Sarcomas are tumors involving the connective tissues of the body, such as muscles, bones, fat and other soft tissues. Many different types of sarcomas occur that can be classified and grouped using several classification systems. In addition, sarcomas can demonstrate highly variable clinical behavior and response to conventional surgical, medical, and radiation-based interventions. These factors frequently create challenges for physicians in forming an accurate diagnosis and subsequent treatment strategy. Consequently, most major medical centers employ a multidisciplinary or team-based approach for treating sarcoma patients.

Despite their large diversity, sarcomas are a relatively rare type of cancer with approximately 10,000 to 15,000 individuals diagnosed with sarcoma annually in the United States. Froedtert & The Medical College of Wisconsin is a nationally recognized center for the treatment of sarcoma. As a result, patients from all over the United States visit us to receive treatment. Sarcoma patients coming to Froedtert & The Medical College have access to some of the most experienced and knowledgeable clinical sarcoma experts in the midwest region of the United States. Each week, a large group of clinicians representing surgical oncology, orthopaedic surgery, plastic surgery, pathology, medical oncology, radiology, radiation oncology and thoracic oncology — along with clinical staff — meet to discuss and develop optimal treatment plans for these patients.

This has been an exciting year for clinical treatment and translational research of sarcoma at Froedtert & The Medical College. As the title of this article suggests, numerous connections between departments and faculty have been formed and strengthened during this time. Paralleling the strong multidisciplinary approach we use for diagnosis and treatment of sarcomas, research programs are being established between
different investigators and departments. These efforts have been greatly promoted by the genuine interest that is shared amongst our faculty and staff, as well as by recent generous donations being used to fund these projects. Sam Pappas, MD, was recently named the Sharon K. Wadina Professor in Sarcoma Research. Using this opportunity, Dr. Pappas has forged research connections with the Department of Pathology (through its Clinical and Translational Research Lab, directed by Craig Mackinnon, MD, PhD) and Human Genetics. The research will use powerful, state-of-the-art molecular techniques to explore and discover novel genetic changes that may drive the formation and growth of sarcoma. These discoveries have the potential to be used clinically for prognostics and therapeutic decisions.

Members of the Department of Pathology led by Eduardo Zambrano, MD, MS, have also recently identified morphologic changes in post-treatment sarcoma tissue samples that strongly and positively correlate with the patient’s response to chemoradiation therapy. By working closely with members of the Department of Radiation Oncology, including Meena Bedi, MD, and Dian Wang, MD, PhD, this collaborative study can hopefully lead to improved treatment strategies and outcomes for patients being treated at Froedtert & The Medical College.

By combining a shared interest in providing the highest level of care to sarcoma patients with a mutual curiosity to explore the molecular and genetic changes that promote the development and growth of sarcoma, physicians and staff at Froedtert & The Medical College are connected, communicating, and committed to further advancing the scope and breadth of treatment options available to patients with sarcoma.

Soft tissue sarcomas are relatively rare tumors that can have an unpredictable behavior. In 2011, it is estimated that there will be approximately 11,000 new cases of soft tissue tumors in the United States.

At Froedtert & The Medical College of Wisconsin, a combined approach with radiation therapy, chemotherapy, and surgery has been used to treat patients who present with these tumors. Treatment is delivered by radiation, medical, and orthopaedic oncologists who have undergone special training to treat sarcomas. Due to their collective effort, excellent rates of local control have been achieved with these relatively rare tumors.

Despite excellent local control rates with this approach, disease that spreads beyond the primary site, or metastasis, still develops in approximately 25 percent to 30 percent of patients. The most common location for primary soft tissue sarcomas to metastasize is the lungs. Occasionally, sarcomas can spread to other areas of the body, including the lymph nodes, bone and liver. Historically, treatment options for metastatic disease from soft tissue sarcomas have been limited to surgery or chemotherapy. Specialty sarcoma centers that use a combined approach to treat metastatic disease have shown improved post-metastatic survival rates, especially in patients with a low volume of metastatic disease.

At Froedtert & The Medical College, we have used aggressive multimodality treatment in patients with metastatic disease to further improve survival. Techniques such as multi-agent chemotherapy, surgery, radiofrequency ablation, cryotherapy and radiation are all used alone, or in combination, to help decrease disease burden, extend survival and improve patient function and quality of life.

The sarcoma team at Froedtert & The Medical College is striving to improve patient outcomes even further by investigating ways to personalize treatment for each sarcoma patient. We are currently developing magnetic resonance imaging (MRI) protocols that will help determine which tumors are responding to preoperative therapies such as chemotherapy and radiation. Studies analyzing the genetic make up of sarcomas will give physicians a better understanding of the molecular markers each sarcoma expresses, which would allow for personalized therapy.

Our team approach to sarcoma management and investment in research has lead to improvements in patient care and outcomes, as well as a better understanding of the disease process. As we move forward, our goal is to continue to provide excellent patient care and engage in research efforts to improve quality of life and extend survival of our sarcoma patients.
Fertility After Cancer Treatment
Amy Granlund, BS, Embryologist and Clinic Manager, Froedtert & The Medical College of Wisconsin Reproductive Medicine Center

When faced with a cancer diagnosis, a million questions may run through your mind. One thought that may not raise immediate concern is ‘what happens when my treatment is over and I want to start a family?’ However, if you plan to have a family, your fertility after cancer treatment should be addressed early. With the increasing success of cancer treatments, more survivors are looking for this information.

Preserving Fertility for Men:
Treatment for cancer can reduce the quality of sperm or completely halt sperm production. This will vary with each man, depending on the disease progression, type of treatment and location of the cancer. For some men, sperm production may resume within a few years of treatment. For others, fertility may be lost forever. There are options available for sperm preservation.

Preserving Fertility for Women:
For women, cancer treatments have varying consequences. When ovarian function is damaged or destroyed by radiation or chemotherapy agents, women stop producing female hormones, go into menopause and lose their ability to become pregnant naturally. Fertility preservation is a little more complex for women than for men, but there are several options available, such as egg freezing, embryo creation, ovarian tissue freezing and medication management.

Becoming a parent is a possibility for everyone, even if you don’t preserve your fertility prior to cancer treatments. Fertility may return to normal following treatment. This possibility is best discussed with your oncology team. Also, many people become parents through the use of donor sperm, donor eggs, donor embryos or adoption. Families are created in many different ways.

If you are interested in talking with a reproductive specialist regarding your options and scheduling an appointment, please let your oncologist know. He or she will refer you to The Froedtert & The Medical College of Wisconsin Reproductive Medicine Center. For additional details about the fertility specialists and services of the Reproductive Medicine Center, please visit froedtert.com/fertility.

Nutrition: Cancer and Beyond
Raina Roeder, RD, Registered Dietician

Nutrition plays an important role as the fuel your body needs to fight infection, heal wounds, sustain energy and maintain weight. Consuming the appropriate amounts of calories, protein, healthy fats, fiber and fluids as well as eating foods that are rich in vitamins and minerals can help maximize nutritional status and prevent loss of lean body mass. Different recommendations exist when side effects of treatment interfere with normal eating. Coping with these side effects is considered temporary and modifications should be made until you have improved and can resume a balanced, nutritious diet. Registered Dietitians at the Froedtert & The Medical College of Wisconsin Clinical Cancer Center are available to help optimize nutrition during and following your cancer treatments.

Tips for healthy eating during cancer:
• Plan ahead. If you experience fatigue have some easy-to-prepare meals in mind. Ask friends or family to help when you’re too tired.
• Use comfort foods on days when you don’t feel well. Following a mild diet may help minimize nausea.
• If you cannot eat normal portion sizes, eat six smaller meals daily. Keep healthy snacks around that also provide your body with nutrition. Ask a dietitian for ideas if you have any restrictions or foods that are not well tolerated.
• Drink fluids between meals. Hydration is important but drinking smaller amounts more frequently will allow you to eat as much as possible at meal time.
• Attempt to maintain your weight.
• After a cancer diagnosis, you and your family members or friends may wonder what dietary changes should be made. Many question if it is important to eliminate or eat more of certain foods, take supplements or modify cooking styles. Well intentioned people may recommend changes that might not be necessary or may be confusing. Ask your doctor to refer you to a registered dietitian to answer any questions, assess current nutritional intake and provide ideas to enhance nutritional status.

Tips for healthy eating after cancer:
The American Institute for Cancer Research (AICR) has developed 10 recommendations for cancer prevention which are also suggested for after treatment is complete. You can find these on the AICR website: www.aicr.org.

For more information, or if you have individual questions pertaining to weight changes, nutritional issues or dietary restrictions after treatment, request an appointment with a registered dietitian in the Jeffrey C. Siegel Quality of Life Center in the Clinical Cancer Center.
Support Groups

**SARCOMA SUPPORT GROUP**
This support group is for anyone affected by a diagnosis of sarcoma. Spouses, family members, significant others, and caregivers are also welcome to attend. The group will offer speakers on various topics and is also intended as an open forum. Please join us for an opportunity to share information and experiences, as well as receive encouragement and support. (This group is made possible by donations to the Froedtert Hospital Foundation.)

- Meets 3rd Monday of each month from 5:30-7:00pm
- Froedtert & The Medical College of Wisconsin Clinical Cancer Center, 1st floor, Conference Room K

**CANCER CAREGIVERS SUPPORT GROUP**
This support group is for friends, family members or others caring for people with cancer. It promotes open communication of feelings, as well as providing relaxation and stress relief. Various topics of interest to the caregiver will also be presented. (This group is made possible by donations to the Froedtert Hospital Foundation.)

- Meets 4th Tuesday of each month from 5:30-7:00pm
- Froedtert & The Medical College of Wisconsin Clinical Cancer Center, Lobby Level, Conference Room J

**YOUNG ADULT ONCOLOGY GROUP**
The Young Adult Oncology Group is for cancer survivors (on or off treatment) ages 18 to 39. This group provides survivorship support, education and offers social activities.

- Meets monthly
- Dates and times vary
- Sponsored by Children’s Hospital of Wisconsin, The Medical College of Wisconsin, Froedtert & The Medical College of Wisconsin Clinical Cancer Center and the Kass Foundation.
- For more information contact Kristin Bingen, 414-456-4148 or kbingen@mcw.edu.

For more information about our support groups, please visit froedtert.com or call 414-805-3666 or 800-272-3666 (unless otherwise noted).

**Froedtert Hospital Foundation**
The staff of the Froedtert Hospital Foundation are pleased to support the publication of this newsletter for patients and their families. We are also delighted to provide sponsorship support for the event “Living with Sarcoma: Facing Today with Hope for Tomorrow” on February 29. We know it will be a great and important day.

Donors to the Froedtert Hospital Foundation stand in partnership with the patients, families, nurses and physicians in the Froedtert & The Medical College of Wisconsin Clinical Cancer Center. Gifts to Froedtert support patient care, clinical research and education initiatives for staff and physicians. Gifts can be made in honor or memory of a loved one and can be directed to a special interest area.

For more information on the Froedtert Hospital Foundation, contact Nora Sale at 414-805-2699 or email ntsale@froedterthealth.org.