu; however, domesticated birds infected with a highly pathogenic avian flu may die within 48 hours of contracting the disease.

The fact that the latest avian influenza, A H5N1 (a designation based on the envelope of the virus), has crossed the species barrier, from bird to man, increases the chance that the virus may evolve to be readily transmitted from human to human. Researchers are concerned that if the H5N1 virus infects someone already infected with another type of influenza virus which can be readily transmitted in man, the two viruses might exchange genetic material—called “reassortment”—evolving into a new, highly pathogenic virus easily spread in humans. Since it would be a “new”



Map shows regions where outbreaks of avian flu have occurred since 1997. Source: http://europa.eu.int/comm/health/ph_threats/com/Influenza/ai_human_en.htm.

virus for us, we would have little or no immune protection—opening us to the possibility of the devastating effects of a pandemic.

What Works against Avian Flu?

Only two of the four FDA-approved influenza antiviral medications, oseltamivir and zanamivir, seem effective against influenza. Unfortunately, some H5N1 viruses isolated from poultry and humans in Southeast Asia and seasonal influenza A (H3N2) isolates from people in the U.S. during the 2005-06 influenza season are resistant to the other two FDA-approved influenza drugs, amantadine and rimantadine. Thus, the CDC recommends that neither amantadine nor rimantadine be used to treat or prevent influenza A.

As we go to press, the World Health Organization (WHO; http://www.who.int/csr/disease/avian_influenza/country/cases_table_2006_03_24/en/index.html) has reported that the A H5N1 virus has caused nearly 300 cases of severe disease. Most cases have occurred in Asia; more than one-third of those infected with H5N1 have died. In most cases, infection has occurred after close contact with H5N1-infected poultry. So far, however, human-to-human spread has only occurred in a very few cases, and in each of these the H5N1 virus transmission has not continued beyond one person, WHO states.

It's important to note that if avian virus does begin spreading between people and is reported in the U.S., you should use the same common sense precautions that you would use against seasonal influenza. Because of avian flu concerns, since February 2004, the CDC has provided U.S. public health departments with periodic updates on flu outbreaks, recommending common sense precautions to use

Even last fall, concerns about avian flu were leading the news, as this cover from Newsweek's October 31, 2005, issue demonstrates.



in those areas—“avoid poultry farms, contact with animals in live food markets, and any surfaces that appear to be contaminated with feces from poultry or other animals,” its Web site states (http://www.cdc.gov/travel/other/avian_influenza_se_asia_2005.htm).

For information about avian flu, you can visit the federal government's official Web site, <http://www.pandemicflu.gov>, a very comprehensive Web site that includes a frequently updated map showing the latest placement of confirmed cases of avian flu.

Past influenza pandemics have led to high levels of illness, death, social disruption, and economic loss. We don't know how or when such a virus might emerge, but we can take lessons from the history of previous pandemics. At NCI-Frederick, we will be prepared. ↻

Dr. Larry O. Arthur

Principal Investigator of the Operations and Technical Support Contract

and Associate Director of the AIDS Vaccine Program, SAIC-Frederick, Inc.

Helpful Web Sites

NCI-Frederick: <http://web.ncifcrf.gov/campus/emergency/pandemicflu.asp>

Travel information: http://www.cdc.gov/travel/other/avian_influenza_se_asia_2005.htm

Department of Health and Human Services: <http://www.hhs.gov/news/statements/20060306.html>

Centers for Disease Control and Prevention: <http://www.cdc.gov/flu/avian/gen-info/qa.htm>

U.S. government: <http://www.pandemicflu.gov>

World Health Organization: http://www.who.int/csr/disease/avian_influenza/en/

LMT (continued from page 1)

is designed for dual-color labeling and direct labeling of proteins from blood, serum, tissue, and cell lines. The microarray has two arrays on one slide, with 1,000 antibodies on each array, whereas commercial forms have only one array per slide, and about 500 antibodies.

Another high-throughput peptide synthesis platform is being tested and will be available soon. This platform can synthesize large quantities, such as a “1-micromole peptide, which is about 17mer peptide, or about a milligram—that’s a lot. We can do multiples of 96 at once. It’s very pure: in the peptides tested, 90% of their mass falls under a single peak in the mass spec test,” Dr. Munroe said.

miRNA Microarray

LMT has also designed a microarray that will sequence all 90 genes known to be mutated in cancer, as well as all the exons, all the splice sites, and the promoters associated with each gene. “If we can do mutational profiling of large numbers of patients, it’ll be much easier to predict which courses of therapy will work better on which patients, to predict prognosis, and also to subdivide diseased patients into different categories, based on their mutation profile,” Dr. Munroe explained.

“The electronic microarray lets us do mutation detection on non-microdissected or laser-captured-dissected material. Most tumors have varying amounts of normal tissue, which makes it difficult to do mutation detection because you get the signal from the normal tissue, which isn’t mutated. But we can detect mutations on this array in material that’s over 90% normal. It’s very sensitive.” The 1,500-feature oligonucleotide microarray is designed to profile all known (confirmed and putative) human, mouse, rat, *Drosophila*, *C. elegans*, zebra fish, *Xenopus*, chicken, and *Arabidopsis* mutations.

Virus Site Mapping

Virus integration site mapping is also available. The automated procedure includes cloning, sequencing, and mapping and provides data analysis.

Collaboration with Affymetrix

Finally, LMT has developed a microarray in conjunction with Affymetrix. “People send a blood sample to LMT; we hybridize the DNA, analyzing the data,” Dr. Munroe said. LMT has worked with Affymetrix in developing the company’s HTA (High-Throughput Array) platform, “which has 96 arrays arranged in a platform that is compatible with a microtiter plate, so you can do 96 samples at once on a robotic platform; we developed that here, and it’s available as a service now,” he said.

LMT’s technologies help nearly every researcher, whatever his or her field of expertise. For example, you might “use the virus chip to identify a virus that has you stumped; or screen for viral contaminants in drugs or animal stock, or to screen patient samples for virus. LMT is designed to continuously develop new technologies, both genomics and proteomics. Currently, LMT focuses on developing platforms for molecular profiles,” Dr. Munroe concluded.

Certainly, LMT’s technologies push the frontiers of research and help scientists find answers to those research challenges.

For information about how LMT’s technologies can help you, please contact Dr. David Munroe at 301-846-1697, or dmunroe@ncifcrf.gov. The LMT is located in suite 211 in the Medical Arts Building, 915 Toll House Avenue, just off Seventh Street, Frederick. ☞☞

Second Scientific Writing Workshop Scheduled for May

“The number-one predictor of a scientist’s success is how well he or she can communicate.” So says Dr. Larry Keefer, chief of the Laboratory of Comparative Carcinogenesis. How well do you communicate your science?

You can easily learn how to take those notebooks filled with data, figures, charts, graphs, and tables and get them into publishable form when you take the “Presenting Science the ‘Write’ Way: Strategies for Scientific Publication,” a free course offered to SAIC-Frederick, Inc., postdocs and fellows.

Dr. Tim Veenstra and Dr. Brian Hood, the Laboratory of Proteomics and Analytical Technologies; Ken Michaels, Maritta Grau, and Nancy Parrish, Scientific Publications, Graphics & Media, will lead the workshop in Building 549, Conference Room B, May 22, 24, and 26; 9:00 a.m. to 12:00 p.m. Topics to be covered include working with collaborators; dividing responsibilities for writing the paper; selecting the best data and other information for the paper; aiming your writing to fit the parts of the scientific presentation, whether paper or poster; preparing the manuscript for journal submission; addressing reviewer comments; and revising the paper.

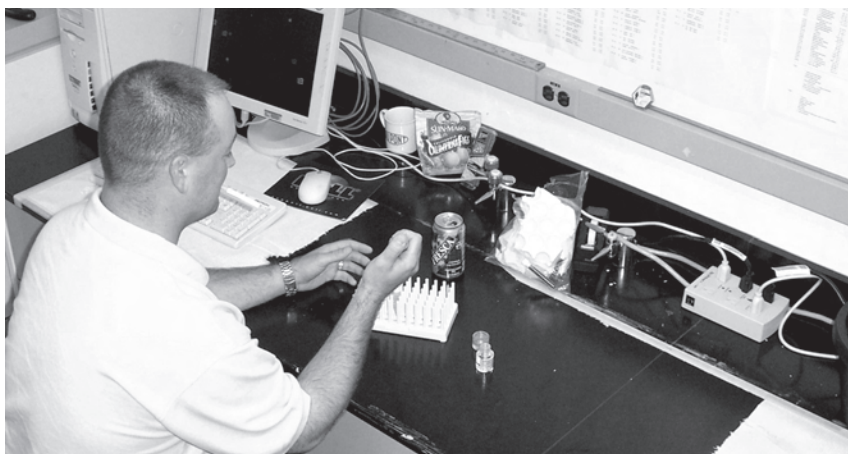
Space is limited to 20 participants, so sign up early. For more information or to attend, call Training Manager Sukanya Bora at 301-846-1129, or e-mail her at sbora@ncifcrf.gov. You must attend all three days of the workshop. ☞☞

How Safe Is *Your Lab*?

How safe is your workplace? Do you know what safety procedures to follow if there should be an accident in your laboratory or office?

Can you answer “yes” to all the following questions? Remember, summer students will be arriving soon! Will the students working in your lab be able to answer “yes” to all these questions? Be sure that you teach your students proper safety procedures before you allow them to participate in laboratory activities.

1. Are the appropriate hazard signs with emergency contact names and phone numbers posted on the outside of your laboratory door?
2. Do you know the location and use of safety equipment (safety showers, eyewashes, fire extinguishers, etc.) in your laboratory?
3. Do you know the emergency procedures to follow in the event of a chemical, biological, or radiological exposure or spill?
4. Are you familiar with the proper use and handling of the biologicals, chemicals, and radiologicals in your laboratory?
5. Do you know how to access health and safety information and material safety data sheets for the chemicals, biologicals, and radiologicals used in your laboratory?
6. Are all containers in your lab properly labeled? Do you know how to interpret these labels?
7. Are the chemicals in your lab properly segregated and stored?
8. Do you wear appropriate personal protective equipment (lab coat, safety goggles, gloves, etc.) in your lab?



There are at least nine violations of safe laboratory practice in this photo. Can you find them?

9. Do you wash your hands after removing gloves and before leaving your laboratory?
10. Do you know how to properly collect and dispose of hazardous wastes?
11. If you are working with infectious materials, recombinant DNA, biological toxins, or select agents, is your work registered with the biological safety office in EHS and the Institutional Biosafety Committee?
12. Are you working with sharps in the laboratory and if so, are you following the proper procedure both for use and for disposal of sharps?
3. No secondary containment is in place for the vial of radioactive material.
4. The technician is not using shielding for work with P-32.
5. Both food and drinks are on the workbench.
6. The technician is not wearing safety glasses, a lab coat, or gloves.
7. The technician does not have absorbent paper or trays on the workbench.
8. It would be a good lab practice to have a Geiger survey meter nearby.
9. The technician has a cigarette in his mouth.

And finally:

13. Can you find at least nine incorrect items or unsafe practices in the photo above of radiological work with P-32?

Answers

1. The technician is not wearing his film badge (TLD); it has been placed above the bench top.
2. No secondary containment is in place for the bag of radioactive waste.

No smoking is allowed in labs. For that matter, smoking is not allowed anywhere on campus; remember—NCI-Frederick is a tobacco-free facility. 🚭

Correction

In the “Arthur’s Corner” for January 2006, the numbers reported for Yellow Task requests and clinical trials were for the Applied Developmental Directorate only. Yellow Task requests totaled approximately 230; more than 190 clinical trials were monitored. In both cases, these numbers are for SAIC-Frederick, Inc., only.

Beeline *(continued from page 1)*

honeybee has been adopted as a symbol of royalty and rulers for centuries.

In the 20th century, scientists discovered that the honeybee has another impressive characteristic: its venom carries a wide range of curative compounds. Two of them, melittin and apamin, have been identified as potential therapeutic agents for treating cancer, sleep disorders, Parkinson's disease, HIV and AIDS-associated dementia, and schizophrenia; for enhancing learning and memory; and for developing novel nonviral vectors for gene therapy.

Other components of the venom are yet to be identified, but it is likely that many more curative compounds will be discovered from these tiny creatures.

Exciting Events to Provide Something for Everyone

In addition to scientific presentations, the festival will feature exhibits on a broad range of health and safety issues, including mental and physical health and fitness, holistic health care, nutrition, aging, drugs and alcohol, cancer, and AIDS. Health screenings

will also be offered to analyze body fat, assess health risks, and more.

As in previous years, major national and regional vendors will exhibit instruments and equipment in the Commercial Science and Technology Expo. Sponsored by the Technical Sales Association, this expo provides an opportunity to talk to vendor representatives and get a hands-on demonstration of state-of-the-art equipment and technology. Last year's festival featured more than 180 vendors. The Technical Sales Association also supports the awards for best scientific posters at the festival.

Science in the Cinema will present movies related to the festival's symbol. *The Swarm* will be featured on May 17, with an implausible look at bees gone awry in what Andrew Wright of Amazon calls a "jaw-droppingly goofy disaster flick" in which "no cliché is left unturned." Starring such old favorites as Fred MacMurray, Katherine Ross, Richard Widmark, Patty Duke, and Richard Chamberlain, to name a few, this film just may be the next cult movie of science. On May 18, the feature film will present a more serious look at bees, with "Tales from the Hive," a NOVA program in which a

specially developed camera lens is used inside the hive to produce an intimate and spectacular look at a working bee colony. This film will be followed by a talk from NCI's own Medicine Man, Dr. David Newman of the Natural Products Branch. ↻

How to Register

If you wish to present a poster at the festival, please register on-line: http://web.ncifcrf.gov/events/springfest/poster_registration.asp

Note that if you would like your poster to be included in the printed program, you must register by May 3.

Health and Safety Fair exhibitors, please register on-line: http://web.ncifcrf.gov/events/springfest/exhibitor_registration.asp

Commercial vendors and exhibitors:

Register with the Technical Sales Association through GTP Management Services International: www.gtpmanagement.com

For more information

Visit the Web site: <http://web.ncifcrf.gov/events/springfest/geninfo.asp>

CSL Provides Remarkably Accurate Results for both Clinical and Basic Researchers

Whether you are a clinical or a basic research investigator, chances are you've had occasion to make use of the Clinical Support Laboratory (CSL), a CCR-sponsored core laboratory. If you've visited the laboratory, you may have noticed the variety of machinery and instrumentation used to produce CSL's remarkably accurate results.

High-Throughput Automated Extraction

For example, the CSL's Clinical Monitoring Section (CMS) provides services for high-throughput automated



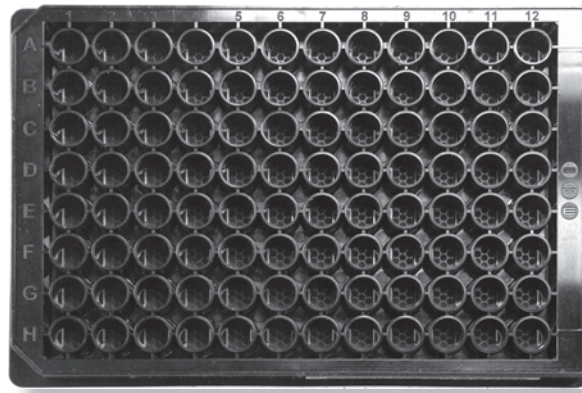
Helen Rager, Associate Scientist at the Clinical Support Laboratory, Applied/Developmental Directorate, holds a test plate from the Meso Scale Discovery SECTOR Imager 6000, used for high-throughput multiplex assays for cytokines, growth factors, and phosphoproteins.

extraction of DNA from small-volume samples using magnetic bead separation on a Qiagen BioRobot M48. The BioRobot M48 provides fully automated nucleic acid purification of up to 48 samples per run from multiple sample sources. Larger-volume or single-sample extractions are also available using Qiagen column technology or from blood collected in PAXGene collection tubes.

In addition, CMS provides support through a broad variety of clinical trial sample processing and inventory support. This support includes density gradient separation of blood, bone marrow, and apheresis products; cryopreservation of isolated mononuclear cells using controlled-rate freeze units; separation of cell subsets using magnetic bead technology; cryopreservation of serum, plasma, and other body fluids; generation of primary fibroblast lines and EBV-transformed B cells. CMS maintains a specimen database that tracks samples and generates reports showing sample collections by patient/protocol and repository status.

Flow Cytometers

A second section is the Flow Cytometric Services (FCS), which specializes in analyzing clinical samples that have gating and analysis challenges such as samples from patients who have been exposed to chemotherapy prior to transplantation; and services that include immunophenotyping, cell cycle analysis, and apoptosis testing (TUNEL, Annexin V). To ensure quality and reproducibility of its results, the FCS participates in external proficiency testing programs and is certified under the Clinical Laboratory Improvement Amendments (CLIA) to perform CD4 determinations. As well as supporting multiple CCR principal investigators, FCS supports the Biopharmaceutical Development Program (BDP) through testing target cell-binding activity of several products.



Test plate from the Meso Scale Discovery SECTOR Imager 6000, used for high-throughput multiplex assays for cytokines, growth factors, and phosphoproteins.

The FCS operates two flow cytometers: a BD FACSCanto Flow Cytometer with 6-color capability; and a Coulter XL Flow Analyzer with 3-4 color capability. FCS personnel will work with you to discuss your specific needs and provide you with an analysis of results obtained not only from the FCS but also from other facilities.

ELISA and Multiplex Assays

Finally, you may have made use of the Lymphokine Testing Section (LTS), which provides testing services using ELISA and Multiplex testing platforms for a wide range of human, mouse, and rat cytokines, growth factors, soluble receptors, and other proteins. Using the Meso Scale Discovery SECTOR™ Imager 6000, LTS now offers high-throughput multiplex assays for cytokines, growth factors and phosphoproteins. The SECTOR™ Imager 6000 platform uses electrochemiluminescence technology for detection, providing high sensitivity, an extended dynamic range of detection relative to standard ELISA, and low backgrounds. Good results have been obtained on this platform with both serum and plasma. The SECTOR™ Imager 6000 can analyze up to 10 analytes in sample volumes of as little as 25 µL. The instrument is designed for high-throughput capabilities with plate

read times of less than three minutes. LTS also has extensive experience in assay development, including both ELISA and bioassay formats. Laboratory personnel can help you with assay design and interpretation of results obtained both from the LTS and from testing performed using the NIH Blanket Purchase Agreement.

To learn more about CSL's services, you can contact either Dr. William C. Kopp or Dr. Mingzhu Zhu. Contact Dr. Kopp by phone at 301-846-1707, by FAX at 301-846-6760, or by e-mail at koppw@mail.nih.gov; contact Dr. Zhu by phone at 301-846-5310 or by e-mail at mzhu@ncifcrf.gov. Finally, you can visit the Clinical Services Program Web site at <http://www.ncifcrf.gov/research/csp/>. To formally request immunological monitoring, please go to the NCI Yellow Task Web site at <http://web.ncifcrf.gov/campus/yellowtask/>. ☺

NCI-Frederick Fitness Challenge 2006 Gaining Momentum

Employees at NCI-Frederick have embraced Fitness Challenge 2006, with more than 300 participants representing all the institutes and contractors of NCI-Frederick. The goal is to lose 2,000 pounds (one ton) of body weight; walk, run, or bike 24,900 miles (the distance around the world), and perform 8,760 hours (one year) of other fitness activity in 2006. All the organizations at NCI-Frederick are competing against each other to see who will be the most successful by the end of the year.

Fitness Challenge Web Site Offers a Wealth of Information

A Fitness Challenge Web site <http://saic.ncifcrf.gov/fitnesschallenge/> has been established to inspire, support and record your efforts. Once you set up your account, you can enter your weight and activity data and track your personal progress, as well as the progress of each company, institute, or SAIC-Frederick, Inc., directorate. There's even a fitness buddy finder to help you find a fitness partner.

The Web site has lots of other health and fitness-related information to keep you motivated. Each month, you'll find a new, healthy recipe, along with helpful tips for maintaining a healthy lifestyle. Special events are also listed, including monthly speakers on health and fitness-related topics and local runs/walks or other activities in which you may participate. From the home page you can link to information on the Odom Fitness Center, Fort Detrick's jogging trails, and the Center for Health Information, all of which will support your efforts.

Be Sure to Enter Your Data

Just as important as doing your activities is entering your data on the Web site so that your organization's progress will be tracked accurately. Once your account is established, you can even log in and enter your data from home. Be sure to enter all of your past, present, and future data so your organization will get the credit. The competition is heating up, so get moving, and record those numbers!

It's Not Too Late to Take the Challenge

It's not too late to participate in the Fitness Challenge.

To enroll in the program, call OHS, 301-846-1096. For inspiration, more information, and to set up your personal account, go to the Web site, at <http://saic.ncifcrf.gov/fitnesschallenge/>. Those without access may use the computers at the Center for Health Information in Building 549, or call OHS for assistance in registering. ↻

Special Events to Keep You Fit

As part of the Fitness Challenge, OHS has organized Lunch & Learn seminars on health- and fitness-related topics. The Fitness Challenge Web site also lists other events in which you may participate. Upcoming events include:

April 30: Frederick Marathon*

May 13: Mission of Mercy Charity Run*

Lunch & Learn Programs

Building 549, Auditorium
11:30 a.m. – 12:30 p.m.

May 11: Eating Addictions – Selden Cooper, OHS

June 8: Sun Safety/Exercising in the Sun – Lois Minchoff, OHS

July 13: Fitness Tips –Rebecca Davis, Maryland Extension Services

*These are community events that SAIC-Frederick, Inc., actively supports. Please see related article on page 11.

For more information on upcoming events, health tips, recipes, and to find a fitness buddy, visit the Fitness Challenge Web site, at <http://saic.ncifcrf.gov/fitnesschallenge/>.

We're looking forward to seeing less of you!



OHS gave free pedometers to NCI-Frederick Fitness Challenge 2006 participants, as part of the 2nd Quarter Kick-off held on March 31.

Calling All Sponsors!

Take Your Child To Work Day Set for July 12



Take Your Child to Work Day (TYCTWD) 2006 will be held on Wednesday, July 12, and to make the day a success, we need the support of both repeat and new sponsors. One of the most popular events on campus, TYCTWD is an opportunity to give future scientists hands-on experience in a “real-life” environment.

If you or anyone you know would be willing to open his or her office, work area, or laboratory to our children, please contact the TYCTWD Planning Committee, by e-mailing kidsday@ncifcrf.gov or by calling 301-846-7400.

Don't Know Where to Start? The Planning Committee Can Help!

Many employees say they would like to participate, but they just don't know what type of program to present. Representatives from the Planning Committee would be delighted to meet with you to help you plan your program. The committee can provide ideas, supplies, and even an area where you can present your program if your work area or lab is not accessible to visitors.

Can't Do an On-Site Program? Come to the Hub!

If you feel you can't give up your lab or work area for the day, consider a Hub activity. These are educational demonstrations, information booths, and “just for fun” activities that are

open to everyone who is registered for TYCTWD. Hub activities take place outside in a common area, where children can go between programs. Your staff can work at the Hub in shifts, so only a few people need to be away at a time. This arrangement will reduce the impact on your lab or department.

TYCTWD Depends on Everyone's Participation

Without sponsored programs, we could not have TYCTWD, so your participation is critical. The number of children participating increases each year, but the number of sponsored programs does not. Unless we increase the number of programs available, we may not be able to hold the event this year. So consider participating. Contact the Planning Committee to discuss some ideas. You'll be surprised at how much fun *you* will have!

For more information, go to the Web site, at <http://kidsday.ncifcrf.gov/>, or call 301-846-7400 to speak to a member of the Planning Committee. All programs/activities should be registered no later than June 2. ☺



Pictures on this page are of possible future scientists from the 2005 Take Your Child to Work Day.

Attention, all authors!**Disclaimer Language
Now in Effect**

Are you responsible for writing manuscripts, posters, or abstracts? If so, you are probably aware of the disclaimer language that is now required to appear on your work. These statements must appear **VERBATIM**, and vary according to the type of work. Affiliations for SAIC-Frederick, Inc., authors must also be stated in a specific way. A summary of the required language is shown below:

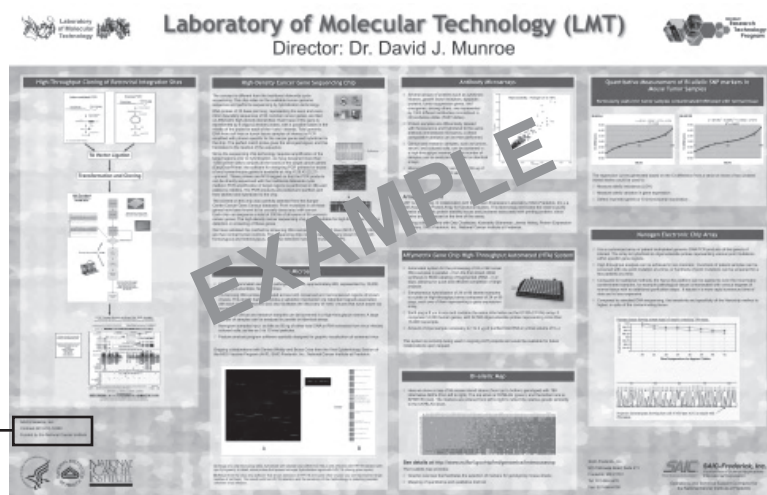
Author's affiliation in all abstracts and manuscripts:

Author's name, [Option 1, 2, and/or 3 from list], SAIC-Frederick, Inc., NCI-Frederick, Frederick, Maryland 21702

Options:

- 1 – Government laboratory name
- 2 – SAIC-Frederick, Inc., laboratory name
- 3 – SAIC-Frederick, Inc., directorate name

SAIC-Frederick, Inc.
Funded by NCI Contract N01-CO-12400



Our thanks to Dr. David Munroe for the use of this Laboratory of Molecular Technology poster.

Include in all abstracts and posters:

Funded by NCI Contract N01-CO-12400.

Include in all manuscripts:

This project has been funded in whole or in part with federal funds from the National Cancer Institute, National Institutes of Health, under contract N01-CO-12400. The content of this publication does not necessarily reflect the views or policies of the Department of Health and Human Services, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.

Include in all manuscripts and posters where applicable:

When animal studies have been performed, include:

NCI-Frederick is accredited by AAALAC International and follows the Public Health Service Policy for the Care and Use of Laboratory Animals. Animal care was provided in accordance with the procedures outlined in the "Guide for Care and Use of Laboratory Animals" (National Research Council; 1996; National Academy Press; Washington, D.C.).

When funding has been provided by the Center for Cancer Research (CCR) or the Developmental Therapeutic Program (DTP), include:

For use of CCR Funds:

This research was supported [in part] by the Intramural Research Program of the NIH, National Cancer Institute, Center for Cancer Research.

For use of DTP Funds:

This research was supported [in part] by the Developmental Therapeutics Program in the Division of Cancer Treatment and Diagnosis of the National Cancer Institute.

It's important to remember that these statements cannot be combined. Each statement must appear independent of another. A Publication Disclaimer Certification form was distributed to the OTS Management Committee in February 2006, and the latest version of the form was distributed electronically to Directorate secretaries and administrative assistants March 9, 2006. This form must be signed by your director and submitted with each publication to the Office of the Director.

If you have any questions, or need additional information, please call Connie Suders, at 301-846-7282, or e-mail csuders@ncifcrf.gov.

**Gnuschke New
Ethics Officer**

Andi Gnuschke, Contract Management Office (CMO), has been appointed SAIC-Frederick, Inc.'s first representative on the SAIC Corporate Employee Ethics Committee (EEC), providing her with many resources to resolve ethics issues. If you have an ethics concern, you can reach her in Building 428, Room 43A; at 301-846-6952; or by e-mail at agnuschke@ncifcrf.gov. If you would like to remain anonymous, please send her a letter or contact the SAIC Corporate Ethics "Hotline" at 800-760-4EEC. Look for a profile on her in a future issue of *News & Views*.

SAIC-Frederick, Inc., Supports Two Charity Events This Spring

For the second year in a row, SAIC-Frederick, Inc., will be a sponsor for the Frederick Marathon. Held April 28–30, the 4th Annual Frederick Marathon is a weekend-long event to promote Frederick as a vital place to live and do business, to encourage a spirit of community involvement, and to promote running as a part of a regular fitness program. Any net proceeds from the event will be donated to local charities, including the United Way. Events include a Twilight 5K Race, pasta party for runners and friends, and fireworks at Harry Grove Stadium on Saturday. Sunday's events open with a sunrise service at 6:30 a.m., followed by the marathon at 7:30 a.m., which will wind through the streets of historic Frederick and end back at the stadium. Even if you're not running, this should be an enjoyable weekend for the whole family. For more information, go to <http://www.frederickmarathon.org>.

Run/Walk Events Support Medical Care for the Poor

SAIC-Frederick, Inc., is also a sponsor for the Mission of Mercy 5K Run and 3K Family Fun Walk on May 13. Mission of Mercy is an all-volunteer, nonsectarian organization made up of active and retired licensed medical professionals who provide free health and dental care, and free prescription medication to people who have no health insurance or limited access to health care. Mission of Mercy's mobile clinics are active throughout Pennsylvania and Maryland, where they served nearly 25,000 patients in 2005 alone. You may register anytime up to and including the day of the event. All proceeds will benefit Mission of Mercy. For more information, or to register, go to <http://www.amissionofmercy.org>. ☺

Proactive Recruiters Key to Finding Good People



*Mary Lou Siegle,
Employment Manager*

Mary Lou Siegle, SAIC-Frederick, Inc., Human Resources' employment manager, believes passionately in the value of a dedicated recruitment program. In a recent

interview, she said, "I believe it is one of the most important functions of human resources. Even with the best product and the best services, if the right hiring decisions are not made, an organization won't be successful."

Employment Activities Expand

In the past year, Ms. Siegle and her team of four recruiters and two specialists have participated in several job fairs and open houses; held interviewing skills workshops for managers; and worked with Scientific Publications, Graphics & Media to develop a Laboratory Animal Sciences Program poster with pockets for informative brochures and response postcards for prospective candidates. They are also developing other marketing tools "to highlight all the great reasons to work here," she said. HR also plans to implement a new applicant tracking system from Corporate to "help streamline the hiring process by reducing paperwork," Ms. Siegle added.

Internet Brings Advantages and Challenges

Involved with recruitment for 20 years, Ms. Siegle has witnessed recruitment strategies evolve from newspaper ads to paperless systems using the Internet to post, track, and identify candidates. However, she noted, the Internet has both advantages and disadvantages.

Because of the number of résumés received on-line, "Recruiters spend enormous amounts of time sifting through hundreds of résumés to identify those candidates who are truly qualified," she said. Another challenge to electronic applications is that applicants don't have the opportunity to talk with an interviewer. "It would be wonderful if we could talk with everybody, but the sheer volume of applications makes that impossible," she said.

Team Provides Interviewing Assistance

Ms. Siegle and her staff can provide directorate or departmental hiring managers with interview and selection assistance. "Our recruiters are experienced in developing objective, job-related interview questions to assist in identifying the best-qualified candidate for a position. We encourage using behavior-based questions in the interview, a concept based on the premise that past behavior predicts future performance. The employment team is available to assist managers in developing interview questions to target the most qualified candidate," Ms. Siegle said.

If you have questions about the recruitment process, or would like help in developing interview skills, contact Ms. Siegle in Building 372 at 301-846-5366. ☺

SAIC-Frederick, Inc., Cares

SAIC-Frederick, Inc., demonstrated its corporate generosity during the first quarter of 2006 by donating \$6,500 to Frederick county schools and other local organizations. Among the recipients of these donations were Goodwill Industries of Monocacy Valley, the Community Foundation of Frederick County, and the Advance Rescue Team of the Independent Hose Company. Other organizations, including the Boys and Girls Clubs of America and the Children's Inn at NIH, received

over \$1,900 in donations during the same period. Total contributions for the quarter reached \$8,400. ↻

United Way Campaign Results

SAIC-Frederick, Inc., employees once again showed their generosity by donating \$9,154 to the 2006 campaign for the United Way of Frederick County, held from November 8 to December 2, 2005. The donation per employee was the second highest in the last five years, at \$305 per employee donor.

Funds generated from the drive are used to help over 20 member nonprofit agencies in Frederick County. These agencies provide assistance to Frederick County citizens in need, including children and families facing crises, men and women who are homeless, hungry, or suffering from drug or alcohol abuse, and those who are challenged with physical or mental disabilities.

Combined with SAIC-Frederick, Inc.'s corporate gift of \$2,500, the total contribution to the 2006 campaign was \$11,654. ↻

Important Telephone Numbers

Ethics Hotline	1-800-435-4234
Human Resources Department	301-846-1146
Benefits Questions, HR Department	301-846-1146
SAIC Stock Programs	1-800-785-7764
SAIC Stock Price	1-888-245-0104

Important Dates

Spring Research Festival	May 17-18, 2006
Take Your Child to Work Day	July 12, 2006

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comments or suggestions to <SPGM@ncifcrf.gov>.

SAIC Stock

The price for SAIC Class A Common stock at press time was \$43.92. A limited market trade to buy and sell SAIC stock has been scheduled for June 30, 2006. Key dates are as follows:

Limit order cycle opens	June 9
Limit order deadline	June 22
Stock price set	June 23
Trade Modification Deadline/Stock Trade	June 30



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