November 2001

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T Clinical Center CONS

Astute Clinician Lecture to be held Nov. 7

Chronic myelogenous leukemia (CML) will be addressed in the fourth annual Astute Clinician Lecture on Nov. 7 by Dr. Brian Druker, Professor of Medicine and the Director of the Leukemia Center of the Oregon Cancer Institute at Oregon Health and Science University.

"STI571: A Tyrosine Kinase Inhibitor for the Treatment of Chronic Myelogenous Leukemia (CML), Validating the Promise of Molecularly Targeted Therapy," is the title of Dr. Druker's lecture, which will be held at 3 p.m. in Masur Auditorium.

Dr. Druker was instrumental in the development of STI571 for the treatment of CML. In 1993, in collaboration with Novartis Pharmaceuticals, he initiated preclinical studies with STI571 and served as the principal investigator on the Phase I clinical trials of this agent.

A 1981 graduate of the University of California San Diego School of Medicine, Dr. Druker completed an internship and residency in internal medicine at Barnes Hospital, Washington University School of Medicine in St. Louis, Missouri. He then trained in Medical Oncology at Harvard's Dana-Farber Cancer



Dr. Brian Druker is this year's Astute Clinician lecturer.

See Lecture, page three



Doppman dedication

The 1C520 conference room in the Radiology department was dedicated to the memory of the late Dr. John L. Doppman, last month. Dr. Doppman served as the deputy chief of the Radiology Department from 1964 until his retirement in April 2000. The dedication was held as part of the weekly **Grand Rounds sessions in which** Dr. Murray F. Brennan, chairman, **Department of Surgery, Memorial** Sloan-Kettering Cancer Center, delivered The John Doppman Memorial Lecture address: "John L. Doppman, A Clinician's Radiologist." Dr. Doppman's death in August 2000 brought to an end 36 years of energetic devotion to clinical research and patient care at NIH. His career earned him recognition by his colleagues as a skilled physician and pillar of the clinical research community.

CC QWI and Diversity Council

Where can caregivers turn for help?

In the aftermath of recent events, the CC QWI/Diversity Council would like to help CC staff learn more about available on-site resources to provide personal comfort. All too often, we focus strictly on the patients, failing to recognize personal needs and to talk about, and deal with, the pressures of work and daily life. Understanding and responding to these needs can help us continue to be effective as caregivers and supporters of patient care and better manage the many roles we assume in our work and personal lives.

The NIH Employee Assistance Program (EAP) has led many successful group discussions for branches and sections throughout NIH. Requests for group consultations have increased markedly since the events of September 11. CC department heads and supervisors may contact Dr. Mike Bowler, Coordinator, EAP, to learn more about bringing trained consultants to Clinical Center departments. EAP staff members are also available to provide individual consultations. You may contact that office at 301- 496-3164 to schedule appointments and/or obtain literature. You can also visit the NIH EAP website at:

http://www.nih.gov/od/ors/ds/eap/

Dr. Raymond Fitzgerald, Chief, Spiritual Ministry Department, and his staff, are also available to speak with Clinical Center employees, in addition to patients. The 14th floor chapel is never closed and is open to anyone seeking quiet time when services are not in progress. There is also a small chapel on the eighth floor in the pathway between the ACRF and main hospital. To learn more about Spiritual Ministry Department services and/or to obtain literature on a variety of topics related to coping and grief, call 301-496-3407.

The CC QWI/Diversity Council is happy to receive suggestions thatmay help to minimize stress and enhance the quality of worklife and diversity for Clinical Center employees. On-site suggestion boxes are located on the second floor walkway outside the cafeteria (near the soda and snack machines), and on the B-1 level in the entrance to the cafeteria. You may also contact the co-facilitators of the council: Sue Fishbein (sfishbein@cc.nih.gov)at 301-435-0031, or Jacques Bolle (Jbolle@cc.nih.gov) at 301-594-9768.



Congratulations Graduates

Certificates of completion were presented to the Neuroscience Nurse Internship Program Class of 2001. This marks the 13th graduating class of the program. Pictured are: (front row I to r) Patrick Taylor, R.N., Elizabeth Childs, R.N., Maria Campanella, R.N., Janna Iskakova Peries, R.N. (back row I to r) Barbar Karp, M.D., assistant clinical director, NINDS, Laura Chisholm, R.N. chief, Critical and Acute Care, Nursing Dept., Clare Hastings, R.N., Ph.D., chief, Nursing and Patient Care Services, Beth Price, R.N., clinical nurse specialist, Neuroscience Program of Care, Nursing Dept., Lisa Marunycz, R.N., nurse manager, **Neuroscience Program of Care, Nursing Dept.**



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Clinical Center News, 6100 Executive Blvd., Suite 3C01, MSC 7511, National Institutes of Health, Bethesda, MD 20892-7511. (301) 496-2563. Fax: (301) 402-2984. Published monthly for CC employees by the Office of Clinical Center Communications, Colleen Henrichsen, chief. News, article ideas, calendar events, letters, and photographs are welcome. Deadline for submissions is the second Monday of each month.

Clinical Center News online: www.cc.nih.gov/ccc/ccnews/current



volunteers needed

Volunteers needed

The National Institutes of Health seeks individuals being treated with antidepressant agents such as Prozac or Zoloft and healthy individuals not taking antidepressant agents. Participants will be asked to donate four tablespoons of blood for routine screening evaluation and platelet function. The visit is about one hour and compensation is provided. Call Donna Jo Mayo at 301-496-5150 for information.

Healthy children

Healthy children, ages 5-8, are sought by NINDS to participate in a study comparing language organization with that of children with epilepsy. Your children may be eligible if they speak English as their first language, do not have a learning disability, attention deficit disorder or any serious medical condition and do not wear braces or glasses (contacts allowed). Participation involves 2-4 outpatient visits over one year. Compensation is provided. Call Lynn at 301-402-3745.

Outpatient study

College-educated, middle-aged adults needed for a two-day outpatient study at NIMH. Involves blood draw and routine clinical, neurological and cognitive procedures. Compensation provided. For information call 301-435-8970.

Women needed

NICHD is seeking healthy women ages 18-55 or 60 and older to participate in an ovarian function study involving five brief outpatient visits. Blood draws, ultrasound and an injection of a natural body hormone are involved. You may be eligible if you do not smoke or take any drugs, including birth control. A past pregnancy is necessary. Compensation is provided. For information call 301-435-8201.

Volunteers needed

Males and females 14 years of age and over who will be receiving a cochlear implant in the future are needed for a study involving language coding in cochlear implant recipients. Compensation provided. Call 301-496-5368, ext. 205 or send an email to szymkoy@nidcd.nih.gov.

Hormone study

The Behavioral Endocrinology Branch, NIMH, seeks female volunteers ages 18-55, to participate in studies of the effects of menstrual cycle hormones on brain and behavior. Volunteers must have regular menstrual cycle with no changes in mood in relationship to menses, be free of medical illnesses, and not taking any hormones or medication on a regular basis. Compensation provided. Call Linda Simpson-St. Clair at 301-496-9576.

Male volunteers

Men, ages 45 and older, are needed for a research study to assess risk factors for atherosclerosis. Compensation provided. For more information or to volunteer, call 301-496-3666.

Female volunteers

The Behavioral Endocrinology Branch, NIMH, seeks healthy female volunteers ages 40-50, to participate in a longitudinal study of perimenopause. Volunteeers must have regular menstrual cycles and be medication free. Periodic hormonal evaluations, symptom rating completion and an occasional interview will be performed. Compensation provided. For more information call 301-496-

African American men and women

The Heart Disease Risk Factors in African Americans Study is investigating the relationship of obesity to heart disease risk factors in healthy, nondiabetic African American men and premenopausal women, ages 18-50. Currently being enrolled are African American men who weigh 180 lbs. or more, and African American women who weigh 150 lbs. or more. There will be a series of four outpatient visits to the Clinical Center. For more information, call 301-402-7119. Compensation provided.

Druker to speak during lecture

continued from page one Institute.

After completing clinical training, Dr. Druker began laboratory work studying the role of tyrosine kinases in cancer. As part of his laboratory work, he developed the 4G10 monoclonal anti-phosphotyrosine antibody. Since 1990, Dr. Druker's focus has been the Bcr-Abl oncogene and chronic myelogenous leukemia.

His role in the development and clinical application of STI571 has resulted in numerous awards, including the AACR-Richard and Hinda Rosenthal Award and the Warren Alpert Prize from Harvard Medical School. Dr. Druker has also received the John J. Kenney Award from the

Leukemia and Lymphoma Society, the American Cancer Society Medal of Honor, and the Dameshak Prize from the American Society of Hematology.

The Astute Clinician Lecture was established through a gift from Haruko and Robert W. Miller, M.D. It honors a U.S. scientist who has observed an unusual clinical occurrence, and by investigating it, has opened an important new avenue of research.

The Astute Clinician Lecture is an NIH Director's Wednesday Afternoon Lecture Series event. It is hosted by the Clinical Center. For information and accommodations, contact Hilda Madine, 301-594-5595.

AIDS vaccine hopes to outsmart fatal virus

Everyday nearly 15,000 people worldwide are infected with AIDS. About 7,000 die. It's a global health-care crisis. It's an epidemic.

It's what Dr. Barney Graham wakes up to everyday. "AIDS is a daily tragedy. A crisis. Each day that we don't have a vaccine, we are losing lives," said Dr. Graham.

Through 2000, cumulative HIV/AIDS associated deaths worldwide were approximately 21.8 million -17.5 million were adults and 4.3 million were children under the age of 15. "A lot of people are working on a cure, but the best way to stop this is to prevent people from getting it," said Graham, chief of the Clinical Trials Core and Viral Pathogenesis Laboratory of the Dale and Betty Bumpers Vaccine Research Center, NIAID.

"HIV is a smart virus. It's smart about learning how to survive, but it's not a very strong virus," said Graham. HIV has a poor transmission efficiency, according to Graham. Place someone in a room with a person who has chicken pox or measles and they are likely to get infected by the initial exposure. However, HIV cannot be transmitted through casual contact or by being in the same room with another person. Even the average likelihood of contracting HIV through a sexual encounter is 1 out of 200 exposures, but Graham cautions that there are people who have been infected with just one exposure from a sexual encounter. Yet, the virus is smart in that it has strategies to hide from the immune response and can replicate itself in ways that help it evade and outpace the immune response.

With that in mind, investigators at the VRC made it their mission to outsmart the virus by successfully developing a vaccine to prevent HIV infection. Last month, they took their initial step when a 56-year-old California man came to the eighth floor clinic as the first volunteer in the first HIV vaccine protocol.

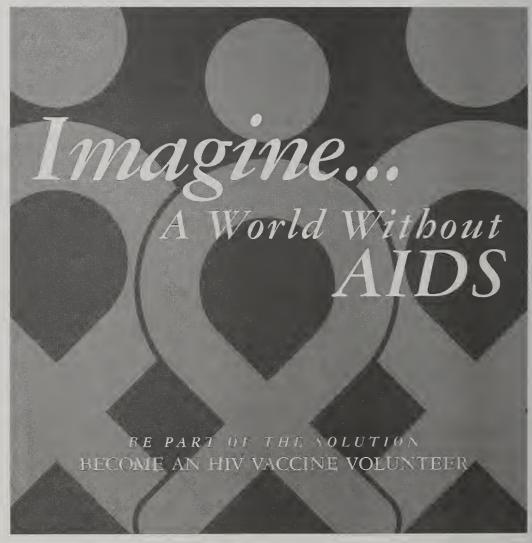
"Many people have misconcep-

tions about how an HIV vaccine works and how it is tested," said Nancy Barrett, recruitment and outreach specialist. "The vaccine is designed to prevent infection, so the studies are done in healthy uninfected persons. Although these kinds of products may also be tested in HIV-infected people in the future, our initial study will be done in uninfected persons."

That's the message they are trying to get out through their nationwide advertising campaign to recruit 21 volunteers for this phase one trial.

"Currently, we have two people enrolled in the study, and we are in the process of screening others," said Grace Kelly, R.N., M.S.N., research nurse specialist and coordinator of the study. "I am very gratified by the strong support from the local community."

The vaccine causes the immune system to produce antibodies or special immune system blood cells that may suppress or kill HIV, the virus that causes AIDS. Because there are no live, killed or weakened forms of HIV in the vaccine, it is impossible to catch the disease from the vaccine. In fact, "We believe the needleless injection system and the nature of the product being tested will not even cause much of a sore arm," said Graham.



1.866.833.LIFE (toll free)



40 Convent Drive, Building 40 Bethesda, MD 20892-3017 Studies ongoing at National Institutes of Health Bethesda, MD

Customer service is key to being the best

At one time or another, everyone has received poor customer service. Whether it was inefficient service, a cashier with a bad attitude or maybe just having to wait in a long line. Whatever the experience, the CC, is going to great lengths to make sure that it never happens here.

"Everyone's job here is about taking care of patients, whether they are involved directly or indirectly." said Deborah Gardner, chief, Planning and Organizational Development. "Each person needs to realize that they are the Clinical Center and have much power to make it better."

And making it better is what Customer Service Initiative Steering Committee hopes to accomplish through its customer service training. The pilot for the training began in May with a goal of training 1,000 employees by December. To date, 800 employees have completed the 4 hour course that covers four modules: 1. The key to good customer service; 2. Effective communication; 3. Managing difficulties and; 4. Process improvement.

"Overall, the staff enjoyed the training and I've noticed a change in the interaction with the patients and among themselves," said Karen Kaczorowski, acting chief, Outpatient Department. All 48 members of the outpatient services staff are on the frontline, greeting and working directly with patients. "It's not just an improvement with individual interaction, but how the staff handles stressful situations and difficult patients."

During the training, employees interact with one another in groups and evaluate their strengths and weaknesses as a department and as individuals. Sessions on behavioral indicators, such as demonstrating active listening, attempting to understand customer's needs, and assessing problem situations and initiating effective service are covered, along with the importance of non-verbal communication and active listening. Different instructors teach each of the modules.

"We should be the poster people for good customer service," said Mark Davidson during one of the training sessions. Davidson, along with colleagues from the Medical Records Department said they realize that customer service is an integral part of being employed at the CC. "To be customer oriented is part of our job. It's what our department does day in and day out as we provide a service to the patients."

"We tell people what we can do for them, not what we can't," said Gardner. "We need to be the way we want the world to be."

That is what the customer service team hopes to instill into each Clinical Center employee through see **Customer**, page eight

Nitric oxide: A sickle cell nightmare

In a continued effort to find a cure for sickle cell anemia and the effects of the blood disorder, Dr. Mark Gladwin, along with colleagues in CCMD, NIDDK and NHLBI, have developed a study that could reduce pulmonary hypertension in patients with sickle cell anemia.

According to Dr. Gladwin, one-third of patients with sickle cell ane-mia develop pulmonary hypertension, or high blood pressure in the lungs, which can lead to heart failure. Past studies have shown that nitric oxide, a gas produced naturally in parts of the body, can relax smooth muscle cells in blood vessels, ultimately increasing the blood flow. Improved blood flow is the key to treating the potentially deadly complication of sickle cell anemia.

The study, which begins this month, uses a new device that allows a pulse of nitric oxide to be inhaled within .02 seconds of taking a breath. Patients will be required to be on nitric oxide continuously for two months.

"Sickle cell is an orphan disease. It only affects 50,000 people in the U.S, yet it is one of the most common genetic diseases that affect African Americans," said Dr. Gladwin. "We have started a major research effort with six protocols designed to find new treatments for sickle cell anemia."

The initial protocol, which began two years ago, measured the effects of nitric oxide on hemoglobin, the oxygen-carrying molecule in red blood cells. The study demonstrated that when nitric oxide is inhaled, it binds to hemoglobin. Once attached, the gas travels through the bloodstream dilating vessels as it passes through.

However, those studies didn't require patients to continuously inhale nitric oxide for such an extended period. "This is the first study we have had with patients breathing nitric oxide for this long," said Gladwin. "I think that is our biggest challenge when recruiting patients." But not too big of a challenge. The study, which began Nov. 1, had already recruited its first patient prior to the start date. Two years ago, all 75 patients needed for the initial protocol were recruited within five months.

"People tend to lack trust and are afraid they will be harmed," said Sheryl Austin. Austin has been a patient in several sickle cell protocols. "It's exciting to see people doing research in this area of study,"

Other investigators involved in the studies include Dr. Richard Cannon, III, NHLBI, Dr. Vandana Sachdev, NHLBI, Dr. Frederick Ognibene, CCMD, Dr. Alan Schechter, NIDDK and Dr. Griffin Rodgers, NIDDK.

Sickle cell anemia causes hemoglobin molecules to cluster into spikes as oxygen is lost. The spiked molecule slow down the blood flow and can block vessels entirely. When blood flow is disrupted, oxygen can no longer be delivered to the body.

Let us not forget the spirit of goodwill

One day of tragedy brings country together; time causes us to forget

The 19th century German classicist, Heinrich von Kleist, in his novella "The Earthquake in Chile" described the blossoming of the human spirit in the aftermath of a cataclysmic natural disaster. In the wake of the Tuesday's terrorist attacks, the deadliest man-made domestic disaster in our nation's history, Americans witnessed numerous instances of generosity and altruism. None was more gratifying than the remarkable mass outpouring of volunteer blood donors. Donors of all ages, races, religions and ethnic groups lined up to do what they could to help, to donate blood. In the 36 hours that followed the first downed plane, our small but determined staff at the National Institutes of Health's blood bank, where daily donations ordinarily number 30 to 40 units, screened more than 400 volunteers and collected some 363 units of blood and blood platelets. Every cot, couch and stretcher was filled with volunteer donors as were the chairs commandeered from every office to line the halls and foyer. Donors stood in line and took numbers when there were no more seats to be had. A young boy heard on the news that donor centers were running short on refreshments, so he brought us a bag of groceries. A family with 7 children brought in bags of apples. Traffic was disrupted on Old Georgetown Road as donors struggled to pass through the heightened security measures on this federal reservation, yet not a single instance of road rage was reported. Blood donors waited 2 to 3 hours to donate, and then thanked us profusely for the opportunity to do so. Stories like this were repeated across the country. It was extraordinary.

Nor was the spirit of good will confined to Americans. At NIH, visiting scientists, and their friends and relatives volunteered to donate, as did a delegation from the Korean Embassy. I am told that foreign tourists turned out at other collection centers. I received telephoned offers of blood from Magen David Adom, the Israeli national blood service as well as from Italy. My colleagues were contacted by blood services in the United Kingdom and the Netherlands. Volunteers turned out to donate blood around the world. You might say that under the circumstances, they were all Americans.

As we have seen in other emergency situations, the spirit of the volunteer donor is infectious. Blood bank staff worked 14-hour shifts without complaint and were joined by professionals from other areas of the hospital. Three former employees, now FDA compliance officers, volunteered to return to our laboratory to relieve fatiguing technologists. Another former employee returned to spend hours taking calls and scheduling donors. An NIH executive and 25-year veteran blood donor, intimately familiar with the screening process, called to offer his services as a blood donor screener--but a world class scientist was already performing this task in the last screening

We turned some donors away. I know that sounds like heresy, but it was a calculated act and a proper one. Of course we recorded contact information so that we can recall those volunteers and schedule donations in the days ahead. Tuesday's donor is not permitted to give again for two months. However donated blood outdates within several weeks and blood platelets within several days. At that point we run the risk of inadequate supplies. Our short term needs for blood have been met, in Bethesda and coast to coast. The nation's blood storage capacity has been all but exceeded thanks to the generosity of blood donors throughout the country. By Thursday morning, it was important to begin telling

our streams of donors that it would be far better for us to schedule donations for later in the month than to draw more blood than was needed now and risk outdating this precious but perishable gift. Most donors, eager as they were to be of immediate help, understood this message.

The last point is worth emphasizing. Blood for today's tragedy is taken from yesterday's inventory. New collections must be quarantined until they are tested, processed, labeled, and shipped to where they are needed. As vital as the donors are who circle the block at the call for emergency blood, their primary role is to replenish our supplies. Once that has been done, we urge the remaining eligible volunteers to make appointments to donate in the upcoming weeks when the acute need may have past but the ongoing need to support casualties and other patients still exists. We desperately need new volunteers to make a commitment to donate regularly and often, absent a national emergency and absent the national media spotlight. For those who were unable to give last week, or have not yet given, please plan to donate in honor and remembrance of those who were affected by the attacks.

In Kleist's novella, the spirit of goodwill was forgotten all too soon after the last earth tremor was felt, and people reverted to more ordinary and parochial behavior. Let that not be the American way. To those of you who turned out by the thousands to donate blood in those first chaotic hours, thank you. For those of you who could not or who were turned away, please don't forget us. We will need you in the days and weeks to come.

Harvey G. Klein, M.D. Chief, DTM President, American Association of Blood Banks

briefs

IPPCR registration

Registration is now open for the 2002 Introduction to the Principles and Practice of Clinical Research. The course will run from January 15, 2002 - April 23, 2002. Classes will be held on the NIH campus on Tuesday and Wednesday evenings from 5:30 p.m. to 7:00 p.m. There is no charge for the course; however, the purchase of a textbook is required. A certificate will be awarded upon the successful completion of the course, including a final exam. Deadline for registering is January 4, 2002. For information regarding coursework or to register, visit the course website at http://www.cc.nih.gov/od/core.

Support NIH School

To help NIH School earn free educational equipment, shoppers at Safeway and Giant Foods need only register for a club card and give the school code: Giant #2983, and Safeway #0623. Registered shoppers

automatically earn credit for the school each time they use their club cards.

NIH/PITT training

Applications for training in clinical research from the University of Pittsburgh will be available beginning November 1 in Building 10, Room B1L403. The program requires that students spend 8 weeks in residence at the University of Pittsburgh, beginning in July 2002. The 8-week summer program is then supplemented by additional courses offered at the Clinical Center via videoconferencing. Tuition for the 2002-2003 academic year is \$480 per credit, with partial tuition waivers for some courses. The room charge for the 8-week summer session is \$800. Prospective participants should consult with their institute or center regarding the official training nomination procedure. For more information please send an e-mail to crtp@imap.pitt.edu or call (412) 692-2686. Deadline for applying is March 1, 2002.

Holiday fundraiser

The Department of Laboratory Medicine requests your participation in thier 29th annual holiday fundraiser auction to benefit the Patient Emergency Fund and the Friends of the Clinical Center on Dec. 7, from 9 a.m. to 2 p.m., Room 2C310. To make a donation or to volunteer, call Shiela Barret at 301-496-5668 or Norma Ruschell at 301-496-4475. All donations are tax deductible. There will be a white elephant sale table, bake sale, pizza and a silent auction.

Free concert

Come and enjoy the thirteenth season of the Manchester String Quartet on Nov. 19 at 12:30 p.m. in Masur Auditorium. For more information, call Sharon Greenwell at 301-496-4713.

Cafeteria opens

The wait is over. The B1-level dining center will officially open its doors on November 6.

CRIS team prepares employees for new system

The NIH CRIS Project is well underway and the CRIS Project
Management Team (PMT) is currently finalizing the requirements for a new Clinical Information System to replace MIS.

The CRIS system will offer new tools for taking care of patients and for collecting research data in the CC. The goal is to design a system to reflect the needs of the entire intramural research community. As a result, the PMT is providing as many forums as possible for members of this community to help promote the success of the CRIS and increase the understanding of the process.

Over the next 6 months the PMT has scheduled a series of educational sessions. These sessions are targeted for all interested personnel, including physicians, nurses, technicians, and

IT specialists. The sessions will present real-life examples of the challenges and risks of similar system installations in the hope that realistic expectations will be developed for the CRIS implementation.

The first session of the series is entitled "Prerequisites for Research and Clinical Data

Management – What are the Issues?" The session will held on December 3rd from 1:30pm to 3:00pm in Lipsett Auditorium. An interactive panel discussion is planned.

Topics and Speakers for this session are:

Intersection of Research & Clinical Database

Stephen Johnson, PhD. Associate Professor of Medical Informatics,

Columbia University

Standards & Terminologies
James Cimino, M.D.
Associate Professor of Medical
Informatics in Medicine, Columbia
University

Privacy & Security
Paul Tang, M.D.
Chief Medical Information Officer,
Palo Alto Medical Foundation

The PMT is committed to choosing a system that meets the needs of our clinical research community and your participation in the various forums will help us to meet this goal.

For more information about the CRIS Educational Sessions, contact Dr. Stephen Rosenfeld at 301-496-3825.

Clinical Center: Making customer service easy

continued from page five

these training session – not just to do customer service right, but to do it better.

"Giving good customer service is hard," said Gardner. "But it's the hard that makes it good. If it was easy, then everyone would be doing it."

To sign your department up to take the customer service training, email Rona Buchbinder at rbuchbinder@cc.nih.gov or Deborah Gardner at dgardner@cc.nih.gov

(right) Employees from the Medical Records Department present information about non-verbal communication during a customer service training session.



november

Grand Rounds
noon-1 p.m.
Lipsett Amphitheater

Prostate Cancer Prevention: What's New in 2001 Howard Parnes, M.D., NCI Obesity and Exercise Performance Bart Drinkard, MSPT, CC

Wednesday Afternoon Lecture 3 p.m. Masur Auditorium

STI571: A Tyrosine Kinase Inhibitor for the Treatment of Chronic Myelogenous Leukemia (CML), Validating the Promise of Molecularly Targeted Therapy Brian J. Druker, M.D., Oregon Helath Sciences University Grand Rounds noon-1 p.m. Lipsett Amphitheater

> Contemporary Clinical Medicine: Great Teachers Sepsis Richard P. Wenzel, M.D., M.S.C., Medical College of Virginia

Wednesday Afternoon Lecture 3 p.m. Masur Auditorium

Thanksgiving Break

21 Grand Rounds noon-1 p.m. Lipsett Amphitheater

No Grand Rounds Lecture

Wednesday Afternoon Lecture 3 p.m. Masur Auditorium

Thanksgiving Break

28 Grand Rounds noon-1 p.m. Lipsett Amphitheater

The Ubiquitin-like Protein
SUMO-1: Roles in Cellular
Function and Disease
Mary Dasso, Ph.D., NICHD
Mouse Models of Human
Disease and Vice Versa
Robert S. Adelstein, M.D.,
NHLBI

Special Tuesday Lecture 3 p.m.
Masur Auditorium

Science, the Public and New Policies Rita R. Colwell, Ph.D., National Science Foundation, VA

Wednesday Afternoon Lecture 3 p.m. Masur Auditorium

Molecular and Biological Analyses of BRCA1 Function David M. Livingston, M.D., Harvard Medical School, Boston