Instituteshrinks its operating deficit but remains cost-conscious

Amid the gloomy headlines dominating the financial news these days, there is a positive story – and it comes from Dana-Farber.

Although it still faces a shortfall, the Institute reduced its operating deficit by 21.5 percent last year over the previous fiscal year. That improvement is attributed to rising patient services, generous donors, careful spending by staff, and a healthy return on DFCI’s investments.

“Fiscal 2000 showed strong improvement in financial results,” reports Director of Finance Karen Bird as she thumbs through financial statements released earlier this month. “It was a good year.”

Says Chief Financial Officer Dorothy Puhy, “We appreciate all the hard work staff members have done to achieve these results.”

The operating deficit for 2000, budgeted at $19.5 million, actually amounted to $16.4 million – a savings of $3.1 million over last year’s level. The deficit represents the difference between revenues from such sources as patient fees, research, and fundraising, and operating expenses from salaries, supplies, building maintenance, and other sources.

Dana-Farber has traditionally run a deficit from operations. The higher-than-usual shortfall in recent years resulted from planned investments made in order to expand our facilities and operations.

Ted Williams 406 Club gathers at Fenway Park to honor the man and his mission of support

On the same weekend that Boston Red Sox legend Ted Williams was awaiting open-heart surgery, members of the Dana-Farber organization named in his honor met at Fenway Park to discuss two of the sports icon’s favorite subjects: baseball and the Jimmy Fund.

Institute donors, staff, and Red Sox personnel gathered for dinner on Jan. 12 overlooking Fenway’s snow-covered field for the fourth annual celebration of the Ted Williams 406 Club. Many attendees were founding club members who had each committed $5,000 over five years to fund the Ted Williams Senior Investigatorship at the Institute. The 82-year-old Hall-of-Famer and war hero was instrumental in the early growth of the Jimmy Fund, and he has spent more than half a century raising awareness and millions of dollars for Dana-Farber.

Williams was still making pleas for support days before his operation – when (as reported in the Boston Globe) he asked his son to tell fans, “No flowers. Instead of sending [me] things that are gonna die, send donations to the Jimmy Fund.” Judging from the poignant words delivered by young Jimmy Fund Clinic patients at the Fenway event, Ted’s ongoing advocacy has been well worth it.

“The doctors and staff at the Jimmy Fund Clinic never made any promises to me, but the greatest gift they gave me – and the one I still hold on to today – was hope,” said 19-year-old Chris Johnson, a clinic patient who has undergone surgery.

DFCI mourns death of Einar ‘Jimmy’ Gustafson, a symbol of survivorship

Carl Einar Gustafson of New Sweden, Maine, a long-distance truck driver who went from public anonymity to near celebrity after coming forward as the original “Jimmy” of the Jimmy Fund, died Jan. 21 at a hospital in Caribou, Maine. He was 65 and had suffered a stroke.

The warm, soft-spoken cancer survivor was named honorary chairman of the Jimmy Fund in November 1999. He had, however, been serving as an unofficial ambassador for the charity since May 1998, when he was welcomed back at Dana-Farber and Fenway Park as the Jimmy Fund turned 50. After his discovery, the father of three and grandfather of six made countless appearances on behalf of the Institute and provided hope and inspiration to those facing cancer today.

Einar Gustafson (left) and two other key figures in Dana-Farber history – DFCI President Emeritus David G. Nathan, M.D. (center), and Boston Red Sox legend Ted Williams – greet a younger in the Jimmy Fund Clinic in July 1999.

“Einar’s story – that he was cured at a time when so few were and led such a full life – is an inspiration to all of us,” said DFCI President Edward J. Benz Jr., M.D. “His story is the story of our nation’s war on cancer, and over the past five decades, tens of thousands of people have rallied against cancer in his name.”

Surgery without scalpels: interventional radiology comes to Dana-Farber

The patient, a 29-year-old farmer from Maine, lies with his chest centered in the “doughnut hole” of a CT scanner. At his side, Eric vanSonnenberg, M.D., slowly works a thin needle into his chest, watching its internal progress on a video monitor. When the needle reaches a lemon-shaped tumor in the lungs, vanSonnenberg turns on a heating element in the needle, destroying the tumor and a narrow layer of surrounding tissue.

The procedure, performed in the Radiology suite at Brigham and Women’s Hospital last week, marked one of the first times that “interventional radiology” has been used to treat a tumor in the lungs. A few weeks earlier, vanSonnenberg and his colleagues had become the first to use the technique
A message from Ellen Pothier, R.N.

The value of planning ahead for health-care decisions

It has been 10 years since the Federal Patient Self-Determination Act was passed. This law gave each state the authority to develop and implement a program to support residents’ rights to specify the kind of medical care they would want if, at some point, they become unable to make or communicate their wishes directly.

Massachusetts responded to the federal mandate by assembling a task force of patients’ rights experts. This group developed an outline for the Massachusetts Health Care Proxy Act and created a customer-friendly proxy form made available to all residents. This is the officially recognized Massachusetts Advance Care Directive. It is an optional statement of instructions to help the will is not legally recognized in Massachusetts; it will be available to all residents. This is the officially recognized Massachusetts Advance Care Directive.

Many Massachusetts residents have not taken the time to complete health care proxy forms, which are routinely available in hospital admitting offices. These easy-to-use documents do not require notarization or a visit to a lawyer.

The most important thing to do when filling out the form is to have a focused and open conversation with the person you choose as your proxy. This individual must agree to take on this responsibility and be willing to communicate your wishes to providers (if you ever become unable to do this yourself).

Your proxy agent needs to know your definition of “quality of life.” The discussion should also include your feelings about the use of modern technology in health care, such as cardiopulmonary resuscitation, mechanical ventilators, feeding tubes, kidney dialysis, and other life-sustaining treatments. In addition, you should inform your physician about your advance directive and provide him/her with a copy.

Putting your wishes in writing and appointing a health care proxy agent are as important as crafting a will or legally appointing someone to take care of your finances if you become incapacitated.

Health-care workers have an opportunity to serve as role models in this area. When you learn more about advance care directives, set one up for yourself, and discuss the process with friends and family, you will help the community better understand the peace of mind that comes when you take the time to formally appoint a proxy and make your wishes known.

DFCI staff members who would like more information on advance care directives may call Ellen Pothier, the Institute patient representative, at (632)-3417. Health care proxy forms are available in the Access Management Department on Dana 1.

Dedicated to Discovery
...Committed to Care

Inside the Dana-Farber office of Candace Lowe, Sc.D., administrative director of the Women’s Cancers Program, but eventually each hand-woven winter hat wound up where it belonged – on the heads of Boston-area children.

In its second year of teaming up with Brigham and Women’s Hospital as part of the nationwide “Caps for Kids” program, Dana-Farber provided 423 caps to youngsters at the Franklin Square Day Care Center in Mission Hill and the Tobin Elementary School in Boston. In addition to Institute employees, the DFCI contingent of knitters and crocheters included parents of staff members, patients, their friends and family, and others.

Seventy-two caps were turned in by residents of the Jack Satter House senior citizens facility in Revere, who heard about the undertaking through Inside the Institute.

All told, DFCI and Brigham and Women’s delivered 590 hats to the kids on Dec. 20, and several of the youngsters responded with thank-you notes after the holidays.

“It was a spectacular effort and exceeded everything we could have hoped for,” says Lowe, who has spearheaded Dana-Farber’s program the past two years after spending several years knitting with the BWH group while an employee there. “Last year we donated just over 100 hats, and we were hoping to double that number. We wound up nearly quadrupling it, which says a lot about the generosity of spirit inherent in people associated with the Institute. The children and teachers were thrilled that Dana-Farber was involved, and they assured us everyone would be used.

The “Caps for Kids” program starting nationally in 1984, Brigham and Women’s has been taking part under the direction of Joan Casby for 12 years, and it has now combined with DFCI to turn out more than 4,500 hats to help families through the frigid New England winters. Eliasson’s Creative Warehouse of Needham has donated yarn toward the DFCI endeavor each of the past two years.

Those interested in getting an early start for next year’s effort – or in obtaining patterns and yarn – are invited to contact Candace Lowe at (632)-2675.

Staff members encouraged to ‘step up’ for Nextel Jimmy Fund Stair Climb on Feb. 8

Take part in one of Dana-Farber’s most energetic evenings by joining or volunteering for the Nextel Jimmy Fund Stair Climb on Thursday, Feb. 8. Last year, more than 500 climbers and 100 volunteers worked together to raise more than $100,000 for the Jimmy Fund and DFCI at this annual event, in which participants can climb up to 99 flights of stairs in office buildings at 53, 60, and 75 State St. in downtown Boston.

Here’s how you can help us achieve a record-breaking year:

Climbers: If you would like to join Team Dana-Farber, please contact Alyssa Adreani, team captain, by e-mail or at (632)-3611. Registration will be in the Great Hall at Fanueil Hall from 4 p.m. to 6 p.m., when the event begins. All climbers will receive a T-shirt and medal, and are invited to the post-climb victory party at the Bay Tower Room. The person fundraising minimum, which can be made up of collected pledges, is $75.

Volunteers: Those wishing to volunteer can do so from either 3 p.m. to 7 p.m. or from 5 p.m. to 8:30 p.m. Please contact Muriel Mathieu at (632)-5008 and indicate which shift you prefer. All volunteers will receive a T-shirt and are invited to the post-climb party.
New law aims to increase bone marrow donations

The Massachusetts legislature gave patients needing bone marrow transplants at Dana-Farber and other area hospitals a belated holiday gift recently by mandating that insurance companies cover the cost of testing unrelated, potential bone marrow donors.

Governor Paul Cellucci signed a bill into law last month that requires health insurance companies to reimburse the $100 cost to individuals undergoing the one-time tissue-typing procedure known as Human Leukocyte Antigen (or HLA) testing, which provides the necessary information to list people in the national registry of potential donors.

In a supportive letter to the Chair of the House Ways and Means Committee, Beth Charney of Dana-Farber, National Bone Marrow Donor Program coordinator, predicted that "this legislation will increase the rate of successful matches for patients needing bone marrow transplants."

Charney offered a point-by-point rebuttal against opposition to the bill that had been mounted earlier by the Massachusetts Association of HMOs. The association later reversed its position and supported the bill after some language changes were made.

State Representative Michael Rodrigues (8th Bristol District), who was instrumental in writing and pushing through the bill via the legislature's Joint Insurance Committee, was another vocal advocate for its approval. So were staff at Michael's Fund, a Fall River charity that raises money to cover the costs of HLA testing for those seeking bone marrow donors. Cindy and Thomas Wrobel set up the fund in memory of their son, Michael, who died in 1996 at age 11 from lymphoma while seeking a bone marrow donor.

"This law is a meaningful and important step toward helping cancer patients survive," says Charney. "The cost of being typed has deterred people from joining the registry. This new program not only rewards healthy individuals who want to help others, but helps those individuals seeking matches."

At a Jan. 5 press conference to celebrate the passage of the state's HLA testing bill are (left to right) Beth Charney (DFCI donor coordinator; DFCI patient Nick Arruda; State Sen. Joan Menard; Thomas and Cindy Wrobel; Patricia Lang, donor center coordinator for Rhode Island; and State Rep. Michael Rodrigues. (Linda Turner photo)

The new law follows similar legislation in Rhode Island, the first state in the nation to pass such a bill. During the recent legislative fight in Massachusetts, 22-year-old Dana-Farber patient Nicholas Arruda of Fall River testified about his inability to find a match.

More than six million people are currently registered as volunteer donors worldwide, and about 3,000 patients are searching the registry for a bone marrow match at any given time. Over the past year, an average of 150 patients a month have received transplants with registry matches.**

Newfound structure helps prepare immune system to fight invaders

For scientists, the body's instruction manual for fighting infections is like a book with large sections whited out. Much about how the immune system identifies and arms itself against foreign invaders is still unknown.

A new study by researchers at Dana-Farber and Brigham and Women's Hospital fills in a critical gap. The study, led by Arlene Sharpe, M.D., Ph.D., of Brigham and Women's and Gordon Freeman, Ph.D., of Dana-Farber, found that a recently discovered structure on immune system T cells helps prepare the cells to fight specific invaders.

The research, performed on mice, involves a structure called the inducible costimulatory (ICOS) receptor. The receptor comes into play after T cells have been activated against infection and helps them specialize in attacking particular infectious agents.

This finding may one day lead to new treatments for autoimmune diseases such as rheumatoid arthritis, in which the immune system mistakenly targets the body's own tissues. ICOS may be particularly involved in treating asthma. Manipulation of the ICOS receptor may make it possible to dampen or shut down the immune response even after it has begun, thereby alleviating autoimmune conditions.

The study was published in the Jan. 4 issue of the journal Nature.**

Gordon Freeman, Ph.D., of Hematologic Oncology

"Jimmy" continued from page 1

We certainly pledge to continue that fight." "Jimmy"'s tale began in 1948, when Gustafson was a 12-year-old patient of Sidney Farber, M.D., founder of the Children's Cancer Research Foundation (eventually renamed Dana-Farber Cancer Institute) and the father of modern chemotherapy. Dubbed "Jimmy" to protect his privacy, the boy was visited by players from the Boston Braves baseball team and featured on Ralph Edwards' national radio program, "Truth or Consequences."

His publicized fight against cancer, spearheaded by the Variety Club of New England, helped raise awareness that this deadly disease struck children and helped generate more than $200,000 within months to support Dr. Farber's research.

Following that brush with celebrity and the mission of his cancer, Gustafson returned to his family's farm in northern Maine. He later lived for many years in Massachusetts, yet didn't reveal that he was the original "Jimmy" until a letter from his sister, Phyllis Clauson, alerted officials at Dana-Farber.

Despite clues over the years to Gustafson's fate and identity, everyone at Dana-Farber had assumed that "Jimmy" had died, because cure rates for pediatric cancers were so low during the era when he was treated. According to Institute physicians, Gustafson probably survived because his cancer (non-Hodgkin's lymphoma, which had a 15 percent cure rate in the 1940s) was operable. Once the tumor was removed from his intestines, chemotherapy was used to prevent spread of the disease.

Today, the improvement in cure rates for childhood cancers, from less than 10 percent to greater than 90 percent (and as high as 95 percent for some forms of the disease) stands as one of the greatest medical successes of the past half-century.

Gustafson never intentionally concealed his role as "Jimmy," but because of his family's private nature and the remoteness of his childhood home, he remained anonymous until 1998, the 50th anniversary of the radio broadcast. When he stepped forward that spring, staff, patients, and volunteers lined up for autographs, and fans at Fenway Park cheered this symbol of survivorship before a Red Sox-Yankees game.

"Einar was generous and unselfish with his time," said Jimmy Fund Chairman Mike Andrews, "and he had a huge impact on everyone who cares about the Jimmy Fund."

Gustafson's many efforts included recording public service announcements for radio and television, visiting patients, and appearing at Jimmy Fund events, such as the Pan-Massachusetts Challenge, the Boston Marathon® Jimmy Fund Walk, and golf tournaments throughout New England. He literally began carrying the Dana-Farber message across the country in December 1999, after receiving a refrigerator trailer for his truck, provided by Chancellor Corporation, and emblazoned with the Jimmy Fund logo.

His story was featured in People magazine, Sports Illustrated, and newspapers nationwide, and the state of Maine held a recognition day for him in April 1999. Gustafson also made frequent appearances at cancer survivor rallies.

"Einar made a big difference 50 years ago and continued to make a big difference over the past three years," added David G. Nathan, M.D., president emeritus of Dana-Farber and the Robert A. Stranahan Distinguished Professor of Pediatrics. "We are very grateful that he came forward, and that we had the privilege of working with him again. We will all miss him deeply."

Information about services and memorial donations were not available at press time.**

Information about services and memorial donations were not available at press time.**
Red Sox ‘Caravan’ makes stop at Jimmy Fund Clinic

Jack Nee was not scheduled for a visit to the Jimmy Fund Clinic on Jan. 31, but the 8-year-old from Winthrop wasn’t going to miss this opportunity. His family has season tickets to the Boston Red Sox, and Nee was about to meet some of the sports heroes he watches at Fenway Park each summer.

“I’m a second baseman, and this year I’m playing for the Red Sox in Little League,” said Nee, an outpatient at the clinic. “Nomar [Garciaparra] is my favorite player, but I love them all. I can’t wait to see them.”

Baseball season is still three months away, but a contingent of Red Sox players stopped by the clinic that afternoon to visit with young patients and their families. Nee and his mother, Judy, both clad in authentic Red Sox jerseys, were among those who talked and posed for photographs with the athletes, who also autographed Red Sox jerseys, were both clad in authentic Red Sox jerseys, were both clad in authentic Red Sox jerseys, were

Madison Nannery (center) gets a boost from her mom, Mary, to obtain Scott Hatteberg’s autograph.

research and patient care to keep the Institute at the forefront of the battle against cancer. Reimbursements for services also have been lower than expected because of the shift to lower-paying insurers.

To address the deficit, DFCI has made concerted efforts to review the way it operates and to undertake only the most critical renovations. Deficit reductions last year also came from expanding research programs, increased patient volume and related services (such as radiology), favorable market conditions, and an extremely fruitful fundraising year that saw contributions and royalty income climb more than 32 percent to over $61 million.

But, Puhy cautions, “We’ve been fortunate to have strong returns on our investments to help us subsidize the deficit. We can’t count on those market conditions continuing in the future. We need to make some additional improvements in our financial performance so that we are not so dependent on our investment returns.”

Here are some of the year’s financial highlights:

• The operating deficit dropped by 21.5 percent, from $20.9 million to $16.4 million.

• Fundraising activities, including trademark income, yielded $61.2 million, up from $46.1 million in fiscal year 1999. Additionally last year, direct fundraising expenses declined as a share of contributions to 12 percent – a level more in line with previous years.

• Adult and pediatric outpatient visits grew 14.1 percent to 118,533 in fiscal year 2000. On the adult side, Dana-Farber expanded its outpatient services while Brigham and Women’s Hospital closed its adult outpatient oncology clinics. As a result, DFCI treats all adult oncology patients previously seen at both institutions, as planned under a joint venture agreement with Partners Healthcare System. Dana-Farber now has 27 licensed inpatient beds at BWI.

• The Institutes total assets swelled 14.7 percent, from $616.6 million last year to $707.6 million in FY 2000 as a result of both the increased fundraising and strong investment performance during the year.

• Dana-Farber spent almost $5 million on charity care, which includes free care to indigent patients and contributions to a state pool for needy patients. In other financial developments last year:

• Dana-Farber and six other Harvard-affiliated institutions formed the Dana-Farber/Harvard Cancer Center (DF/HCC) to foster cancer-related collaboration among 800 researchers. The institutions – DFCI, Harvard Medical School, Beth Israel Deaconess Medical Center, Brigham and Women’s Hospital, Children’s Hospital, Massachusetts General Hospital, and Harvard School of Public Health – conduct more than $235 million in cancer-related research each year.

• The National Cancer Institute awarded the Dana-Farber/Harvard Cancer Center $52.3 million over the next five years and extended Dana-Farber’s designation as an NCI Comprehensive Cancer Center to DF/HCC. Funding awarded in the grant will be used in part to support large, highly technical core laboratories critical to genetic research in cancer.
Dana-Farber/Partners CancerCare teams with community health centers to promote awareness about cervical cancer

In an effort to promote awareness of cervical cancer risk and improve access to screening and treatment, five physician-researchers from Dana-Farber/Partners CancerCare are meeting with community health center clinicians in Dorchester, Jamaica Plain, Mattapan, and Roxbury this winter.

Most of the talks are taking place in January as part of National Cervical Health Awareness Month. The physicians — who include Ursula Matulonis, M.D., and Ross Berkowitz, M.D., of Dana-Farber and Brigham and Women’s Hospital — are sharing the latest information on treatment and risks for cervical cancer, and are emphasizing the need to increase the number of women screened annually for the disease.

Cervical cancer is nearly 100 percent curable when diagnosed early. But the key to early diagnosis is an annual Pap test, and public health data reveal racial and income disparities in cervical cancer screening rates and deaths from the disease.

A 1998 Massachusetts Department of Public Health survey shows the Commonwealth ranked fourth highest nationally in the number of women age 18 and over who had a Pap test during the previous three years. But, compared to 92 percent of all other races, only 46 percent of Asian women age 18-39 had undergone a Pap test during the past three years.

Furthermore, while 94 percent of Massachusetts women and 89 percent of Boston women age 18 and over report having had a cervical Pap test at some point in their lives, women with annual incomes of less than $25,000 were much less likely to have ever been screened.

Whereas nearly 95 percent of African-American women in Boston say they have had a cervical Pap test at some time in their lives, the Boston Public Health Commission reports that from 1993-98, African-American women had twice the mortality rate from cervical cancer of Caucasian women.

The cervical cancer lecture series is made possible by Dana-Farber/Partners CancerCare’s Gillette Centers for Women’s Cancers. The presentations are scheduled for the Geiger-Gilton, Upham’s Corner, and Napolset Community Health Centers in Dorchester; the Martha Eliot Health Center in Jamaica Plain; the Mattapan Community Health Center; and the Whitter Community Health Center; and the Whitter Community Health Center.

Public health data reveal racial and income disparities in cervical cancer screening rates and deaths.

Street Health Center in Roxbury. In addition to Matulonis and Berkowitz, participating physicians are Christopher Crum, M.D., of BWH, and Najmosama Nikrui, M.D., and A.K. Goodman, M.D., of Massachusetts General Hospital.

Inaugural series

This is the first time DF/PCC has organized a lecture series on cervical cancer for community health center clinicians. The five centers are among 14 Boston-area community health centers that teamed with Dana-Farber/Partners CancerCare two years ago to expand the availability of free breast and cervical cancer screening to uninsured women age 40 and above.

Last year, with Department of Public Health funding, the health centers used mobile mammography or on-site mammography to check 1,200 uninsured women for breast cancer, they also performed Pap smears to screen for cervical cancer. Nearly 20 percent of the women had never had a Pap test.

Recent state changes now enable uninsured women age 18 and over to receive a free annual Pap test, and the 14 community health centers involved are urging women in their community to be screened.

Radio spots produced by Partners HealthCare System in five different languages are also airing in January. The ads promote the importance of annual screening and the availability of free screening for uninsured women. The radio ads are voiced by JudyAnn Bigby, M.D., of BWH and health professionals from community health centers who speak Khmer, Haitian-Creole, Portuguese, and Spanish.

Ross Berkowitz, M.D. (Steve Gilbert photos)

More calendar listings for the Institute and other affiliated organizations can be found on DFCI Online, at https://live/link.dfc.harvard.edu, under “Calendars.”

Parenting Workshop on the MCAS Tests Debate

Tuesday, Jan. 30, noon to 1:15 p.m. Room 447, Tosteson Medical Education Center, 260 Longwood Avenue, Harvard Medical School

Speaker: Jackie King, Coordinator of the statewide Coalition for Authentic Reform in Education (CARE)

Join this discussion about the controversial high stakes MCAS tests — their origins in education reform, content, and use to determine graduation — and the effects of concerned parents, teachers, and students to foster a comprehensive approach to assessment of student and school progress. Feel free to bring your lunch.

Presented by the Harvard Medical Center Office of Work and Family. For more information about this program or for other parenting resources, call Barbara Wolf at the Office of Work and Family at 432-1615.

Sexual Harassment Prevention Training Sessions

Feb. 6, 10 - 11 a.m., Shields Warren 1

Feb. 26, 2 - 3 p.m., O1620

March 6, 10 - 11 a.m., Shields Warren 1

Attendance at a sexual harassment training session is a one-time mandatory requirement for all staff. Pre-registration is required. To register, send a message to Leigh Holden at dfci_training@dfci.harvard.edu. If you have any questions or would like to schedule a separate training session for your department, please call Holden at (617)632-6137.

DFCI Ethics Rounds

Monday, Feb. 26, noon - 1 p.m.

Smith Family Room (O1620)

Topic: Should insurers pay for early-stage clinical trials?

Presenter: Sarah W. Alexander, M.D. Discussant: Norman Daniels, Ph.D., Professor of Philosophy, Tufts University

Moderated by Edward J. Benz, Jr., M.D., President of Dana-Farber

For more information, please contact Steven Joffe, M.D., M.P.H., DFCI Ethics Advisory Committee, at 632-5295.

Patient Safety Lunchtime Lectures

Feb. 15, March 15, May 17 noon - 1 p.m.

Smith 304

Hear several Dana-Farber leaders present what we’ve learned, done, and are currently doing to support continuous improvements in patient safety. Through these and many other related lectures, our efforts have been well recognized by healthcare staff nationwide. At the request of staff, we are now presenting these lectures to the DCFI community.

There will be plenty of time for questions and discussion. Bring your lunch; soda and cookies will be provided.

“Systems and Error Prevention”

Thursday, Feb. 15

Speakers: Sylvia Bartel, R.P.H., M.H.P., Director of Pharmacy, and Robert Soiffer, M.D., Chair of the Pharmacy and Therapeutics Committee; Clinical Director, Hematologic Oncology; Co-Director, Stem Cell Transplantation

“Critical Event Analysis”

Thursday, March 15

Speakers: Maureen Connor, R.N., M.P.H., Director Risk Management, and Deb Duncombe, M.H.P., Risk Manager

“Update on Systems for Pediatric Chemotherapy Safety”

Thursday, May 17

Speaker: Amy Billet, M.D., Chief, Oncology Inpatient Service, Children’s Hospital; Assistant Professor of Pediatrics, Harvard Medical School

For more information, contact Leigh Holden in Human Resources, at (617)3852.
on an adrenal gland tumor.

In a few months, another innovation is planned: interventional radiology will become available at Dana-Farber.

Sometimes known as “scalpel-less surgery,” interventional radiology involves the use of imaging technology such as CT (computed tomography) or MRI (magnetic resonance imaging) scanners and ultra-slim needles, wires, and catheters to perform procedures that once could be done only by surgeons. First developed in the 1980s, the technique is now one of the fastest-growing areas of medicine.

“At Brigham and Women’s – and soon at Dana-Farber – we use interventional radiology (or IR) to target abnormalities, make diagnoses, and treat problems in a variety of organs,” says vanSonnenberg, of the Department of Radiology. “We use IR to take biopsies [extract tissue for laboratory analysis], drain fluids, treat nerve pain, and remove obstructions or stones from organs such as the kidneys, bile ducts, gallbladder, and intestines. Most recently, we’ve started using it to kill tumors.”

The technique is favored by some patients and physicians because it can be less traumatic, less costly, and require less hospitalization than conventional surgery. In some cases, IR may represent the only means of diagnosing and treating a condition, vanSonnenberg says.

At Brigham and Women’s and soon at Dana-Farber, interventional radiology procedures always are will be performed in consultation with, and with cooperation from, surgeons or other referring physicians, according to vanSonnenberg.

A great deal of training is required for radiologists to become interventional radiologists, vanSonnenberg says, as is true of the entire interventional radiology team – other physicians, nurses, and radiology technologists.

In a typical procedure, a patient is sedated and given a local anesthetic where a needle or other slender instrument will be inserted. If the aim is to kill (or “ablate”) a tumor, the radiologist will guide the needle and probes to the site of the tumor, aided by a live image produced by a CT or MRI scanner or ultrasound device. With current technology, radiologists can target tumors or other physical abnormalities as small as 3-5 millimeters in diameter. They can destroy a tumor by heating it, freezing it, injecting it with chemicals, or a combination of techniques.

Interventional radiology can also be useful for clearing blockages in the body, whether in a blood vessel, airway, kidney, bile duct, or intestines. Radiologists can pass a tiny stent – a tube made of wire mesh – to the blocked area and allow the stent to expand to hold the passageway open.

Many interventional radiology procedures can be done on an outpatient basis, although some patients spend a night or more in the hospital as a safety precaution.

At Brigham and Women’s, interventional radiology is used on a wide range of patients; at Dana-Farber, it will be reserved for cancer patients. That doesn’t mean, however, that the technique will be employed at the Institute only for tumors.

“Cancer patients can have a wide variety of problems other than tumors that can be treated by interventional radiology,” vanSonnenberg observes. “They may have an abscess that needs to be drained, or blockage or stones in their kidneys, bile ducts, or gallbladder that need to be removed. Having the service available at Dana-Farber will enable many patients to have such procedures performed on the same day they come in for other appointments.”

The inauguration of a service at the Institute will require the hiring of additional radiologists and nurses skilled in interventional techniques, he adds. Anesthesiologists often participate in the procedures, and pathologists are frequently on hand to undertake an immediate laboratory analysis of removed tissue.

At the forefront

For vanSonnenberg, part of the field’s appeal is the opportunity to participate in an area at the cutting edge of medical practice. “During my residency and fellowship in radiology at Mass General Hospital [in the 1980s], interventional radiology was so novel that practically every week we were doing brand-new procedures. You couldn’t look them up in the medical literature, because they’d never been done before.”

Much of that excitement persists, he adds, citing the recent “first” of removing a tumor from a patient’s adrenal gland. VanSonnenberg and his colleagues also conduct research into new techniques with colleagues at other Harvard-affiliated hospitals.

This research, combined with ever-more-sophisticated technology, promises to expand the interventional radiology field even further, vanSonnenberg notes. Dana-Farber, in fact, plans to obtain a combined CT-PET (positron emission tomography) scanner in the near future, which will provide even more options for patients.

Text by Robert Levy
Photos by Laura Wulf
gone three surgeries for an incurable brain tumor in six years. “Maybe in the near future, there will be a cure for cancer, but until then I’m thankful that there is a place like the Jimmy Fund Clinic and people like you who support it.”

Saluting a Hero

Recognizing in its name the phenomenal .406 batting average reached by Williams in his best season, the 406 Club has raised more than $2 million since its 1995 inception. With its original 406 founding pledges now filled, the club has become integrated into DFCI’s Annual Leadership Giving Program.

Alan D’Andrea, M.D., of Pediatric Oncology, the current Ted Williams Senior Investigator, shared his feelings about the position at the event.

“Heroes are people who care tremendously about what they do, love their profession, and have the discipline to pursue the talent they were born with,” explained D’Andrea, whose research is focused on Fanconi anemia – a rare disease that often leads to cancer.

“I am very proud to be appointed the Ted Williams Senior Investigator,” he told the crowd in Fenway’s 600 Club, “but even more so, I’m very proud that you have assigned the name of a true hero to people in my profession.”

An ardent baseball fan whose two young children wore Red Sox shirts and caps to the event, D’Andrea drew laughs in recalling his dismay when, as a Harvard College student, he was offered a ticket to Game Six of the 1975 World Series the night before his organic chemistry mid-term. He declined, and missed the Sox and Cincinnati Reds battle in what many now call the greatest game ever played.

Hyundai Motor America and its dealers recently got help from youngsters Celina and Salvatore Valenti of Revere in presenting the Jimmy Fund with $347,000 to support cancer research at Dana-Farber. Here, Jimmy Fund Chairman Mike Andrews (center) and the youngsters accept a check from Hyundai’s Eastern Region General Manager Michael Tocci (left) and Tom O’Brien, a long-time Jimmy Fund supporter and owner of Tom O’Brien Hyundai in Quincy. Celina, 6 (left), donated bone marrow tissue to her brother, Salvatore, 2, who was treated for an immune deficiency disease by Eva Guinan, M.D., and Sung-Fun Pai, M.D., at the Jimmy Fund Clinic.
Colorectal Cancer

Every year, more than 56,000 Americans die from colorectal cancer, making it the third leading cause of cancer deaths among both men and women. Yet thousands of lives could be saved every year if more people took advantage of colorectal screening and made lifestyle changes to reduce their risk of this disease. Because even though colorectal cancer is one of the most common and potentially deadly types of cancer, it is also one of the most preventable and, if detected early, one of the most curable.

To raise awareness about the latest advances in colorectal cancer prevention, screening, and treatment, Dana-Farber/Partners CancerCare (DF/PCC) recently presented a workshop titled “What You Need to Know about Colorectal Cancer.” It was the third in a four-part series of free educational programs offered this fall by DF/PCC.

Presenting the workshop were Matthew Kulke, M.D., an oncologist at Dana-Farber and Brigham and Women’s Hospital, and David P. Ryan, M.D., an oncologist at Massachusetts General Hospital. Kulke focused on the risk factors and screening tests for colorectal cancer, while Ryan discussed the latest treatments.

Risk factors
Kulke reviewed the anatomy of the colon and rectum, explaining that cancer can originate at any point along this approximately six-foot long tube known as the large intestine. He pointed out that colorectal cancer is quite common, with some 130,000 new cases occurring every year in the U.S., primarily among people 50 years of age and over.

The lifetime risk of developing colorectal cancer for the average American who lives to age 85 is about 5-6 percent, said Kulke. However, the risk is higher for certain groups, such as individuals with a family history of colorectal cancer, particularly among first-degree relatives such as a parent or sibling. A rare condition called familial adenomatous polyposis (FAP), which represents less than one percent of colorectal cancers, increases the risk of the disease dramatically.

Screening recommendations
According to American Cancer Society (ACS) guidelines, most people at average risk and without symptoms should be screened for colorectal cancer beginning at age 50. This typically includes a fecal occult blood test, a simple procedure that checks a stool sample for hidden blood; a digital rectal examination; and either a flexible sigmoidoscopy or a colonoscopy.

Until recently, most people were advised to undergo a flexible sigmoidoscopy rather than a colonoscopy. The former is a procedure in which a gastroenterologist inserts a flexible, lighted scope into the lower rectum and colon to look for polyps, precancerous growths that can eventually develop into cancer. While studies indicate that sigmoidoscopy helps prevent colorectal cancer, it provides a view only of the lower third of the colon; therefore it cannot detect polyps in the upper two-thirds.

For an unknown reason, over the past few decades cancers have been originating higher in the colon, beyond the view of sigmoidoscopy. As a result, the ACS now recommends that people age 50 and over at average risk for colorectal cancer consider having a colonoscopy every 10 years. This procedure provides a view of the entire colon and permits the removal of any accessible polyps that are discovered.

Screening is designed to remove polyps before they become cancerous or, if cancer is found, to diagnose the disease early when it is more treatable. Kulke stressed. If colorectal cancer is detected at its earliest stage, the five-year survival rate is about 90 percent. If, however, the disease is not found until it has spread to adjacent organs or lymph nodes, the five-year survival rate drops to roughly 50 percent. This rate plummets to about 5 percent if the disease has metastasized to distant sites.

Lifestyle changes
In addition to screenings, people can make lifestyle changes that may reduce their risk of developing colorectal cancer, said Kulke. These include taking a daily multivitamin containing folate (also called folic acid), getting at least 30 minutes of exercise daily, eating less red meat, avoiding smoking, and reducing alcohol consumption or eliminating it altogether.

Aspirin use has also been shown to protect against colorectal cancer, but it must be taken for decades to confer any benefit. Estrogen replacement therapy also appears to lower colorectal cancer risk to some extent.

For many years, it was believed that consuming a high-fiber diet reduced the risk of colorectal cancer, but recent studies have shown this has no protective effect. However, diet still plays an important role in colorectal cancer risk: people who eat large amounts of animal fat, specifically red meat, appear to increase their risk of developing the disease.

Treatment options
In his overview of treatment options, Ryan explained that surgery is still the mainstay of therapy, but that chemotherapy, radiation therapy, or a combination of all three may be used, depending on the location and stage of the disease and other variables.

The goal of surgery is to remove the cancerous tumor, along with adequate margins of tissue to ensure that no diseased tissue remains. In many instances, this entails removing a section of the colon, after which the two ends are joined together. Fortunately, most patients today do not require a permanent colostomy, in which a portion of the colon is routed through a surgical opening in the abdomen to provide an exit for waste material.

Because colorectal cancer has a predilection for spreading to the ovaries (as well as the liver and lungs), some women may need to have their ovaries removed. Whether or not to use chemotherapy drugs in the treatment of colorectal cancer depends, in large measure, on the stage of the disease. According to Ryan, most oncologists use the TNM system to stage cancers. This system indicates how deep the tumor has invaded the wall of the colon or rectum (T), the involvement of nearby lymph nodes (N), and whether distant metastases (M) have been found. If, for example, the disease has not spread outside the colon, surgery may be all that is necessary. Today, so-called “adjuvant” chemotherapy is often advised for patients who have no obvious signs of metastatic disease, but whose cancer might have spread. The goal is to improve the odds of killing any tumor cells that might be present throughout the body.

The mainstay of chemotherapy for colorectal cancer is a combination of the drug 5-fluorouracil (5-FU) and leucovorin (folinic acid), which enhances the action of 5-FU. Recently, the U.S. Food and Drug Administration (FDA) approved the use of Camptosar (irinotecan) in combination with 5-FU and leucovorin as a front-line treatment for colorectal cancer. Recent studies indicate that this drug trio delays tumor progression and improves survival rates. A new drug, oxaliplatin, is also showing promise in the treatment of colorectal cancer, but it is currently available in the U.S. only through clinical trials.

Treatment goals
While chemotherapy will not cure patients whose colorectal cancer has metastasized to distant sites, it is sometimes used to help these patients feel better and prolong their lives.

Most patients tolerate chemotherapy for the disease quite well, experiencing only mild or moderate side effects, said Ryan. In fact, many patients are able to continue working throughout their treatment.

Radiation therapy is often used for patients with cancer of the rectum or to relieve symptoms, such as pain, resulting from cancer that has metastasized. The so-called “adjuvant” chemotherapy may also help reduce the risk of local recurrences.

Ryan emphasized the importance of patients considering participation in clinical trials, as this is the only way to answer questions that may lead to treatment advances. Joining a clinical trial has two benefits. Ryan noted; it offers patients access to new, promising therapies, and it gives them a unique opportunity to help improve the care of all patients.

Another set of workshops are to start in March; for more information, call the DF/PCC consumer education line at (800) 553-3787.

Text by Hillary Bennett