

# UConn health center

VOLUME 1  
No. 1  
FALL 2005

## OVERCOMING INFERTILITY

Linking science  
with care to  
build families

PREMIERE ISSUE

# contents



## Medical Arts & Research Building

OUR NEW FOUR-STORY BUILDING PROVIDES  
MODERN DIAGNOSTIC AND TREATMENT  
FACILITIES FOR PROBLEMS AFFECTING  
BONES, JOINTS AND CONNECTIVE TISSUE





# fall 2005

## departments

- 4 News Briefs
- 12 Grants at a Glance
- 13 Profiles
- 15 Giving for the Future
- 24 Class Notes
- 28 Off the Campus

## features

### 8 Behind the Dream of Parenthood

The Center for Advanced Reproductive Services links the best science with the best care for those suffering infertility.  
By Maureen McGuire

### 17 Redefining Cancer Prevention

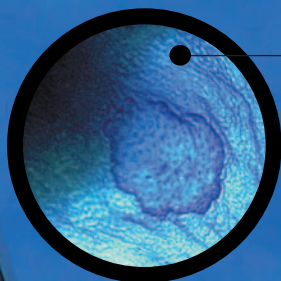
Scientists and physicians collaborate to identify molecular changes that may lead to colon cancer and identify those at risk before the disease develops.  
By Jim H. Smith

### 20 Filling the Need

By going out into the community, dental students get a first-rate, real-world education while improving access to care.  
By Kristina Goodnough

## on the cover

Kathryn (foreground) and Jack Kilian





# Time for UConn Sports Medicine.



AT THE UCONN HEALTH CENTER, our team of orthopaedic sports medicine experts helps athletes of all skill levels and ages get back in the game. From the management of complex joint, muscle and ligament disorders to sprains, strains, and nagging pains, our physicians have extensive expertise working with intercollegiate teams and elite athletes as well as the recreational sports participant. Our team includes physicians, physical therapists and trainers.

In addition, we offer you an important difference. As the only university hospital in central Connecticut, our patients receive the advantages of the latest research and innovations in health care.

Call 860-679-6600 to make an appointment with one of our sports medicine physicians: Jeffrey Anderson, M.D., Robert Arciero, M.D., Augustus Mazzocca, M.D., Carl Nissen, M.D., or Kevin Shea, M.D.

Department of Orthopaedics  
263 Farmington Avenue, Farmington

UConn Health Partners  
99 Ash Street, East Hartford  
[www.uchc.edu](http://www.uchc.edu)

*100*  
**SOLUCIENT**  
TOP HOSPITALS  
*Performance Improvement Leaders*



UConn  
Health  
Center

*Remarkable Care Through  
Research and Education*

**EDITOR**

Kristina Goodnough

**ART DIRECTOR**

Jordanna Hertz

**PHOTOGRAPHY**

Al Ferreira, Principal  
Peter Morenus

**CONTRIBUTING STAFF**

Patrick Keefe, Maureen McGuire,  
Carolyn Pennington, Jane Shaskan

**MANAGER OF**

**CREATIVE SERVICES**

Leonard Blanks, Jr.

**PRESIDENT**

Philip E. Austin

**EXECUTIVE VICE PRESIDENT  
FOR HEALTH AFFAIRS**

**DEAN, SCHOOL OF MEDICINE**  
Peter J. Deckers, M.D.

**DEAN, SCHOOL OF  
DENTAL MEDICINE**

Peter J. Robinson, D.D.S., Ph.D.

**ASSOCIATE VICE PRESIDENT,  
COMMUNICATIONS**

James H. Walter

**ASSOCIATE VICE PRESIDENT,  
DEVELOPMENT**

Magda J. Stayton

UConn Health Center magazine is produced for alumni, faculty, staff and friends of the Health Center three times a year by the Office of Communications, UConn Health Center.

Creative design and production services are provided through a partnership with University Communications, University of Connecticut, Storrs.

We welcome letters. Please send them to UConn Health Center magazine, 263 Farmington Avenue, Farmington, CT 06030-5385. e-mail: [magazine@uchc.edu](mailto:magazine@uchc.edu)

# welcome



Welcome to *UConn Health Center* magazine. Its mission is straightforward. We want to celebrate the men and women who devote themselves to educating and training the highest quality health care professionals, to discovering new knowledge, and to incorporating it into sensitive, responsible care for our patients.

In these pages, we will share stories that demonstrate our commitment to the integration of research into therapies for treatment and disease prevention. The article on colon cancer, which outlines the collaboration between a scientist and physician to identify the very earliest stages of a deadly disease, is just one example of the partnerships that are the foundation of our bench-to-bedside translational research programs.

We will share the Health Center's commitment to the public health of Connecticut's residents in stories like the one about our community-based dentistry program. The faculty and students of our dental school are the single largest provider of oral health care to the underserved population of this state. Our students do not learn in an ivory tower. As they serve areas of true need, they receive a better, real-world education and provide care to some of the state's most fragile citizens.

In these pages, we also want to share our successes in research, whether it's the discovery of a gene related to glaucoma, a leading cause of blindness, or the latest findings on the best treatment for prostate or parathyroid cancer. We want to acknowledge those who support our mission, like Carole and Ray Neag who have contributed generously to our cancer center; the Chase family, whose recent gift helps our musculoskeletal signature program; and the Health Center Auxiliary, which funded a chair in bioethics and medical humanities to honor a distinguished former faculty member. By highlighting some of these gifts, we hope to demonstrate the crucial role private philanthropy plays in supporting our quest for excellence.

The Health Center's contributions over the past three decades are enormous. We have trained more than 2,500 physicians, 1,100 dentists and hundreds of Ph.D. and master's degree candidates in scientific and public health fields. We have made important contributions in understanding the genetics and physiology of some forms of vision loss as well as addiction, alcoholism and aging. We have explored the fundamental mechanisms of bone loss and the cell biology of bone repair. We have helped quantify the molecular events in living cells and made seminal advances in vascular biology and in the creation of vaccines to treat cancer and infectious diseases.

Every year, our hospital treats more than 10,000 people as inpatients and 280,000 through ambulatory visits. More than 525,000 visits are made each year to the 350 physicians in our multidisciplinary faculty practice.

We are proud of our past and excited about our future. We provide this magazine so you can share our excitement and support our achievements.

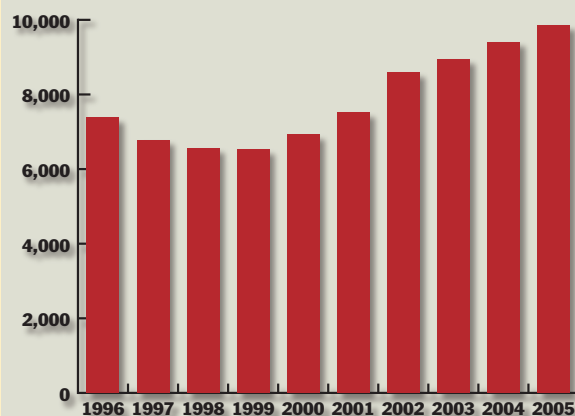
Executive Vice President for Health Affairs  
Dean of the School of Medicine







## CHARTING OUR COURSE



John Dempsey Hospital Admissions by Fiscal Year

## Good News for Shoulders

**R**obert Arciero, M.D., and Augustus Mazzocca, M.D., (left to right, above) from the Sports Medicine Program in Orthopedic Surgery were awarded first place in the Richard B. Caspari Award for the best upper extremity paper at the Scientific Program of the fifth Biennial International Congress Society of Arthroscopy, Knee Surgery, and Orthopaedic Sports Medicine (ISAKOS). This international meeting for arthroscopic and sports

medicine surgeons is attended by several thousand in these subspecialties.

The paper, "Arthroscopic Single versus Double Row Suture Anchor Rotator Cuff Repair," reported a new method of fixation of rotator cuff tears that leads to more predictable healing. The method uses a double row rather than a single row of suture anchors to tie down the rotator cuff in a fashion that more closely approximates natural attachment.

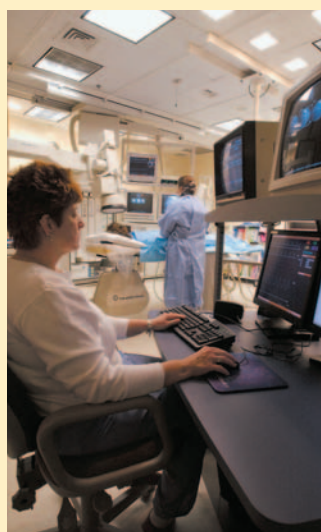


## Expanding Access to Cardiac Care

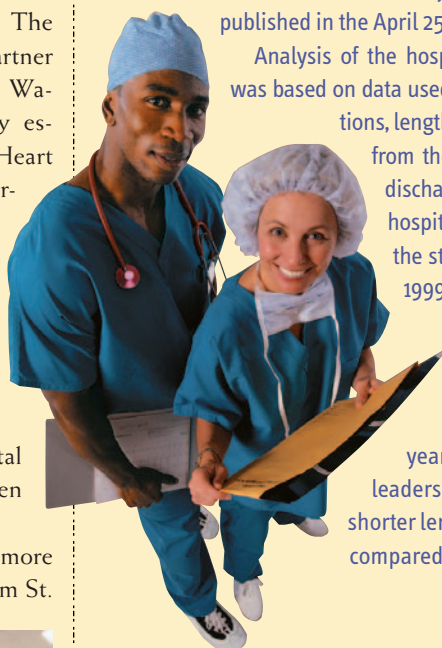
**T**he advanced cardiac care program opened by Waterbury Hospital and St. Mary's Hospital during the summer bears a strong resemblance to the Health Center's program.

And for good reason. The Health Center was partner and educator for the two Waterbury hospitals as they established the integrated Heart Center of Greater Waterbury to perform both angioplasty and open-heart surgery. Before the center opened, Waterbury area patients who needed cardiac intervention were transported to John Dempsey Hospital or hospitals in New Haven or Bridgeport.

For several months, more than 80 staff members from St.



THE CARDIAC CATHETERIZATION LABORATORIES IN WATERBURY RESEMBLE THE HEALTH CENTER'S LAB, SHOWN ABOVE.



Mary's and Waterbury hospitals came in small groups to the Health Center for classroom education and hands-on training in providing care to patients receiving angioplasty or open heart procedures. Health Center clinical and technical staff collaborated on some planning for the facility, acquiring equipment and supplies, developing staffing models, protocols, policies, and procedures as well as educating and training the clinical staff.

"The staff received 40 hours of classroom instruction and

spent several weeks in our operating room, catheterization lab, intensive care unit and cardiac step down unit from January through mid-July," says Jeanne Lattanzio, coordinator of the education and training project, who led the Health Center initiative that established its interventional cardiology and open-heart surgery program in the early 1990s.

"It was a logical role for us as the state's medical school and a teaching hospital, and it's the kind of opportunity and challenge our staff thrives on," says Lattanzio.

## In the Top 100

achievements



**T**he Health Center was named a "Top 100 Hospital Performance Improvement Leader," joining such major teaching hospitals on the list as the Johns Hopkins Hospital in Baltimore; the Dartmouth-Hitchcock Hospital in Hanover, N.H.; and the Hospital of the University of Pennsylvania, Philadelphia.

The "Top 100" designation was conferred by Solucient, a health care information and data analysis software company in a study published in the April 25 issue of *Modern Healthcare*.

Analysis of the hospitals' performance by Solucient, was based on data used to calculate mortality, complications, length of stay and several other metrics from the more than 12 million Medicare discharges of the nation's acute care hospitals annually. The data used in the study was from federal fiscal years 1999 through 2003. The database contained more than 800 elements for more than 6,000 U.S. acute care and specialty hospitals.

The analysis revealed this year's performance improvement leaders have lower mortality rates, shorter lengths of stay, and lower expenses compared with peer group U.S. hospitals.



KRISTINE DELVALLE AND DAUGHTERS, KAITLYN, LEFT, AND HALIE, JOIN THE CELEBRATION.

## Celebration Brings Hundreds Back

**F**amilies by the hundreds returned to the Health Center to help the Newborn Intensive Care Nurseries celebrate its 30th anniversary.

"Family members and hospital staff often become very close during a baby's stay," says Rachel Schmitt, nursing manager. "The reunions, held every five years, give us all a chance to visit and celebrate the life-giving support provided in the nurseries."

The Intensive Care Nurseries serve as a referral center for high-risk pregnancies and births throughout the state and admit about 500 babies every year. Some babies stay just a few days. Others, including very sick or tiny premature babies who require the highest level of care, may stay in the unit for months.

## research



### Researchers Discover New Glaucoma Gene

**H**ealth Center researchers have discovered a gene that causes a type of late-onset glaucoma.

The discovery was made earlier this year by Mansoor Sarfarazi, Ph.D., professor of human molecular genetics, and graduate assistant, Sharareh Monemi, M.D., Ph.D. The gene, (WDR36) is the third glaucoma causing gene that was discovered by Sarfarazi's laboratory.

"This discovery will enhance screening for late-onset, primary, open-angle glaucoma," says Sarfarazi. "It will improve early diagnosis, facilitating earlier and better treatment and will advance the likelihood of gene-targeted therapies."

Glaucoma affects more than 2 million Americans and more than 33 million people worldwide. After cataracts, it is the second most common cause of blindness.



### Findings on Thyroid Cancer

**A** new study by researchers in the Center for Molecular Medicine helps settle a long-running controversy involving papillary thyroid cancer, the most common form of the disease, and carries implications for its treatment.

In most cases of thyroid cancer, along with the main tumor, a pathologist will typically find small nodules called microcarcinomas. A number of previous studies have tried to determine whether these microscopic tumors broke off from the original cancer and spread within the thyroid gland, or whether they are independent of the main tumor and developed spontaneously. Studies have found patients with these multiple tumors are more likely to have their cancer recur.

"Our research shows that these multiple clusters of tumors can often arise independently, which means that such patients are strongly predisposed to developing new papillary thyroid cancers," says Andrew Arnold, M.D., director of the Center for Molecular Medicine and chief of the Division of Endocrinology.

The new findings should help eliminate some surgeons' doubts about aggressively removing the thyroid when treating papillary cancer, according to Arnold. "Any

of the tissue you leave is at risk for already harboring microscopic tumors that could eventually grow into disease, or be fertile ground where entirely new cancers can form. That's why near total

removal of the thyroid along with radioactive iodine therapy is the best option."

The study was published in the June 9 issue of the *New England Journal of Medicine*.

## education



### Henry Wins Annual Loeser Award

**D**an Henry, M.D., Medicine, was selected by the Class of 2007 as the winner of the annual Charles N. Loeser Award for excellence in teaching. Henry lectures and runs small group sessions as well as courses like the Multidisciplinary Ambulatory Program. The award is given annually to the faculty member who helps advance students' welfare and education and can evoke enthusiasm for learning.



## JDH as 'High Reliability' Organization

**A** Health Center-wide collaboration aims to make John Dempsey Hospital the safest hospital in the state.

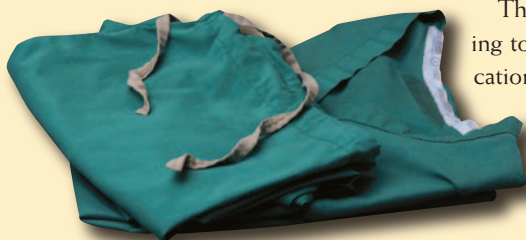
Small teams of faculty and staff are focusing on four specific areas – medication management, pain management, hospital-born infections, and fall prevention – and working to improve patient safety in all of them, according to vascular surgeon James Menzoian, medical director for the project known as the Collaborative Center for Clinical Care Improvement.

"The care of patients depends on a complex, adaptive system," says Menzoian. "Team members are focusing on finding errors in the system and ways to change them."

To reduce falls, team members have identified hospital floors with a higher occurrence of falls and related injuries. They purchased special beds designed to reduce falls and are examining the care given to all frail patients, not just the elderly. "Our goal is to understand why falls occur and to make adjustments in care and equipment to reduce them," says

Rhea Sanford, co-director of the center and leader of the fall reduction team.

The team working to reduce medication errors will implement a barcoding system for drugs and



patient wristbands so caregivers can double check at the bedside the match between medications, dosage and patient.

To reduce hospital-acquired infections, the team led by Richard Garibaldi, M.D., will focus on increasing flu shots for health care staff and patients, improving hand washing and

recommending steps to reduce surgical site infections.

The pain management team will focus on training caregivers to measure pain and pain levels better so they can provide maximum safe care. "The ultimate goal is to become a 'high reliability organization' focused on patient safety," says Menzoian.

## Cross Campus Stem Cell Research Institute Planned

**T**he Health Center and the Storrs campus are planning a joint institute for human stem cell research, thanks to a new state law that makes Connecticut a safe haven for the research.

The law, which provides a 10-year, \$100 million commitment for the initiative, was signed by Gov. M. Jodi Rell in June at the Health Center. It also requires establishment of oversight committees to ensure the scientific, legal and ethical integrity of the work.

"The law provides a considerable amount of money and long-term support for a

very promising area of investigation," says Marc Lalande, Ph.D., assistant dean for research at the Health Center and chairman of its Department of Genetics and Developmental Biology.

Because of their potential to develop into many different cell types in the body, stem cells are viewed as a possible source of new cells and tissue to repair damage caused by a variety of genetic disorders and diseases such as diabetes or Parkinson's. The federal government limits funding to research on 21 lines of human embryonic stem cell lines developed before the summer of 2001.

"Both campuses have considerable expertise in animal stem cell research, which provides a valuable foundation for moving into human stem cell research," says Lalande. "We hope to build on our strengths in animal stem cell research and use that knowledge and expertise to move quickly into the study and investigation of human stem cells. Although a great deal of laboratory work is needed to fully understand the mechanisms that regulate stem cell differentiation, it's an exciting field of research that ultimately could have broad clinical and therapeutic applications."



ASSISTANT DEAN FOR RESEARCH MARC LALANDE, UNIVERSITY PRESIDENT PHILIP E. AUSTIN, CONNECTICUT GOV. M. JODI RELL AND EXECUTIVE VICE PRESIDENT FOR HEALTH AFFAIRS PETER J. DECKERS CELEBRATE THE STATE'S COMMITMENT TO HUMAN STEM CELL RESEARCH.

By Maureen McGuire

Life can be chaotic for Beth and John Kilian. It's not easy keeping up with four-year-old Caroline, who skips and dances through her days, and 11-month-old twins, Kathryn and Jack, who took their time getting acquainted with a full night's sleep.

But it's a joyful chaos. It's the life Beth and John imagined when they fell in love and decided to spend their lives together nearly 10 years ago.

"It was always clear that we both wanted to have children," Beth says, noting that it was more than disappointing when, a few years into their married life, they were unable to conceive.

And so began their journey down the often lonely and confusing road known as infertility – a journey that ultimately led them to the Center for Advanced Reproductive Services at UConn Health Center, where an experienced team helped them achieve their dream of becoming parents.

### A Reality for Thousands of Couples



JOHN NULSEN, M.D.

About 15 percent of couples who try to conceive are affected by infertility, according to John Nulsen, M.D., a reproductive endocrinologist and medical director of the center.

"About 40 percent of couples who experience infertility are affected by male factor infertility, which is marked by less than optimal sperm production, including low sperm counts, poor movement of the sperm, poor sperm quality or sperm that lack the ability to penetrate an egg," says Nulsen. Another 40 percent of couples are affected by medical problems associated with the female partner, such as blocked tubes, scarring in the pelvic area, complicated endocrine problems and more. Another 5 percent of couples are affected by

both male and female infertility; and for 15 percent of couples, no cause is ever determined. In Connecticut alone, that translates into thousands of couples facing a medical challenge to become parents.

Increasingly, many of those couples have turned to UConn's center, where the demand for services has steadily increased since it opened in the 1980s. In 2004, more than 13,000 couples received care at the center, up from about 400 couples per year a decade earlier.

Nulsen attributes this growth to increased awareness about fertility services and new advances in care.

Some of the most dramatic changes have occurred in the techniques used for in vitro fertilization (IVF), the most aggressive option to treat infertility. During the IVF process, the woman takes several medications to develop multiple ovarian follicles that contain mature eggs capable of being fertilized. The eggs are retrieved through a needle guided by ultrasound into the ovary, then exposed to sperm. Within a few days, the resulting embryos are transferred back into the woman's uterus.

"We have better understanding of critical requirements for fertilization and optimal embryonic development," says Nulsen. "This has led to major improvements in the IVF laboratory, including optimization of

DO  
CENTER  
HELPS  
COUPLES  
ACHIEVE  
DREAM OF  
THE  
PARENT





*The sperm bank  
holds vials of semen,  
each with millions of  
sperm, frozen and  
preserved until needed.*

the media used to culture eggs, sperm and embryos and a greater appreciation of the importance of environmental issues such as air quality and temperature. Additionally, we have developed better techniques to help us identify embryos most likely to implant. We know that embryos that divide robustly, are symmetrical in appearance and exhibit the orderly arrangement of genetic material tend to be more viable," Nulsen says.

For patients for whom IVF is the best option, the success rates at the center are significantly above the national average in several categories, according to the latest data supplied by the Centers for Disease Control. The center also received national recognition from the Society for Assisted Reproductive Technology for its low number of higher-order multiple births (triplets or higher).

"Higher-order births carry serious health risks for both the mother and the babies," Nulsen says. "We are very committed to keeping those numbers as low as possible, and we have been quite successful."

## A Nationally Recognized Resource

By the time Beth and John were first referred to the center, Beth's obstetrician had completed a battery of routine fertility tests and found no abnormalities. Her physician also prescribed medication to stimulate ovulation and improve the odds of conception, but this was not successful. Ultimately, John underwent semen analysis and a diagnosis of male factor infertility was made.

With the staff at the center, the Kilians decided upon intracytoplasmic sperm injection (ICSI), which has revolutionized treatment for male factor infertility. During ICSI, a single sperm is injected into each egg obtained through IVF. The procedure allows an egg to be fertilized by a single sperm that otherwise is unable to bind or penetrate the zona pellucida (the permeable barrier around the egg) or the underlying egg membrane. At age 26, Beth was one of the youngest patients to undergo IVF at the center. After three attempts in 2000, she became pregnant with Caroline. "We celebrate every day with Caroline. She is a gift," Beth says.

Early in 2004, they went through one successful IVF cycle again and became pregnant with Jack and Kathryn. The twins were born in November.

Today, Beth says she still has moments when she can't believe she is a mother of three, after so many years of not knowing if she and John would ever be parents.

Like many patients, she describes living with infertility as a day-to-day burden. It put everything in limbo and many things on hold. "I didn't know how to plan my life. It impacted everything – every decision I made, from the kind of car I bought to the type of furniture we decorated our house with to simple decisions like what I ate for lunch. It was always in the back of my mind," she says.

Casey Jacob, Ph.D., a professor of psychiatry with the UConn Health Center who works closely with patients at the center, says this is completely normal – annoying but normal.

# THE CENTER FOR ADVANCED REPRODUCTIVE SERVICES

## PHYSICIANS

All of our physicians are board certified or active candidates for board certification in reproductive endocrinology and infertility

- ✓ John Nulsen, M.D., Medical Director of the Center
- ✓ Donald Maier, M.D., Chief of the Division of Reproductive Endocrinology at UConn Health Center
- ✓ Claudio Benadiva, M.D., Director of the IVF Laboratory
- ✓ David Schmidt, M.D., Director of the Hamden Office

The Center offers a full range of services including comprehensive fertility testing and treatments

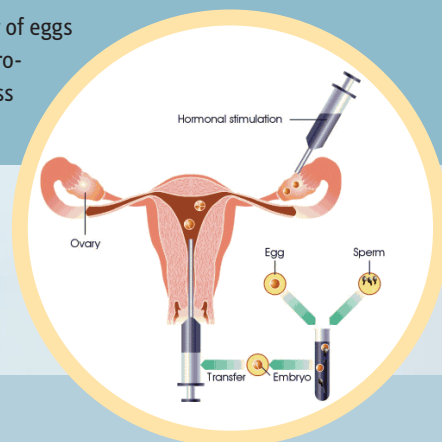
## SERVICES

### Superovulation and Intrauterine Insemination (IUI)

Superovulation therapy relies on medications to increase the number of eggs produced by a woman during ovulation each month. Then, at the appropriate time, semen is placed into the woman's uterus through a process known as intrauterine insemination (IUI).

### In Vitro Fertilization (IVF)

During the IVF process, the woman takes several medications to develop multiple ovarian follicles that contain mature eggs capable of being fertilized. The eggs are retrieved through a needle guided by ultrasound into the ovary and exposed to sperm. Within a few days, the resulting embryos are transferred into the woman's uterus.







BETH AND JOHN KILIAN  
ENJOY TIME WITH  
CHILDREN (LEFT TO  
RIGHT) CAROLINE, JACK  
AND KATHRYN.

For example, Jacob reminds couples that men and women may not always react the same way to stressful situations, such as living with infertility. "Relationships can be challenged by infertility. Women, in general, tend to be more emotional and want to talk – and cry – about their feelings and their frustrations. Men, in general, tend to be stoic and instead of talking or crying about their feelings, they prefer to stay busy and do sports or tackle projects around the house," she says.

"I remind couples that this is normal. People react differently to stress. The most important

thing is to set aside a designated time, maybe a half hour once or twice a week, to talk about living with infertility and check in with each other about your thoughts and feelings," she says.

Many couples have found Jacob's advice helpful.

"It helped just looking around that room and realizing we were not alone, there were so many other couples going through the same pain as we were. Plus, her advice is meaningful for many situations in life," John Kilian says, noting that the uncertainty about getting pregnant slowly morphed into uncertainty about the pregnancies and the babies.

"You never stop worrying about your children – but that's a wonderful problem to have," he adds with a smile. ☺

### Healing the Spirit, Too

"Having infertility is being in this weird place where you want something you can't have. It's an invisible condition, non life-threatening but absolutely devastating," Jacob says.

She compares living with infertility to a state of chronic grief. Every month, every menstrual cycle, when patients do not become pregnant, there is a feeling of significant loss. "And there are other losses such as loss of privacy, feelings of loss of control, sometimes even a loss of faith," she adds. Jacob is available to meet privately with patients who seek treatment at the center. For all couples who choose to pursue IVF, there is a required group session during which Jacob talks about the emotional toll of infertility. She offers advice and coping tips for couples as well.

## OFFERS THE LATEST TREATMENTS FOR INFERTILITY

PROCEDURES USED WITH IVF	Intracytoplasmic Sperm Injection (ICSI)	Intracytoplasmic sperm injection, which is one of the most aggressive treatments for male factor infertility, injects a single sperm into an egg obtained through the IVF process.
	Preimplantation Genetic Diagnosis (PGD)	Preimplantation genetic diagnosis tests embryos for more than 40 life-threatening and debilitating genetic disorders, such as cystic fibrosis or Tay-Sachs disease, before their transfer to the woman's uterus. The program makes it possible for couples with a known history of a serious inherited disorder to significantly decrease the risk of having a child affected by the same disorder.
	Egg Donation	An egg donor program, using both identified and anonymous donors, is available for women who are unable to produce healthy eggs. Donors and recipient couples are screened by the center's psychologist before the procedure. UConn had the first baby born through an egg donor in New England in 1987.
	Gestational Carrier Program	A gestational carrier program is available for couples who may be able to conceive but are unable to carry a pregnancy to term. Embryos produced by the mother's eggs and the father's sperm during IVF are transferred into another woman, who carries the baby to term. Couples and carriers are required to meet with the center's psychologist prior to this procedure.

THE TEAM	Patients receive care from a dedicated team that includes reproductive endocrinologists, nurses, nurse practitioners, a psychologist, fellows in reproductive endocrinology and medical residents. Behind the scenes, care is provided by specially trained and nationally recognized laboratory staff. Locations: The main office is on the campus of the UConn Health Center, 263 Farmington Avenue in Farmington. A satellite office opened at 2080 Whitney Avenue in Hamden in 2004. To reach us: Call 860-679-4580 or visit <a href="http://www.fertilitycenter-uconn.org/">www.fertilitycenter-uconn.org/</a> .
----------	---

# grants at a glance



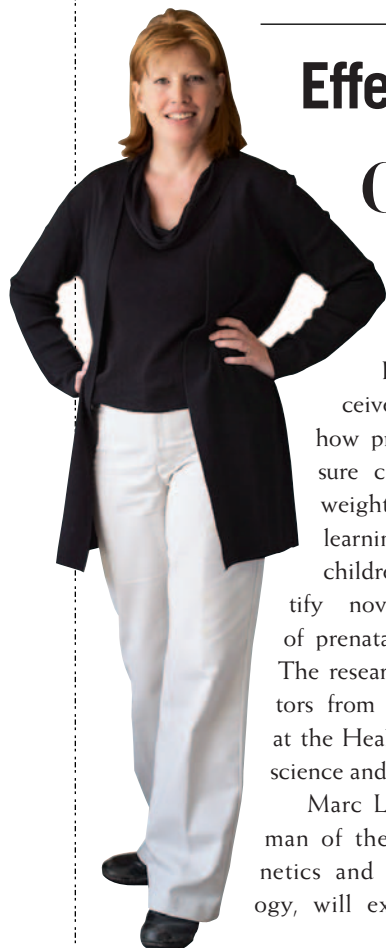
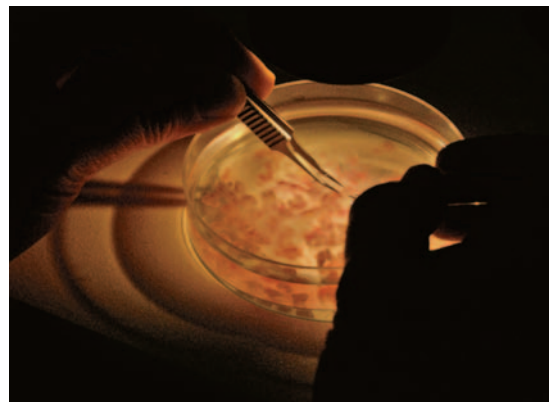
## Tissue Regeneration

The School of Dental Medicine has received a \$2.6 million two-year federal grant to build a program in craniofacial tissue repair and regeneration dedicated to research with clinical application.

The grant, one of seven awarded nationally by the National Institute for Dental and Craniofacial Research, will enable the School of Dental Medicine to hire faculty, purchase equipment and jump-start the new program.

"We want to develop procedures that ultimately can be used clinically to repair and regenerate tissue. If we can fix wounds or defects with cells and tissue that can live and grow, then the repair is much less likely to wear out or degenerate over time," says William Upholt, Ph.D., professor of oral rehabilitation, biomaterials and skeletal development and one of the co-investigators of the grant.

Other co-investigators on the grant include Jon Goldberg, Ph.D., whose research focuses on the development of new biomaterials; Mina Mina, D.D.S., Ph.D., whose research focuses on jawbone and jaw-related tissue growth; and Susan Reisine, Ph.D., associate dean for research at the dental school.



## Effects of Smoking on Infant Health

Cheryl Oncken, M.D., M.P.H., was selected to receive one of the first grants from the state's Biomedical Research Trust Fund. Oncken received \$500,000 to explain how prenatal tobacco exposure causes low birth weight in infants and learning problems in children and to identify novel biomarkers of prenatal tobacco exposure. The research involves investigators from different departments at the Health Center, both basic science and clinical.

Marc Lalande, Ph.D., chairman of the Department of Genetics and Developmental Biology, will examine the effect of

smoking on a protein important for fetal growth, which may provide understanding, at a genetic level, of how smoking causes low birth weight in babies.

Naveed Hussain, M.D., director of the Newborn Intensive Care Nurseries, will look at whether cell surface molecules on nerve cells, called nicotinic receptors, are affected by maternal smoking; and whether the processing of sound and hearing is different in babies of smoking mothers and whether these effects are correlated.

Henry Furneaux, Ph.D., associate professor of molecular, microbial and structural biology, will examine the effects of smoking on the placenta, the organ that provides nutrients to the growing fetus, for insight into how smoking can contribute to low birth weight in babies.

The project was selected from 20 submitted for support from the Biomedical Research Trust Fund, the state's share of the 1998 Master Settlement Agreement with big tobacco firms.





## profile

a closer look



PETER ALBERTSEN,  
M.D., RELISHES ALL  
THE ROLES OF THE  
ACADEMIC LIFE



## Achieving the Perfect Balance

**P**eter Albertsen, M.D., is organized. He has to be. He's busy. Albertsen is a professor of surgery, chief of the division of urology, and director of the urology residency program.

Monday, he sees patients. Tuesday morning, he does surgery. Tuesday afternoon, he teaches. Wednesday morning, he sees patients, and in the afternoon, takes care of administrative matters. Thursday morning, he works with residents until early afternoon, then he concentrates on research. Friday is clean-up day: work with students interspersed with caring for patients.

Nights and weekends he writes papers, including one published recently in the *Journal of the American Medical Association* on "watchful waiting" as the most appropriate treatment for low grade prostate cancers.

He is the 2005 winner of the University of Connecticut Board of Directors Faculty Recognition Award, an honor established to celebrate and

acknowledge excellence in faculty members.

"I have the most varied and diverse job imaginable," he says. "I do something different every day of the week and I love it. The job is never routine and it's challenging; there are always clinical problems or research problems to solve."

He serves numerous professional organizations, is on the editorial board of six publications and is a reviewer for seven others including, *JAMA*, and the *New England Journal of Medicine*.

This year, he's been to meetings, made presentations or presided over board exams in London, Chicago, Washington, Maine and Texas, among other places.

"It's a three-legged stool," Albertsen says. "Faculty members are expected to be good teachers, good researchers and good clinicians. In this day and age, it's an ever increasing challenge to be good in all three," he says.

The academic life suits Peter Albertsen.

"I enjoy the intellectual stimulation that comes from working with expert physicians who are deeply involved in and committed to patient care, research and teaching, and who are motivated by an interest in doing the right thing." —by Patrick Keefe

a closer look



# profile



## Harnessing Spider Venom

including humans. They're so dangerous, in fact, that only their venom and venom glands could be brought back to the Health Center for study.

In the lab, Sollod froze and dissected glands taken from four specimens, isolating the genetic "blueprint" in each gland. Then she determined how to reproduce one particular novel toxin synthetically so she could determine its three dimensional structure and explain its mechanism.

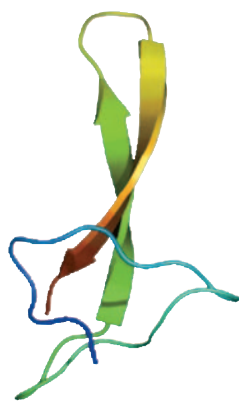
Her thesis – due for completion this fall – looks at the evolution, expression and molecular mechanism of spider venom components. It also examines the novel toxin that appears to have a dual mechanism of action, giving it lethal flexibility when dealing with a variety of prey. For obvious reasons, she would like to name it Sollod toxin.

"Someday soon, this technology will help us control some of the world's most destructive pests," she says. Insect-specific viruses will carry genes encoding toxins taken from the funnel-web or other spiders and deliver them to mosquitoes carrying malaria, ticks carrying Lyme disease, or other insects that every year gobble up a quarter of the world's food supply. The pesticides made from these viruses will target and kill specific bugs, so they won't harm other plants, vertebrates, or helpful insects, such as bees.

A Purdue University graduate, Sollod worked on folic acid studies at the Abbott Laboratories in Chicago before coming to the Health Center to pursue her doctorate in biomedical science with an emphasis on molecular biology and biochemistry.

With her doctorate behind her, the outdoor enthusiast and world traveler will have many options. After a planned wedding in November to fourth-year UConn medical student David McFarland, followed by a honeymoon in Thailand, Sollod will begin building a career in the pharmaceutical industry. A people person, she sees herself as someone who could bridge the gap between the business sector and science.

—by Paula Hartman Cohen



ACTUAL THREE-DIMENSIONAL STRUCTURE OF A TOXIN FOUND INSIDE THE VENOM GLAND OF THE AUSTRALIAN FUNNEL-WEB SPIDER

Growing up in Colorado, Brianna Sollod never liked spiders. "They weren't my favorite thing," she said. Nevertheless, she has spent the last five years studying some of the world's most poisonous specimens and the molecular and genetic makeup of their venom.

Sollod, 28, can barely hide her enthusiasm for working in the lab of Glenn King, Ph.D., professor in the Department of Molecular, Microbial and Structural Biology, where she is pursuing a doctorate. There, she has contributed to a knowledge base dedicated to building safer, more efficient means of preventing the spread of malaria or the destruction of crops.

"You can look at the venom of the Australian funnel-web spider as a library of toxins," she explains, describing the fist-sized creature she has hunted and caught in its natural habitat. These spiders have had 400 million years to fine-tune their deadly weapons against a host of insect species. Not only are their toxins lethal to almost every bug on the planet, they can paralyze or kill mammals,



# giving for the future

donors



Illustration by Dona Turner

## UCHC Auxiliary Donates \$900,000

The Health Center Auxiliary raised \$900,000 in less than five years in memory of a beloved faculty member.

The auxiliary, 300 members strong, used bake sales and book sales, golf tournaments, holiday bazaars and garden parties, relying on volunteers and many small contributions to fund the Joseph M. Healy Jr. Memorial Chair in Medical Humanities and Bioethics. "Little things can achieve great goals," says Irene Engel, who led the effort. "It was truly a labor of love."

A major source of funds was the Gift Shop, staffed 65.5 hours a week by auxiliary volunteers. "We're indebted to the Huskies and their amazing basketball success," says Laurie Pencz, auxiliary president, who notes that Husky items flew off the shelves throughout the fund-raising period and helped the Gift Shop bring in more than \$400,000 toward the chair.

Healey served in the Department of Community Medicine and Health Care from 1975 until his death in 1993.

## Golf Scores for Cancer Research

Mark and Laura Yellin of Farmington have managed to combine their passion for golf with their commitment to fighting cancer by organizing annual golf tournaments that have raised more than \$900,000 to support research at the Health Center.

This year's tournament, held in August, drew more than 160 people and raised about \$155,000 to cover the entire cost

of a new laser capture micro-dissection instrument, which will help in the study of microscopic, molecular characteristics of precancerous colon tissue. (See story on page 17.)

Through the years, the Cancer Research Golf Tournament has funded a wide variety of initiatives at the Health Center, from research into new cancer vaccine treatments to establishment of a tumor bank and the purchase of state-of-the-art equipment for researchers' laboratories.

This year, in addition to their support for the golf tournament, the Yellins made a personal gift of \$100,000 to establish an endowment for cancer research. "It's for a good cause and one we're happy to support," says Mark Yellin.



## Chase Family makes \$1 million gift

The David and Rhoda Chase Family Foundation has donated \$1 million to provide endowment support for the Health Center's signature program in musculoskeletal medicine.

The gift will support state-of-the-art research laboratories to advance new cures, techniques and treatments for bone and joint diseases, bringing together researchers, surgeons and experts in related fields.

David T. Chase, the founder of Chase Enterprises in Hartford, says the impetus for the gift was deeply felt by him and his wife, Rhoda. "We chose to make this gift to the Health Center in recognition of the institution's tremendous value as a resource to the Connecticut community and our family and the importance of UConn's groundbreaking research in this area of medicine.

The Chase family has a long history of supporting the university, including a recent gift of \$750,000 to the law school to establish the Cheryl A. Chase Endowment and a previous gift establishing the Chase Family Chair in Juvenile Diabetes at the Health Center.

# Another UConn team is winning hearts.



## The Pat and Jim Calhoun Cardiology Center.

AT THE PAT AND JIM CALHOUN CARDIOLOGY CENTER, an experienced team of specialists offers top quality care to diagnose and treat diseases of the heart and blood vessels.

UConn cardiologists and other specialists provide advanced medical approaches to help patients manage risk factors such as high cholesterol, high blood pressure and diabetes. Also, patients have access to a full range of sophisticated surgical procedures, performed by some of the most highly skilled cardiac and vascular surgeons in the country – in a convenient, suburban location.

And there's an important difference. As the only university hospital in central Connecticut, UConn Health Center patients receive the advantages of the latest research and innovations in health care. It's no wonder the UConn cardiology team is winning hearts.



263 Farmington Avenue, Farmington  
99 Ash Street, East Hartford  
860-535-6232  
*For health information visit*  
**[www.uchc.edu](http://www.uchc.edu)**



**UConn  
Health  
Center**

*Remarkable Care Through  
Research and Education*



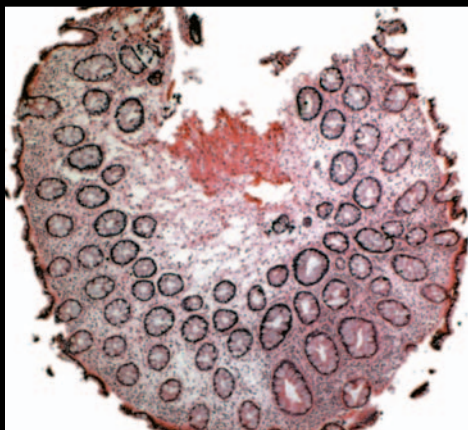
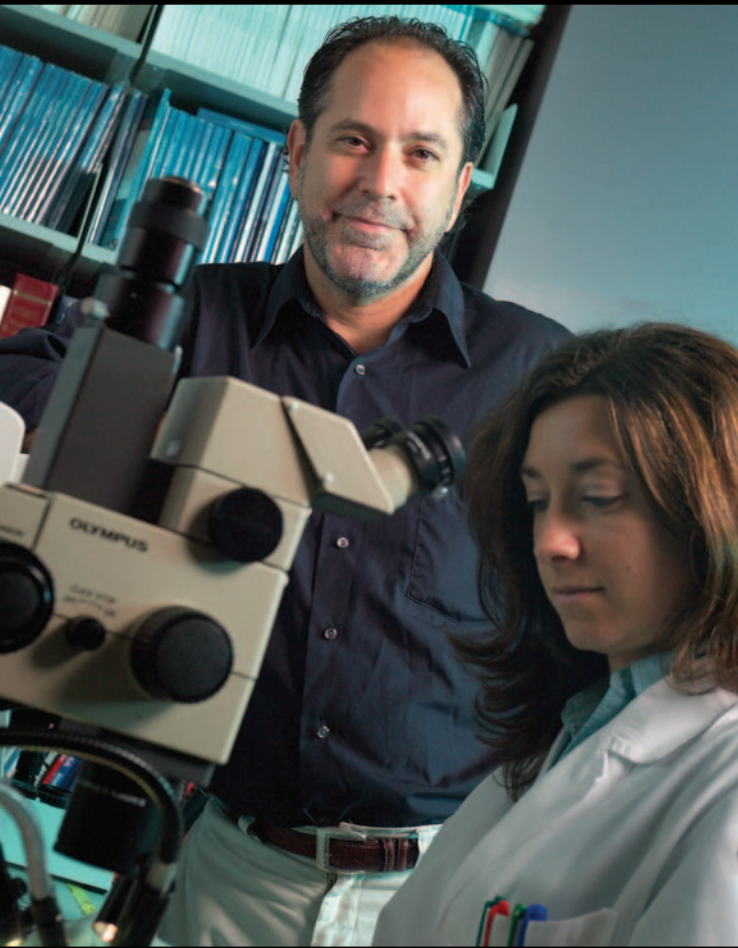
# Redefining

# Cancer

## Prevention

### An Innovative Prevention Program and Breakthrough Technology Offer New Hope

By Jim H. Smith



DAN ROSENBERG, PH.D.,  
WITH GRADUATE STUDENT  
MELISSA YABLONSKY,  
STUDIES COLON TISSUE  
FOR CELLULAR CHANGES  
THAT MAY INDICATE A RISK  
FOR CANCER LONG BEFORE  
THE DISEASE BEGINS.

Joseph Welch of West Hartford was one of the more than 100,000 Americans who develop colon cancer every year. It's the third most common cancer diagnosed in the United States, but it's also highly treatable if it's detected early.

Unfortunately, Welch, like many people, put off getting a checkup until it was too late. When he died in 1997, his son, Mark, was 39. A West Hartford architect who heads his own firm, OakPark Architects, Mark Welch knew that his father's disease automatically put him at risk. One's chances of developing cancer roughly double if a parent or a sibling has had the disease.

But Mark Welch was more than a decade short of 50, the age when doctors generally recommend their patients first undergo a colonoscopy, the simple procedure that can detect tumors and polyps, small growths on the wall of the colon from which tumors may form.

So, for the next few years he did nothing to address the matter.

Then, last fall, Mark's mother, Audrey, underwent a colonoscopy at the University of Connecticut Health Center. Mrs. Welch was not surprised, after the procedure, to learn that several polyps had been removed from her colon. She had her first colonoscopy before her husband became sick. And since polyps were discovered in that initial checkup – and since she also survived ovarian cancer 20 years ago – she has had regular colonoscopies ever since. Each time, physicians have discovered and removed some polyps. She has never developed colon cancer.

Last fall, however, thanks to a new procedure that is breaking medical ground at the UConn Health Center, Joel Levine, M.D., found something besides the polyps. Using a prototype close-focus colonoscope provided through a partnership with Olympus Corporation, Levine could see clusters of unusual cells called aberrant crypt foci (ACF). They are not cancer cells, but they are often found in people with colon cancer. Understanding these aberrant cells may offer hope for Mrs. Welch and her son, in fact, hope for anyone at risk of developing colon cancer.

## Focus on Prevention

"Now when we think about colon cancer, a focus on prevention is increasingly replacing the emphasis on detection," says Levine, a professor of medicine and co-director of

**Understanding these aberrant cells may offer hope for Mrs. Welch and her son, in fact, hope for anyone at risk of developing colon cancer.**

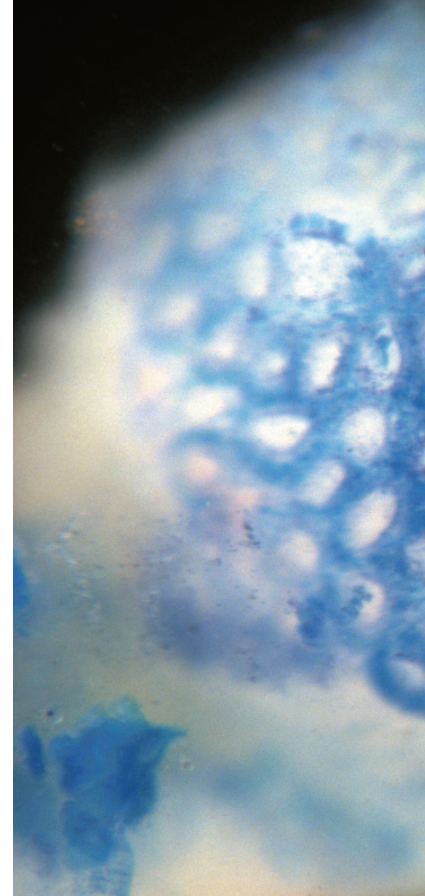
the Health Center's new Colon Cancer Prevention Program.

It's an important distinction. A colonoscopy is designed to detect tumors or polyps. Prevention, on the other hand, is

about what causes polyps and tumors to develop. It starts with genetic mutations, and ACFs are giving physicians and researchers increasingly important insights into how those mutations may cause cancer.

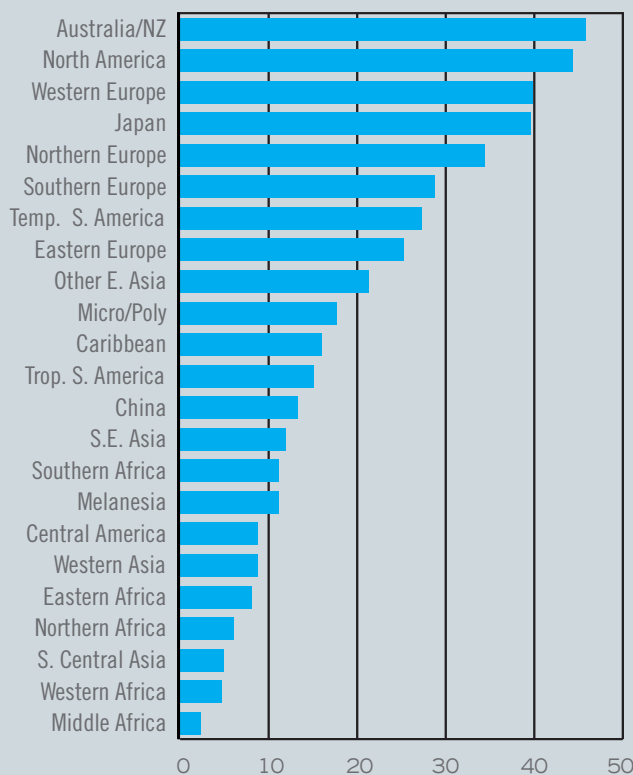
"Genes get damaged in everyone's body, all the time," says Levine, "but the body is remarkably resilient. It repairs most of the mutations. For cancer to develop, the damage must go unrepaired."

The story of cancer, he says, is one of "multiple, sequential abnormalities." A host of things can cause genetic damage. Start



## Colon Cancer Incidence per 100,000 Persons per Year

Incidence of Colon and Rectal Cancer in Males by World Region



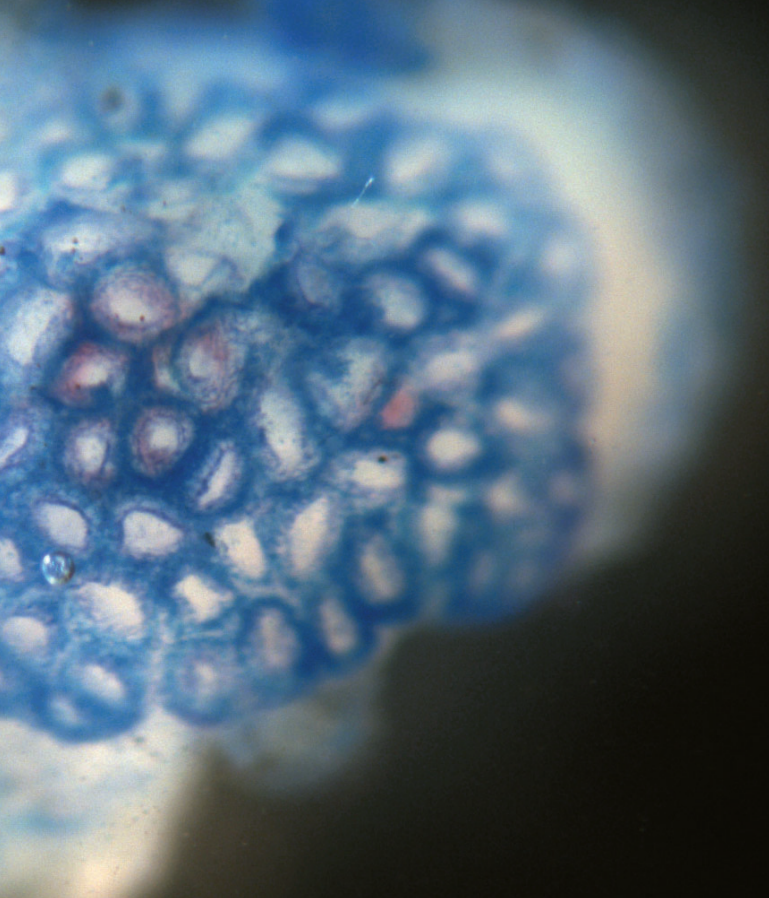
From the IARC, Lyon: Parkin, DM, et al. CA Cancer Clinic, 49:36-6

with diet. Studies have shown that people whose diets contain a lot of red meat are at greater risk. Some dietary chemicals and fats are also implicated. So are smoking, obesity, a sedentary lifestyle and exposure to chemicals in the environment that are a byproduct of industrialization.

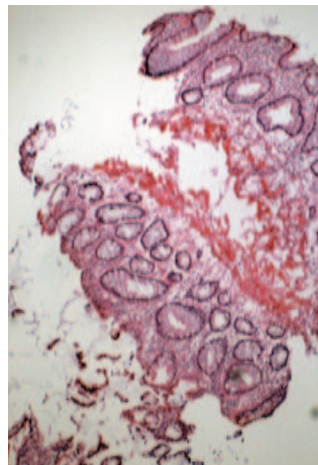
As if that's not complicated enough, there is no single kind of colon cancer. People may develop different kinds, and the likelihood of developing cancer may be increased or reduced depending upon the person's ethnicity and cultural background.

"If you want to prevent cancer, then you must think about all of these factors," says Levine. That's the idea behind the Colon Cancer Prevention Program, supported by part of a \$10 million donation last year to the Health Center by Carole and Ray Neag. By gathering as much information as possible about the many factors that put people at risk, Levine believes that doctors and researchers





AN ABERRANT CRYPT FOCI WITH ITS UNUSUAL CELLS, LEFT, IDENTIFIED THROUGH A COLONOSCOPY. BELOW, A SECTION OF AN ACF, STAINED AND VIEWED THROUGH A MICROSCOPE.



“Now when we think about colon cancer, a focus on prevention is increasingly replacing the emphasis on detection.”

—JOEL LEVINE

will be increasingly successful at identifying those at greatest risk of contracting cancer and helping them avoid that fate.

Patients who visit the Health Center program are thoroughly screened in order to create a comprehensive profile of their health and risk of developing cancer. Based upon the profile, a plan is created for each patient to help him or her maximize colon health.

In this effort, Levine is supported by cutting-edge technology that distinguishes the UConn Health Center from any other facility in the country. “Colonoscopies have unquestionably helped to reduce the rate of death from colon cancer,” he says, “but they are not foolproof. As many as 20 per-

cent of polyps smaller than one centimeter may be missed.”

Besides, for some people, especially those who are genetically at risk, the cellular changes that can lead to cancer may happen a long time before polyps ever form. Suppose you could detect those microscopic changes a long time before they would ever be spotted using conventional colonoscopy equipment.

### Zeroing In

Enter cancer biologist Daniel Rosenberg, Ph.D., who co-directs the Colon Cancer Prevention Program. Rosenberg began collaborating with Levine soon after he came to UConn five years ago. Their objective is at once simple and profound: Push back the point at which

precancerous cells in the colon can be detected.


At best, conventional colonoscopies can detect only fairly large abnormalities. But the Health Center’s program has the advantage of the prototype colonoscope and the powerful technology of micro array analysis that allows simultaneous evaluation of the levels of thousands of genes to monitor their roles in the development of cancer.

Increasingly, Rosenberg and Levine have focused on the ACFs that Rosenberg began to study in laboratory mice a decade ago. Most people with colon cancer have a much higher frequency of these aberrant cells in their colons, but it’s not clear whether ACFs may predictably lead to cancer. Rosenberg is determined to find out, though. Thanks to technology that allows his research team to analyze tiny biopsies from a patient’s colon containing as little as one-trillionth of a gram of DNA or RNA, he believes he is making progress.

In the last couple of years, more than 250 samples of these abnormal cells have been collected from Health Center patients. They make up the single largest repository of human ACF anywhere. Researchers in Rosenberg’s laboratory, using laser micro-dissection to isolate exceedingly small numbers of cells, are now pursuing a wide range of projects aimed at determining what, precisely, triggers the development of ACFs and which ACFs have a high potential to turn into cancers. Already some of those projects have produced very promising results.

This fall, the Health Center will collaborate with the Mayo Clinic in a nationwide study that will explore the impact of three different medicines – an aspirin-like compound, a cholesterol-lowering drug and a carbohydrate – all of which have shown promise as tools to reduce ACFs. The study is expected to produce results by next spring. This is the first trial with the aim of reducing the actual risk of developing colon cancer.

That’s positive news for Audrey Welch. After Levine discovered ACFs during her colonoscopy last fall, Mark Welch, responding to that red flag, came in for his own checkup. Although no polyps were discovered during his test, he did have an increased number of ACFs, despite his young age.

So both Welches are now being regularly monitored. Thanks to the Colon Cancer Prevention Program, there has never been a better time to face their risk. 

# Filling the Need



*Community-based  
dentistry program  
improves education  
and access to care*

By Kristina Goodnough

Two or three days a week for eight weeks, fourth-year students in the School of Dental Medicine travel to community health centers and private offices around the state to provide care to some of Connecticut's most needy citizens.

Their travels are part of the school's commitment to help stem what the Surgeon General's Report on Oral Health called a "silent epidemic" of dental and oral disease among the poor, especially children and the elderly. The travel or rotations are also part of a major paradigm shift for dental education. "Our students will receive a substantially greater percentage of their clinical education in community-based settings," says Peter Robinson, D.D.S., Ph.D., dean of the dental school.

The community-based practice experience, long a traditional part of the medical education model, is not entirely new to the dental school. "We've had a community-based component to our education for a long time," says Monty MacNeil, D.D.S., M. Dent. Sc., associate dean for dental academic affairs. "It started when we moved our pediatric dentistry program to Burgdorf Health Center in Hartford in 1995."

RICHARD SKINNER, D.M.D.,  
PEDIATRIC DENTISTRY,  
CHECKS CARE PROVIDED TO A  
PATIENT BY CARVER LITTLE,  
'06 SODM, AT BURGDORF  
COMMUNITY HEALTH CLINIC.







The reasons were both practical and educational. "Having a dental school in the relatively affluent town of Farmington and not in the middle of a dense urban area presents some challenges. We know that the people with the greatest dental needs are inside our cities and that, in many cases, their only option for dental care is in a dental school or community clinic," says MacNeil. "So the question was: How do we make care available to these patients and also expose our students to all the elements of the access-to-care problem, which involves more than just 'treatment' and 'procedures'? We decided our students needed to go where the demand was, not only to provide care but also to learn more about these communities, about why the access problem exists, and to provide care in a setting that differs from our school clinics," he says.

Building on the School Experience

The exposure augments and diversifies the experience that students get in the school clinics, which still remain the largest part of the clinical program. "We provide the student dentists to these community clinics, and the clinics provide the infrastructure. Our students get to see how a practice runs, how to function within a team and how to become more efficient providing care. It's an added dimension to their education before they graduate and begin practice or a residency themselves," says MacNeil.

"The experience is outstanding," says Aaron Liddell, '05 D.M.D., one of the first fourth-year students to experience the broadened community-based program. Early in his fourth year, he spent Mondays and Fridays at United Community and Family Services in Norwich. "Instead of one patient in three hours, you're booked to treat six to eight patients a day. Instead of having a faculty member check you off at every step of the way, you get to make your own assessment and diagnosis. You have an assistant," says Liddell, comparing his experience with patients in the Health Center dental clinic and in the community practice. "In Norwich, there was always a faculty dentist nearby if I had a question, but I was not on a tight leash. They let me work at

LITTLE TREATS  
A PATIENT.



Community Based Dental Care

Care provided by faculty and students to patients in community health centers and private dental offices is a major reason the Health Center is the single largest provider of oral health care to the state's underserved population.

Facility	Procedures	Patient visits	Students
Burgdorf Fleet Health Center, Hartford	54	36	4
UConn Health Center Emergency Department	94	39	1
Charter Oak Health Center, Hartford	519	341	8
Community Health Center, New Britain	499	355	8
East Hartford Community Health Center	368	212	7
Staywell Community Health Center, Waterbury	150	126	2
United Community and Family, Norwich	364	254	7
Dr. Stanley Fellman, Hartford (Private Practice)	174	50	2
Dr. James Franklin, Hartford (Private Practice)	152	81	1
Totals:	2,374	1,494	40





**SKINNER DISCUSSES A PATIENT'S RADIOGRAPH WITH BRENDAN HALLISSEY, MARK LUDLOW, CARVER LITTLE, MICHAEL GODKIND AND NIKA GRIGAITIS, ALL '06 SODM.**

my own level, and I came back significantly more productive. It opens your eyes to what is possible."

"It's a wonderful education for students," says Margaret Drozdowski, D.M.D., dental director of Community Health Center of New Britain, which had eight students perform nearly 500 different procedures during 355 patient visits during the last academic year. "The students get to see patients out in the real world. They probably see more patients here than they would at UConn."

The extra hands are greatly appreciated by both the staff and the patients, according to Drozdowski. "We had some empty chairs before the dental students started. We have so many patients, I'd much rather see students caring for patients in those chairs than see them empty."

## Support from Robert Wood Johnson

The new program is supported at the Health Center and nine other U.S. dental schools with grants from the Robert Wood Johnson Foundation, as part of its Pipeline Profession and Practice: Community Based Dental Education Initiative. The goal is to link schools to communities in need of dental care and to boost their underrepresented minority and low-income student enrollment. "We were fully intending to build a community program, and our plan fit like a glove with the Robert Wood Johnson initiative, which was announced in 2002," says MacNeil.

The program, which is being implemented gradually, has required considerable planning and redesign of the curriculum. Courses in public health care policy, geriatric and special needs dentistry and practice management have been developed or expanded.

Five community health centers and two private practice offices

were carefully selected based on the quality of the facility and its attending dentists. Community dentists have been appointed to the faculty and efforts made to standardize patient care and student evaluation protocols.


Before the Robert Wood Johnson program, SODM students provided 27 days of care in the community during their third and fourth years. During the 2004-2005 academic year, students provided 42 days of care in the community. "Our goal for the students is 60 days over four years when the program is fully implemented," says MacNeil.

There is no guarantee that the student at a community health center in New Britain will get the exact same experience as the student at a community health center in Norwich, Waterbury or East Hartford, but the total learning piece will be comparable, according to MacNeil. "We are working to standardize experiences, but the differences can be valuable. In

that variation of experience, there is learning," he says.

"The community-based experience helps improve access to care and gives students opportunities to increase their cultural competency skills," says Cynthia Hodge, D.M.D., M.P.H., associate dean for community and outreach programs for the dental school. "The students interact with patients who often lack basic information about oral health, with parents who may not know they shouldn't put children to bed with a bottle of juice," she says.

"Our students learn to provide comprehensive care at the Health Center. The community experience gives students an opportunity to improve skills providing comprehensive care to diverse patient populations in a setting that is 'real-world' dentistry," says Hodge. The community experience allows students to re-examine their career choices as well. "After the community health center rotation, many of the students report they will provide more care to the underserved than they indicated prior to the rotation."

"Through its clinics and its community based practice, the Health Center is already the largest provider of dental care to the state's underserved," says Robinson. "Expanding the community program will help us strengthen the coalition of professional organizations, state agencies, community health centers and private practitioners committed to addressing the almost frantic level of need for access to oral care." 

# classnot



ANGELEE D. CARTA, '81 M.D., WAS THE ALUMNI SPEAKER AT THE 2005 COMMENCEMENT CEREMONY. DR. CARTA IS ALSO A PRECEPTOR AT THE HEALTH CENTER, MENTORING STUDENTS IN PATIENT CARE. SHE LIVES AND PRACTICES IN MANCHESTER, CONN.

## *Richard A. Epstein '76 D.M.D.*

Dr. Epstein has been inducted into the International Academy of Dental-Facial Esthetics. He maintains a general dental practice in Westport, Conn.

## *Peter Anderson '77 M.D.*

Dr. Anderson is currently president of the medical staff at New Milford Hospital. Dr. Anderson is also an associate clinical professor in family medicine for the UConn Health Center. Dr. Anderson and his wife, Jan, reside in Bridgewater, Conn. They have two daughters: Kate, 19, and Kristie, 17.

## *Alan W. Hackford '77 M.D.*

Dr. Hackford has been appointed chief of colorectal surgery at Caritas St. Elizabeth's Medical Center in Boston.

## *Mike H. Summerer '77 M.D.*

Dr. Summerer has been named the new chief medical officer of HallMark Health System, serving Boston's northern suburbs. He oversees the medical staff of Lawrence Memorial Hospital and Melrose-Wakefield Hospital.

## *Stuart Jacobson '80 M.D.*

Dr. Jacobson is practicing medicine in Darien, Conn., while residing in Fairfield. His daughter just completed the 5th grade. He writes: "Twenty-five years after graduation, I'm still having fun and doing what I hoped to do."

## *Joshua A. Morowitz '80 M.D.*

Dr. Morowitz has joined the staff at the Bradley Memorial Wound Care Center. Dr. Morowitz is also staff physician at New Britain General Hospital. He resides in Southington, Conn.

## *Paul M. Martha, Jr. '82 M.D.*

Dr. Martha has been promoted to senior vice president and chief medical officer at Transkaryotic Therapies, Inc., a biopharmaceutical company headquartered in Cambridge, Mass., that focuses on researching, developing and commercializing treatments for rare diseases.

## *Mary L. Pergiovanni '83 D.M.D.*

Dr. Pergiovanni has been named fellow of the American College of Dentists. Dr. Pergiovanni, a trustee of the Connecticut State Dental Foundation, is the founder and director of Little Friends International, a nonprofit organi-

zation dedicated to the needs of children in developing countries.

## *Lisa Todes '85 D.M.D.*

Dr. Todes is currently in solo practice in Easton, Penn. She resides in Bethlehem with her husband, Eugene Meyer, and three children: Laura, 17, Rachel, 14, and Rebecca, 5.

## *Jeanne V. Linden '86 M.D., M.P.H.*

Dr. Linden has been appointed to the U.S. Department of Health and Human Services Advisory Committee on Blood Safety and Availability, administered by the office of the Surgeon General. Dr. Linden is director of blood and tissue resources, New York State Department of Health.

## *Ellen T. Madigan '86 M.P.H.*

Mrs. Madigan was named the executive director of Home-Care and Hospice, Day Kimball Hospital, Putnam, Conn.



FROM LEFT TO RIGHT: SCOTT HOPKINS, JEFF MURRAY, '84 M.D., DEBRA WILLIAMS HOPKINS, '84 M.D., CARL FRITZ HINZ, M.D., EMERITUS PROFESSOR AND FORMER ASSOCIATE DEAN, SOM. THE 1984 CLASS REUNION TOOK PLACE ON MAY 21. THE EVENT INCLUDED A GOLF OUTING, BIRD WATCH HIKE, AND DINNER RECEPTION. IN HONOR OF THIS CELEBRATION, THE CLASS OF 1984 MADE A GIFT TOWARD THE SUPPORT AND RENOVATIONS OF THE LYMAN MAYNARD STOWE LIBRARY.



## THE SCIENCE OF FINE CHOCOLATE

### alumni profile



**W**hen family physician Robert Steinberg, '73 M.D., decided to try his hand manufacturing fine chocolate, his medical education and practice were helpful.

"There was no curriculum, there was no real program," says Steinberg, who traveled to Lyons, France, in 1995 to learn the chocolate-making business from family-owned company Bernachon. "I sort of jumped in and had to figure out the situation. It's really very similar to diagnosing an illness. You have to figure out the problem, break it down into smaller questions and develop answers," says Steinberg, who with a friend established Scharffen Berger, a \$15 million maker of fine chocolate with a factory in Berkeley, Calif., and five specialty shops sprinkled across the country from the Bay Area to Manhattan. "Working in an organization requires a fair amount of interpersonal interaction. Not only do you have to ask the right questions, but you have to relate to people. I think that's what I learned in my medical practice."

beans and most meticulous growers and turn it all into a business.

"The basic idea was to work as artisans in the United States, making a product that was only being made by huge industrial concerns. We wanted to take advantage of consumers' new interest in the origins and manufacture of their food," says Steinberg, who continued to practice medicine one day a week at a free clinic in San Francisco until last year. "Starbucks was getting started, and people were just starting to really taste their coffee. We wanted to do the same thing with chocolate."



The company now employs 60 people and manufactures more than 800,000 pounds of chocolate annually. It is the first American company founded in the past 50 years to make chocolate from beans into bars and the only one to use small-batch processing. "Watching chocolate made from scratch, seeing beans change into a glistening substance, then made into confections, there's a real romance to that," says Steinberg.

**“It's really very similar to diagnosing an illness. You have to figure out the problem, break it down into smaller questions and develop answers.”**

—ROBERT STEINBERG

### Huw Thomas '86 Ph.D.

Dr. Thomas has been named dean of the School of Dentistry at the University of Alabama at Birmingham.



He was a faculty member for 12 years before taking the chairmanship of the Department of Pediatric

Dentistry at the University of Texas Health Sciences Center, San Antonio, in 1992.

### Sally A. Crawford '87 M.D.

Dr. Crawford has been elected board president of the Visiting Nurses of the Lower Valley, Inc., serving Connecticut's lower river valley and shoreline.

### Brett Volpe '87 M.D.

Dr. Volpe is the director of the Connecticut Sleep Answers Center with offices in Hartford, Glastonbury, West Hartford, and Avon.

### James F. Devanney '90 M.D.

Dr. Devanney has been named Doctor of the Year by Charlotte Hungerford Hospital. Dr. Devanney, a practicing urologist, was honored for his work with prostate cancer patients.

### Joseph Pachman '90 M.D., M.P.H.

Dr. Pachman has been appointed chief of occupational medicine at Norwalk Hospital and the medical director of occupational health services.

# classnotes

*Glenn G. Tremml '90 M.D.*

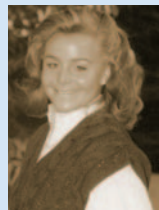
Dr. Tremml is director of Indian River Memorial Hospital's Emergency Department in Vero Beach, Florida. He will oversee the hospital's new \$10.6 million emergency medical facility.

*Mark Cooper '92 M.P.H.*

Mr. Cooper, formerly director of health for the Newtown Health District, was elected first selectman for the town of Southbury, Conn.

*Anna C. Freitag-Kedersha, '94 M.D.*

Dr. Freitag-Kedersha and her husband, Michael, were married



in September 2004.

Dr. Freitag is a board certified endocrinologist and internist in private practice

in Stamford, Conn. She was twice named one of Connecticut's "Top Doctors" in Endocrinology and Internal Medicine by *Connecticut Magazine*.

*Elizabeth Spencer*

*Joslin '95 M.D.*

Dr. Joslin married Neil T. Montlick at Immanuel Congregational Church in Hartford. She is a family physician and assistant professor at the UConn Health Center.

*Sidney R. Hinds II '96 M.D.*

Dr. Hinds, a major in the U.S. Army, returned from a four-year tour of duty at Landstuhl Regional Medical



alumni profile



## A LIFE OF SERVICE TO HAITIAN NEEDY

**F**or Jeremiah Lowney, '96 M.P.H., a quick visit to Haiti to extract infected teeth fostered a life of service dedicated to improving the health and the lives of thousands of Haitians.

Lowney is president and founder of the Haitian Health Foundation, a nonprofit humanitarian organization with a 27,000 square-foot outpatient clinic, a nutrition center for malnourished children and a lying-in center for women in high-risk pregnancies in the remote city of Jeremie.

He made his first trip to Haiti in 1982 at the invitation of his friend Bishop Daniel Reilly of Norwich, who organized the visit in response to urging from Pope John Paul II to help developing countries.

Lowney decided he wouldn't go as an observer. A practicing orthodontist who hadn't removed a tooth in 19 years, he took a refresher course in oral surgery and borrowed the necessary dental instruments. He spent the entire week working in makeshift clinics set up by the Missionaries of Charity, an order of nuns founded by Mother Teresa, "taking teeth out by the hundreds." Extraction was generally the only option because of the advanced disease and the dearth of available care.

"Perhaps it was my experience with cancer, but I really felt like I wanted to share my blessings," says Lowney, who was successfully operated on for a bladder tumor shortly before his first visit. He returned to Haiti on his own six months later and has made repeat visits every three months since then. For several years, he worked in Port au Prince. Then, at Mother Teresa's request, he accompanied some nuns she was sending to Jeremie, a remote city in the southern part of the island. "It's hard to say no to a living saint," says Lowney. "Besides the town and I shared the same name."

Through his wife, Virginia, Lowney met anesthesiologist Julian Joseph, a Jeremie native practicing in Norwich who donated 10 acres of land for health care uses. To accept the gift, Lowney established the foundation, and the land became the site of its 27,000 square-foot clinic.

In 1985, during another visit to Haiti, Lowney happened to meet a physician in charge of medical operations for the U.S. Agency for International Development, who suggested he seek a grant







aimed at promoting child survival in the area. The result was a federal grant to establish outreach medical programs for the villages around Jeremie to provide immunizations and education about oral rehydration. Today, this program, still partially funded by USAID, has a public health outreach in 104 rural mountain villages caring for 200,000 people.

"There was no serendipity to this. These were all divinely guided events," says Lowney, who now focuses most of his work for the foundation on grant writing and fund-raising.

In between his orthodontics practice in Norwich and his regular trips to Haiti, Lowney successfully completed the University of Connecticut's MPH program. "The degree has proved invaluable," he says. "It not only gave me a broader perspective, it gave me more credibility in my dealings with officials both here and in Haiti."

Besides direct health care, the foundation has supported the construction of more than 125 "Happy Houses" for \$500 apiece, established the Save-a-Family program, which provides \$25 monthly to more than 1,000 families for food, clothing, tuition, and general living expenses. The foundation has built latrines, distributed pigs and goats, and trained residents in more than 100 different villages to act as health agents and treat indigenous diseases.

"We don't look at the big picture, because the country is so troubled. We concentrate on one person at a time, one family at a time, and now there are 200,000 people under our umbrella of care."

For more information about the Haitian Health Foundation, go to [www.haitianhealthfoundation.org](http://www.haitianhealthfoundation.org).

Center in Germany as a staff neurologist and chief of the neurology service. He currently has a fellowship in Nuclear Medicine at Walter Reed Army Medical Center. He lives in North Potomac, Md., with his wife, Andrea Stahl, Ph.D., and their three children.

*Deborah Varney-Katsirebas '97 D.M.D.*

Dr. Varney writes "we added a beautiful baby boy, Ethan, to our family." Dr. Varney and her family reside in Epsom, N.H.



*Kenneth W. Rudd II '98 M.D., M.P.H.*

Dr. Rudd, his wife, Wendy, and two daughters, Rebekah and Danielle, have moved to China to serve as missionaries for a few years.



*Carl Berliner '99 M.D.*

Dr. Berliner and wife, Heather, have moved to Mount Vernon, Wash. Dr. Berliner works in a multispecialty group practice and practices family medicine with obstetrics. He writes, "In my free time I play with Emma (born 2/02/03) and check out the amazing tulip gardens in the county each spring. I occasionally dream of doing another race!"

*David R. Elwood '99 M.D.*

Dr. Elwood completed a five-year general surgery residency at the Lahey Clinic. He has begun a two-year combined fellowship in hepatobiliary and pancreatic surgery and liver transplantation.

*Catherine Lockwood '00 M.D.*

Dr. Lockwood has been appointed staff physician at the newly opened Hampshire Family Physicians in Belchertown, Mass. Dr. Lockwood lives in Belchertown with her husband.

*Jessica Schoonmaker '00 M.D.*

Dr. Schoonmaker has joined the staff at Pentucket Medical Associates in the Newburyport Internal Medicine Department.



*Christopher Olson '01 M.D.*

Dr. Olson has completed and published his book, *The Herb*, which

explores growing patient dissatisfaction with conventional American medicine, and examines the shocking state of consumer protection in the field of herbal medicine today. He is a family medicine resident at Brown University/Memorial Hospital of Rhode Island.

*Thomas R. Stansfield '02 M.P.H.*

Mr. Stansfield is the sanitarian for the Torrington Area Health District that includes Falls Village, Salisbury, and Winsted. Mr. Stansfield also has a private business as a soil evaluator. He resides in Goshen, Conn., with his family.

# off the campus



## Health Care in the Shadows

HOMERO GONZALEZ (RIGHT) GETS A PHYSICAL EXAM FROM CHRISTOPHER BINETTE, '08 SOM. FELIPE MARTINEZ (LEFT) WAITS HIS TURN.

Three nights a week during the summer, small groups of medical and dental students travel around the state providing basic health care to the migrant and seasonal farm workers who tend and pick fruit, vegetables and tobacco.

At the end of the workday, at picnic tables, under tents or in camp cafeterias, the students take medical histories, listen to hearts and lungs, take blood pressure, examine teeth and treat some of the pains and illnesses troubling the workers.

"It's one of the best things to happen," says Greg Pinowski, who coordinates health and safety programs for Imperial Nurseries, headquartered in Granby.

The clinic, which just completed its eighth season, is a collaboration among the Schools of Medicine and Dental Medicine, the Hispanic Health Council of Hartford, the Connecticut River Valley Farm Worker Health Program, the Area Health Education Center (AHEC) program, federally qualified community health centers, and community physicians, among others. "The need for the clinic was first suggested by the Connecticut Primary Care Association," says Bruce Gould, M.D., associate dean of primary care. "I mentioned it to a couple of students, and they embraced the idea."

Each year, the students organize the program,

recruiting volunteers and setting up the schedule for one or more visits to about a dozen farms from late June through the middle of October. They arrive in the early evening, after the workday, often staying until it gets too dark to continue.

"It's an opportunity to connect with a unique cultural community that's overlooked and can benefit from health education and screenings," says Lee Richter, '08 SOM, who was a volunteer during her first year of medical school and then served as one of the student coordinators her second year.

"The workers could be treated at emergency rooms, but that's an expensive and inefficient way for them to get care," says Gould. "These men are already spending a fair amount of their pay on food. They are often reluctant to seek health care because of the potential expense and time lost on the job."

For those who need referrals to obtain additional care, the Hispanic Health Council arranges transportation to a federally qualified community health center. Most of the centers have evening hours to accommodate the workers' schedules.

There are about 20,000 seasonal and migrant farm workers in the state. "They are shadow people," says Pinowski. "These workers seldom have easy access to any health care. Anything we can do to improve that is a very good thing." —by Kristina Goodnough







# The Fund for UConn Health

*Recognized as one of Solucient's  
Top 100 Hospitals: Performance  
Improvement Leaders-2004.*

*The School of Dental Medicine  
consistently ranks among the  
top three programs in the nation.*

*Our Colon Cancer Prevention Program  
conducts leading-edge research to  
prevent cancer and promote cures  
through early detection and  
personalized patient care.*

*Our Newborn Intensive Care Nursery is  
a referral center for high-risk pregnan-  
cies and births throughout the state.*

## **Your tax deductible gift enables us to:**

- translate scientific discoveries into new treatments and prevention strategies
- train the physicians, dentists and scientists of tomorrow
- provide health education to Connecticut's citizens

## **Please join us in our quest for a healthier society.**

Your gift will help to improve health care for families around the corner and around the world. Please consider The Fund for UConn Health for your year-end charitable donation. Thank you.



UConn  
Health  
Center

*Remarkable Care Through  
Research and Education*

UConn Health Center Development Office  
263 Farmington Avenue  
Farmington, CT 06034-4032

**860.679.1122**

e-mail: [giving@nso.uchc.edu](mailto:giving@nso.uchc.edu)  
[www.uchc.edu/development](http://www.uchc.edu/development)



## Embracing Medicine

FIRST-YEAR STUDENT ADELINA FONTES DONS THE SYMBOLIC WHITE COAT WITH A LITTLE HELP FROM SECOND-YEAR STUDENT MELLISA Pensa AT THE WHITE COAT CEREMONY TO WELCOME, INTRODUCE AND CELEBRATE NEW STUDENTS AS THEY BEGIN THEIR PROFESSIONAL LIVES AS PHYSICIANS. THE CEREMONY CULMINATES WITH STUDENTS' RECITATION OF THE HIPPOCRATIC OATH.



University of Connecticut Health Center  
Office of Communications  
263 Farmington Avenue  
Farmington, CT 06030-5385

Nonprofit Org.  
U.S. Postage  
Paid  
No. 13  
Farmington, CT