## PRING 04 ROUUNDDS HARTFORDHOSPITAL'S WELLNESS MAGAZINE

## HARTFORD HOSPITAL

S 2

### Both Sides Now: Bilateral Breast MRI Scans

When a mammogram or ultrasound returns a suspicious finding, MRI provides an additional non-invasive way to evaluate a potential breast tumor. Since malignant lesions appear brighter with intravenous administration of a contrast agent, high-resolution MRI can detect small breast cancers that may be missed by mammography.

Hartford Hospital is one of the first hospitals in the country to offer high-resolution, high-speed bilateral MRI, which allows rapid scanning of both breasts at once. "Improvements in technology now permit simultaneous bilateral magnetic resonance imaging and faster scanning," says Edward B. Cronin, M.D., Section Director of Breast Imaging and Intervention at Hartford Hospital. "In the past, patients who came to the hospital to have an MRI of one breast had to wait at least four hours before returning for the other side."

During the exam, the woman lies under a blanket, supported by comfortable cushions. After an injection of a clear intravenous contrast agent, the computer acquires the images for a bilateral exam consisting of several scans. A typical exam is completed in about thirty minutes.

# ROUNDS

Hartford Hospital's Wellness Magazine

### Hartford Hospital

80 Seymour Street Hartford, CT 06102-5037 (860) 545-5000 Health Referral Service (860) 545-1888 or (800) 545-7664 www.harthosp.org

> Rounds Medical Advisory Board: Adrienne Bentman, M.D. David Crombie, M.D. Joseph Klimek, M.D. Andrew Salner, M.D. Linda Taylor, M.D.

| Editor:      | Lee Monroe                   |
|--------------|------------------------------|
|              | Director of Public Relations |
| Designer:    | Clare Philips                |
| Writer:      | Jane Bradley                 |
| Photography: | Pages 3, 5, 8: Joy Miller    |
| Calendar     |                              |
| Coordinator: | Luisa Machado                |

ROUNDS is a quarterly publication of Hartford Hospital. It is not intended to provide medical advice on individual health matters. Please consult your physician for any health concerns. MRI is a critical diagnostic tool for women with dense breasts or those at high risk for breast cancer because of family history or an atypical biopsy. The technique allows virtual "slices" of suspicious breast tissue to be viewed with detailed accuracy. However, it's not likely to replace mammography as a screening tool any time soon.

Lisa Sabbatino's doctor suggested an MRI because of the density of Lisa's breasts. "Both my sister and I had our breast cancers diagnosed with MRI," says Lisa. "Even though I had recently had a mammogram that was negative, my MRI showed a suspicious enhancement. I told my sister to have one too, and she found that she also had an invasive cancer too small to be seen on a mammogram."

At the time, Lisa didn't have a strong family history of breast cancer, and she has since tested negative for the BRCA genes linked to breast cancer. "MRI found my sister's cancer so early that she didn't even need chemotherapy," says Lisa. "It's well known that early detection means survival. My doctor and Hartford Hospital's excellent radiologists saved my life."

## **Building Bones**

Many people find outdoor gardening a great way to stay fit, since it not only keeps muscles limber, but also builds bone. A University of Arkansas study of 3,310 post-menopausal women found that gardeners who do weekly yard work have higher bone density measurements than those who jog, bicycle, swim or do aerobics.

Vigorous weight-bearing exercise

can slow the degenerative process of bone loss. Gardening, landscaping, raking, pulling weeds and turning over soil is hard physical work. Repetitive lifting and digging builds strong bones and muscles, while pushing a wheelbarrow or lawn mower can help develop balance and prevent falls key to avoiding potential bone breaks.

Being outside also gives bones an extra boost from sunlight, which spurs the body's production of vitamin D, necessary for calcium absorption. Though calcium alone will not protect you from bone loss, inadequate amounts can contribute to the development of osteoporosis. Use sunscreen and avoid overexposure.

Talk to your physician before beginning any vigorous exercise program. If you have spinal osteoporosis, avoid heavy lifting. To build bones, push rather than pull—use a wheelbarrow instead of a wagon. Get down on your hands and knees—on a cushion if you have arthritis—and start pulling weeds. You'll not only enjoy the fresh air, but you can grow calcium-rich green vegetables, too.



### **PHYSICIAN PROFILE**

### August C. Olivar, M.D.

August C. Olivar, M.D., heads the hospital's Division of **Reproductive Endocrinology** and Infertility. Board-certified in both Reproductive **Endocrinology and Obstetrics** and Gynecology (OB/GYN), he divides his time among teaching, writing and publishing, gynecology and female (and male) infertility. He is a full professor of obstetrics and gynecology at the University of Connecticut School of Medicine and president of the Connecticut Association of Reproductive Endocrinologists (CARE).

A native of Peru, he graduated from San Marcos University School of Medicine. After a post-graduate surgical internship at Brown University and residency in OB/GYN at Hartford Hospital, he did a fellowship in reproductive endocrinology and infertility at Harvard Medical School's Brigham & Women's Hospital. The son of a Peruvian mother and a Chinese father. he practiced as Dr. Chong before joining Hartford Hospital in 1990, when he reverted to his mother's family name. In his spare time, he enjoys golf and tennis.





For women trying to have a baby, infertility is a roller coaster of hope and despair. Six million couples are infertile and up to 15 percent of American couples can't conceive even after trying for a year or more. Fertility drugs, procedures and surgery help about two-thirds of them, but many of the rest are candidates for *in vitro* fertilization (IVF).

IVF began in England in 1978 with the birth of the world's first "test tube" baby. In the intervening decades, success rates have inched up, though IVF boasts at best a 60 percent "take-home baby" rate—and only in women under 35. After age 35, the likelihood of pregnancy plummets. "The success rate of IVF is clearly age-related," explains infertility specialist August C. Olivar, M.D., director of Hartford Hospital's Division of Reproductive Endocrinology and Infertility. "In women age 39, the rate is 45 percent. By age 42, it drops to 18 percent and by 43 it's almost nil."

As women grow older, hidden biochemical changes impair their chances of conceiving and carrying a pregnancy to term. From age 30 to 35, the ability to become pregnant gradually declines; after age 40, it falls abruptly. At the same time, the risks of miscarriage and chromosomal abnormalities, including Down's Syndrome, rise sharply with advancing age.

"In the past, I didn't see patients until they had tried for a year to get pregnant," says Dr. Olivar. "Now we're likely to see an older woman who hasn't conceived after six months because we recognize what an important role age plays in infertility."

Although a young couple normally has about a one-in-four chance of conceiving a baby in any given cycle, the rate rapidly declines after age 35. "In the days when women were predominately thinking about their careers and delaying childbearing, they didn't realize that conception might not be possible later," says Dr. Olivar. "A generation ago, infertility was kept hidden even from family members. Now women—and men—are seeking help earlier and more often."

### **Tubes Tied, Without Surgery**

Ready to stop worrying about birth control? Each year, an estimated 700,000 American women opt for permanent sterilization, making it the most popular method of contraception. The procedure, called *tubal ligation*, is performed under general anesthesia. Though minimally invasive, the operation still requires abdominal incisions and two to four days of recovery.

Hartford Hospital is among the first hospitals in Connecticut to offer a non-surgical implant that involves no cutting, suturing, incisions or general anesthesia. Instead, the gynecologist inserts a soft, flexible micro-insert into each fallopian tube through the body's natural pathways. Most patients are on their way within 45 minutes after the procedure and can return to their regular activities within one to two days.

"The procedure takes only about 20 minutes," says Dr. Olivar. He is training other gynecologists in the placement of the inserts, which block conception by closing off the fallopian tubes, where fertilization normally occurs. After three months, benign tissue growth in and around the micro-inserts permanently protects against pregnancy.

3

P I O N E E R I N G

### **Surgical Art** *da Vinci* Robotic-Assisted System for Prostate Cancer Surgery



Smaller scars, reduced pain, minimal blood loss and Schorter recovery times have spurred the rapid growth of minimally invasive surgery over the past decade. Though most of the 15 million operations performed annually in the United States aren't yet performed with laparoscopy, or minimally invasive techniques, many believe computer-assisted technology will revolutionize the delivery of health care.

Hartford Hospital is among two or three medical centers in New England and is the first in Connecticut to remove cancerous prostate glands with robotic-assisted laparascopic techniques. With approval from the U.S. Food and Drug Administration (FDA), the da Vinci Surgical System became the first robotic device to be used in American operating rooms. Urologist Joseph R. Wagner, M.D., uses the \$1.2 million surgical robot to remove malignant prostate tissue in a delicate nerve-sparing procedure. The da Vinci isn't an autonomous robot that can perform surgical tasks on its own, but an assistant that lends a mechanical helping hand to surgeons. Though the robotic system offers unprecedented control and precision of surgical instruments, it still requires a human to operate it by remote control.

"Robots are manipulators," explains Dr. Wagner. "The surgeon retains complete control, yet the greatly magnified three-dimensional view allows precise removal of the cancerous prostate gland while preserving urinary continence and vital nerves essential for sexual function."

Robotics also decrease the fatigue that doctors experience during surgeries lasting several hours. Even the steadiest of human hands cannot match those of a surgical robot. The system has been programmed to compensate for hand tremors, so if the surgeon's hand shakes, the computer ignores it and keeps the mechanical arm steady.

As in conventional laparoscopy, instruments are inserted through the belly button and four small (less than an inch long) incisions in the patient's abdomen. "Because the procedure is minimally invasive, blood loss is drastically reduced and transfusions are unheard of," says Dr. Wagner. >

### WHAT'S GOING AROUND...News & Breakthroughs

### **Cheers to Beer!**

Dark brew—better for you than light beer—may prevent blood clots, say researchers at the University of Wisconsin. Like red wine and purple grape juice, dark beer is rich in flavonoids, which have powerful antioxidant effects believed to protect heart health. Drinking beer in moderation with meals may reduce clotting and perhaps lower heart disease risk.

### **Painkiller Perils**

Avoid alcohol and check labels before combining over-the-counter painkillers containing acetaminophen, warns the FDA. Best known as Tylenol, acetaminophen is found in 600 products for pain, coughs, cold and flu and the prescription drug Vicodin (where it's listed on the label as APAP). About 56,000 people visit emergency rooms and 100 die yearly after unintentional overdoses of the drug.

### Why We Die

4

The Department of Public Health's latest report, Mortality and Its Risk Factors in Connecticut, 1989 to 1998, examines trends in the leading causes of death among Connecticut residents by gender, race/ethnicity, and age. The report details mortality risk and premature loss of life for whites, blacks, Hispanics, Asian/Pacific Islanders and Native Americans. View the report online at www.dph.state.ct.us/OPPE/ Mortality/mortalityrisk factors.htm.

### **Go Fish**

Six in 100 Americans carry gene variants that thicken artery walls, though a diet rich in fish oils and low in fatty meats can reduce their heart disease risk. University of Southern California and UCLA researchers found that fish oils helped only those with the risky genetic variant, more common among blacks and Asian/Pacific Islanders than whites or Hispanics.

# THE NEW MEDICINE

"The surgeon has better ability to totally remove the cancer, while improving urinary control and erectile function."

Seated at a control console next to the operating table, Dr. Wagner looks into a viewfinder to see the 3-D images being sent by the camera inside the patient. The images show the surgical site and surgical instruments. With his hands encased in glove-like sensors called "endowrists," he can manipulate instruments through the full range of motion and rotate them more than 360 degrees through the tiny incisions.

Each time one of the joysticks or foot pedals moves, a computer sends an electronic signal to one of the instruments, which moves in sync with the movements of the surgeon's hands.

Surgeons must learn the counterintuitive movements up is down and right is left in laparoscopy. But the opposite is true with robotic surgery. The instinctive operative controls make complex procedures feel more like conventional "open" surgery than laparoscopic surgery. Patients leave the operating room with bandaids over their abdominal incisions and go home after an overnight hospital stay.

Prostate cancer is the second leading cause of cancer death in men. As the malignancy grows, it can spread beyond the prostate into the surrounding tissues and even to distant organs like the lungs and liver. Surgeons remove "margins" of tissue extending beyond the edges of the cancer to reduce the chance of metastasis.

"In my hands, the operation is faster," says Dr. Wagner, who has been doing the surgery since 2001 and is training other Hartford Hospital urologists to perform the roboticassisted procedure. Hartford Hospital doctors expect



Dr. Joseph Wagner

the da Vinci system will eventually find its way into general surgery.

While surgical robots offer advantages over the human hand, we are still a long way from the day when autonomous robots will operate on people without human interaction or perform tele-surgery in a battlefield MASH unit, for example. Today, most surgeries require nearly a dozen people in the room, but surgeons may someday be seated at consoles while automated robots do much of the "handson" work. Eventually robots are expected to assist at more than 3.5 million medical procedures each year in the United States alone.

### **Pap Progress**

Once the leading cause of cancer death in women, cervical cancer has declined as better Pap tests and viral screening have enhanced early detection and treatment. Nearly all cervical cancers are caused by the human papillomavirus (HPV), a sexually transmitted virus. Researchers are studying a vaccine to protect against HPV 16, which causes half of cervical cancers.

### **Tuna Turndown**

The U.S. government is warning women of childbearing age to limit their consumption of tuna because of its high mercury content. The Food and Drug Administration (FDA) and Environmental Protection Agency caution pregnant women, nursing mothers, young children and women of childbearing age to limit their intake of tuna, swordfish, and shellfish to 12 ounces weekly.

### Low-Tar Can't Cut It

"Light" or "ultra light" cigarettes don't lower a smoker's risk of lung cancer, say researchers at the Massachusetts Institute of Technology and the American Cancer Society. In a recent study, people who smoked low-tar cigarettes had the same lung cancer risk as those who smoked regular cigarettes. Those who smoked non-filter cigarettes had the highest rate of the deadly disease.

### Anti-Psychotic Advisory

The American Diabetes Association is warning patients who take certain anti-psychotic drugs for schizophrenia, bipolar disorder, autism, dementia and other psychiatric disorders that they are at risk for diabetes, obesity or high cholesterol. The medications are sold under the names Abilify, Clozaril, Geodon, Risperdal, Seroquel and Zyprexa.

## Under the Ozone: Melanoma ABCDs



While fair-skinned, blue-eyed blondes are the proverbial melanoma victims, African-Americans and Latinos are by no means immune to the potentially lethal skin cancer. Jamaican reggae star Bob Marley died at age 36 of the malignant disease, which began as a sore on his toe that he attributed to a soccer injury.

"Melanoma is less common in African-Americans, but when present, is more common on the palms and soles," says dermatologist Lisa Kugelman, M.D. "While more commonly seen in sun-exposed areas such as the face, back and legs, melanoma can go undetected under a fingernail or toenail, on the scalp, in the vaginal area or on the penis."

Overexposure to the ultraviolet radiation in sunlight is believed to be a strong risk factor, especially among people

who suffer severe sunburns early in life. Though melanoma often arises when an existing mole turns cancerous, it can also occur spontaneously. When detected at its early stage, surgical removal is usually curative.

Melanoma strikes more than 50,000 Americans annually, anywhere on the skin—including the eye. Since a very strong genetic correlation exists in melanoma, anyone with a family history of the disease should alert eye doctors and hairdressers to be on the lookout for any telltale signs.

Remember your **A-B-C-Ds**. Most melanomas exhibit more than one of the following characteristics:

- A is for Asymmetry (one half unlike the other half)
- **B** is for **Border Irregularity** (irregular edges)
- **C** is for **Color Variation** (tan, brown, black, white, red or blue)

**D** is for **Diameter** (larger than a pencil eraser) A recent study at Memorial Sloan-Kettering Cancer Center found that digital photos help people monitor potentially dangerous changes that may signal skin cancer. "People normally develop spots on their skin as they age," says Dr. Kugelman. "Though about two percent of melanomas are pink or colorless, most are pigmented. Up to 85 percent grow laterally first and can be treated before they start growing vertically, when they can enter the bloodstream and spread."

### in the **DOCTOR'S OFFICE**

### WRIST RESCUE

Do you experience pain, numbness and tingling in your hand, especially at night? While driving or writing? Are you losing grip strength? Dexterity? Do you have decreased feeling in your thumb, index, and middle finger?

Carpal Tunnel Syndrome (CTS) —a form of nerve compression—may be the reason. The median nerve travels from the forearm into the hand through a "tunnel" at the wrist. The wrist bones (carpals) form a narrow canal covered by a strong band of connective tissue (ligament). Sometimes this tunnel becomes too tight, compressing the nerve, and causing pain and numbness. Although keyboarders and industrial workers are classic candidates for CTS, you don't have to engage in extremely repetitive activity to develop the problem. Diabetes and pregnancy contribute to the condition.

"The diagnosis can usually be made through examination," says Duffield Ashmead, IV, M.D., a hand surgeon who is Boardcertified in plastic surgery. "Complaints of numbness and tingling are helpful in distinguishing CTS from other potential causes of wrist pain, such as tendonitis or arthritis." If initial evaluation is inconclusive, or if you suffer from potentially confounding conditions such as cervical spine disease or peripheral neuropathy, special studies performed by a neurologist can confirm the diagnosis.

Mild cases can be treated by wearing a splint at night and intermittently during the day to keep the wrist from bending. "We take a conservative approach to treatment," explains Andrew E. Caputo, M.D., a Board-certified orthopedic surgeon. "We recommend surgery only after trying splints, ergonomic changes and sometimes medication, including Vitamin B<sub>6</sub> or nonsteroidal anti-inflammatories. Conservative treatment is most effective in the early stages. When this fails, and if not too late, surgery is very effective in relieving symptoms."

When necessary, surgery, or carpal tunnel release, involves cutting the ligament that forms the roof of the tunnel to relieve the pressure on the median nerve. An outpatient procedure, it can be performed under local or general anesthesia. Most patients are able to resume lighter activities within several days, and heavier chores and sports within weeks. The majority of patients who have had timely surgery report significant relief of symptoms.

## The Grace Webb School

WHEN EMOTIONAL ISSUES GET IN THE WAY OF LEARNING



For children and adolescents with emotional issues, eating disorders or psychiatric problems that interfere with learning, school can be disturbing and difficult. Students in turmoil need caring teachers in a supportive environment.

"Our school offers short- and long-term placement for students who need clinical support, with the hope that they will eventually return to their original schools," says Surrey Hardcastle, M.A., C.A.G.S., director of education at The Institute of Living's Grace S. Webb School. Children who need support that can't be provided in local schools are typically referred to the non-residential program by their school districts.

A therapeutic school can be a refuge for students who need help to cope with the academic and social problems they may face in their regular school. "After my inpatient time, I didn't want to return to my school because it was such a difficult place for me," says Rachel (not her real name). "The teachers and counselors helped me learn coping skills so I could handle problems better on my own." With support from staff at The Grace Webb School, students can escape from a toxic situation so they're more able to confront and heal their emotional difficulties.

Kids labeled "bad" or "odd" often find a haven where they're accepted by their peers and can feel a part of the community. The state-approved, comprehensive, special education system provides an integrated therapeutic and educational program for students in kindergarten through twelfth grade. Most students, except for those on hospital units, are bused in daily from their local community. Day students travel to the main campus from the greater Hartford and Central Connecticut areas. A satellite campus, The Webb School at Cheshire, serves children in kindergarten through eighth grade, while a third Grace Webb campus is located in West Hartford.

"Grace Webb School has the diversity that every school wants," says Ms. Hardcastle. "It's a real socioeconomic

mix with a constellation of family structures, representing every ethnic background, rural or urban, sheltered or street-savvy."

The main campus, located at The Institute of Living in Hartford, is undergoing renovation. Cheerful colors and bright paint welcome elementary students, while teenagers enjoy a pinball machine in their private lounge area or learn to cook in a sparkling kitchen. Though diagnosed as "special education" students, some are slightly behind grade level while others are gifted. For those who graduate from high school at Grace Webb, commencement is an emotional ceremony that draws alumni back each year.

At the main campus, students occupy three floors of the sprawling Braceland Building. In addition to educational subjects, students attend group therapy sessions and receive one-on-one counseling. "We're involved in individual clinical work with students," explains psychiatrist Nora N. Hanna, M.D., who works with high school students on the building's ground floor. "Some children are here for an evalutation, while others stay for a number of years. Typical diagnoses range from anxiety and depression to bipolar disorder and schizophrenia."

For adolescents experiencing psychosis or disordered thinking, the Cognitive Rehabilitation and Education Skills Training Program (CREST) offers cognitive rehabilitation geared toward those with psychotic disorders. High school students in the CREST program occupy their own wing in the building, where vocational training includes activities like bicycle repair along with practical life skills.

"The kids help each other," says Ms. Hardcastle. "Some of these kids have never had a successful experience at school, while others have never had a friend. We provide a safe environment where kids feel comfortable about trying new behaviors."

7



Bowl and accessories courtesy of the Hartford Hospital Auxiliary Gift Shop.

### Method of Preparation:

- 1. Soak bulgur in hot water to cover for 45 minutes to 1 hour.
- 2. While bulgur is soaking, chop all the vegetables and keep refrigerated.
- 3. When bulgur is tender, drain and press out any excess water.
- 4. In a mixing bowl, add the bulgur, tomato, parsley, garlic cucumber, lemon juice and dressing.
- 5. Lightly toss the ingredients together; season with salt and pepper.
- 6. Let the salad sit in the refrigerator for at least 1 to 2 hours.

#### Yield: 15 servings

#### Chef's Tips:

Enjoy Tabouleh on bread spread with hummus; place lettuce on the bread and spoon the tabouleh onto the lettuce. Feel free to improvise by adding feta cheese, toasted nuts, avocado, etc., to the tabouleh.

For the best flavor, make the salad ahead of time and let it sit overnight in the refrigerator. You can store it up to a week.

#### Nutritional Analysis:

Serving Size: 102 g (about 3.5 oz.) Amount Per Serving Calories: 90 Calories from Fat: 15 Total Fat: 1.5 g Saturated Fat: 0 g Cholesterol: 0 mg Sodium: 90 mg Total Carbohydrate: 17 g

Dietary Fiber: 4 q Sugars: 1 q Protein: 3 q Vitamin A: 15% Vitamin C: 30% Calcium: 2% Iron: 6%

Recipe analyzed by Brunella Ibarrola, MS, RD, CD-N.



alternative, dietetic interns Beth LaPierre and Scott food service/management and of Albany, New York, plans a career as a hospital dietitian.

1 bunch finely chopped parsley 2 large tomatoes, seeded and finely chopped 2 medium cucumbers, peeled and finely chopped

**Ingredients:** 2 cups bulgur wheat

<sup>1</sup>/<sub>4</sub> cup fresh lemon juice

- salt and pepper to taste
- 4 cloves of garlic, chopped
- 2 ounces vinaigrette or lightly textured dressing

Tabouleh Salad

McCarthy created this recipe for the hospital's cafeteria. The dietetic interns from the University of Connecticut are completing their nine-month clinical rotations at Hartford Hospital. After completing the internship, they will be eligible to take the certification exam to become registered dietitians. Scott, from Quincy, Massachusetts, is a former cook who eventually wants to work in a test kitchen, while Beth,

Seeking a healthy salad-bar

