In The NEWS

UAB Begins Tomotherapy Program

Since the UAB Comprehensive Cancer Center occupied the first and third floors of The Kirklin Clinic® (TKC) at Acton Road in 2002, it has featured the most modern radiation equipment, including a Varian Clinac 21EX linear accelerator and a GE Hi-Speed NX/iPro computed tomography (cross-sectional imaging) simulator. Now, it is the first facility in Alabama and only the 10th in the United States to offer the complete Tomotherapy HI-ART® (Highly Integrated Adaptive Radiotherapy) system.

Tomotherapy is a new way to deliver oncological radiation therapy. A derivative of tomography, the term literally means “slice therapy.”

TOMOTHERAPY PROGRAM OPEN HOUSE

February 22 – noon to 2 PM – The Kirklin Clinic® at Acton Road

“The Tomotherapy HI-ART System delivers a sophisticated form of intensity-modulated radiotherapy (IMRT) that combines treatment planning, computed tomography (CT) image-guided patient positioning, and treatment delivery into an integrated system,” Jennifer De Los Santos, MD, in-house radiation oncologist at TKC at Acton Road, says.

WORLD’S MOST ADVANCED RADIATION SYSTEM

“Specifically, the tomotherapy system provides 3-D imaging immediately prior to each treatment to verify the specific location of a patient’s tumor. While conventional radiotherapy delivers a wide beam of radiation from several different directions, this system delivers highly targeted radiation beams to the exact tumor site,” she explains. “IMRT is especially useful when a tumor wraps around or has a concave relationship with a sensitive normal structure.”

The tomotherapy equipment looks like a CT system: the patient lies on a couch that moves continuously through a rotating ring gantry. The gantry houses a linear accelerator that delivers radiation in the shape of a fan beam as the ring turns. With the couch moving at the same time the gantry is rotating, the radiation beam makes a helical pattern around the patient, targeting the tumor with optimal levels of radiation, while minimizing the dose to healthy areas.

“The capability to both image and treat the tumor without the patient changing position is unique,” she says. CT localization allows physicians to accurately treat tumors with closer margins and protect more normal tissue. Because normal tissue receives less radiation, side effects of therapy may be less than with other forms of radiation therapy.

Clinical trials are planned to increase the tumor dose in some cases or decrease... continued on page 2

UB Launches Genetic Skin Disorders Clinic

UNIQUE TO SOUTHEAST

UAB’s new Genetic Skin Disorders Clinic, a joint effort of the Departments of Genetics and Dermatology, is dedicated to diagnosis and management of skin disorders caused by a single gene defect. Genodermatoses include a wide array of disorders that can cause significant morbidity, compromise quality of life, and in some cases, result in early mortality.

The clinic — the only one of its kind in the Southeast — provides comprehensive services for newborns, children, and adults with a spectrum of skin conditions, including the phakomatoses, epidermolysis bullosa, the ichthyoses, and congenital abnormalities of the hair, nails, and sweat glands.

Genodermatoses can be inherited or triggered by spontaneous mutations, and onset can occur at any time... continued on page 3
the number of times a patient may need treatment. Patients with tumors expected to benefit include those with:

- **Prostate cancer.** Protocols are under development to decrease overall treatment time.
- **Spinal tumors (primary or metastatic).** A clinical trial is open for patients to receive 1 to 5 fractions of radiation therapy with tomotherapy instead of several weeks of treatment, which may avoid delays in starting chemotherapy.
- **Brain tumors.** Many patients with meningiomas or pituitary tumors are not candidates for radiosurgery and require fractionated treatment. Tomotherapy’s CT guidance limits the normal tissue exposed to radiation.
- **Head and neck cancer.** Using targeted IMRT treatments can protect the parotid glands in some patients; UAB has several research studies utilizing IMRT for head and neck cancer.
- **Other tumor types,** including retreatment of patients who have had prior radiation therapy.

Several letters nominating Dr. Heck referred to his role as director of Children’s Hospital’s juvenile rheumatoid arthritis (JRA) clinic, the first of its kind in the nation, established by the late Howard Holly, MD. Although he trained as an adult rheumatologist, Dr. Heck has been treating children with JRA since 1980. This is particularly significant in a state that has an estimated 6,000 JRA patients but no pediatric rheumatologist.

In an especially poignant nomination, a grateful parent wrote, “From age 3 until her death in 1994 at age 29, our daughter suffered with one of the most debilitating cases of JRA ever diagnosed in Alabama. She was a patient of Dr. Heck’s for a major portion of her life, and he was a dear friend and counselor to her during this time. She loved and trusted him beyond measure. The level of care and concern he exhibited toward our family was best exemplified when he and his family attended our daughter’s memorial service. It is clear that his medical skills are highly complemented by his heart of love and gracious, caring manner conveyed to his patients.”

**TINSLEY HARRISON’S ADVICE**

Attending the award presentation were several practicing rheumatologists who were taught by Dr. Heck at the School of Medicine at UAB. Some recalled Dr. Heck’s daily reminders of the physician’s role in treating the emotional side of patients, especially important for people with arthritis, who often face a lifetime of disability. He says he strives to practice and share with medical students UAB pioneer Dr. Tinsley Harrison’s advice:

“Tact, sympathy, and understanding are expected of the physician, for the patient is no mere collection of symptoms, signs, disordered functions, damaged organs, and disturbed emotions. He is human, fearful and hopeful, seeking relief, help and reassurance... The true physician has a Shakespearean breadth of interest in the wise and the foolish, the proud and the humble, the stoic hero and the whining rogue. He cares for people.”

Before joining UAB’s Division of Clinical Immunology and Rheumatology as professor of medicine, Dr. Heck worked at the National Institutes of Health, Harvard Medical School, and Brigham and Women’s Hospital. He earned his medical degree at Indiana University in Indianapolis.

In accepting the Rheumatologist-of-the-Year Award, Dr. Heck paid tribute to the support of his family and his UAB colleagues and alluded to his long association with the Arthritis Foundation, which began while he was a medical student in Indiana.

The Arthritis Foundation (www.arthritis.org) is the nation’s only nonprofit health organization helping individuals take greater control of arthritis by leading efforts to prevent, control, and cure arthritis and related diseases.
UAB Comprehensive Cancer Center Supporters will climax current fundraising by hosting Gala 2005 on Saturday, February 26, from 7 PM to 10 PM at The Kirklin Clinic®. The formal event is now in its 20th year. This year, 75% of funds from the Cancer Center’s Supporters Board annual fundraising effort, which culminates in the gala, will be used to fund a laboratory to study gliomas. Each year, more than 18,400 Americans are diagnosed with a malignant brain tumor. The erratic and powerful tumor overtakes the body’s center of function and limits conventional treatment options. The rest of the funds will support patient assistance at the Cancer Center.

The first of its kind in the United States, the Glioma Invasion Core Facility will support research to examine gliomas and their central problem: what causes such aggressive brain metastasis? Researchers from UAB and other institutions will examine brain tumor growth on a molecular level to answer this vital question.

“This laboratory will give investigators access to a facility that can quickly test experimental agents to determine if those agents are potential brain tumor treatments,” says Steven Rosenfeld, MD, PhD, principal investigator for the Cancer Center’s Brain Tumor SPORE, director of the Cancer Center’s Neuro-oncology Program, and leader of the Brain Tumor Research and Treatment Program. Gala funds will purchase equipment, including cutting-edge microscopes and tissue incubators. Data from this laboratory eventually will be used to write a major grant application to the National Institutes of Health. Dr. Rosenfeld adds, “Seed money provided by this project will also leverage federal dollars.”

The benefit to patients? Research dollars from the National Cancer Institute and other funding sources will allow UAB researchers to move promising laboratory findings into the clinical setting at the UAB Interdisciplinary Brain Tumor Clinic, where patients come from across the Southeast to receive specialized, compassionate treatment.

“We already are a national leader in the field of brain tumor research,” Dr. Rosenfeld stresses. “Today, more than 30 Cancer Center faculty from many disciplines conduct brain tumor research. My goal is to make sure we stay within the top echelon of brain tumor research centers to continue our impact on this disease.”

UAB Launches Skin Disorders Clinic

from birth through adulthood, explains pediatric dermatologist Amy Theos, MD, codirector of the new clinic along with Department of Genetics Chair Bruce Korf, MD, PhD.

“The skin may be the earliest manifestation of systemic disease, and therefore, an important diagnostic marker, as with the ash leaf spots of tuberous sclerosis or the café au lait spots characteristic of neurofibromatosis,” she says. Dr. Theos adds that while advances in molecular genetics have mapped a large number of these diseases at specific loci within the human genome, effective treatments remain limited.

COMPREHENSIVE CONSULTATION

“Improving care for these patients is the clinic’s number one goal,” Dr. Theos says. “Genetic skin disorders are often challenging to diagnose and time consuming to manage; patients usually have many questions about genetic testing and reproductive issues. In most dermatology practices, the physician’s time is too limited to comprehensively address all these needs, and patients are usually referred to a geneticist for additional evaluation. Our clinic allows patients to see a geneticist.”

To access a Synopsis article from the last 2 years, visit our Web site at www.health.uab.edu/synopsis. You can search by date or subject in the left sidebar.

UAB physicians: visit MSI, the password-protected Medical Staff intranet site, at https://horizon.hs.uab.edu.
dermatologist and geneticist on the same day.”

During clinic visits, patients are evaluated by both Dr. Theos and Dr. Korf, who discuss diagnosis, management, and genetic testing, and then meet with patients to educate them about their condition, explain treatment plans, and answer questions. Genetic counselors are also available.

The Genetic Skin Disorders Clinic offers:
- Evaluation of family history
- Examination, including thorough skin screening of patients and family members
- Specialized diagnostic testing
- Discussion of management and treatment recommendations
- Comprehensive treatment programs
- Genetic counseling to assist in family education and planning
- Opportunities to participate in clinical research projects

“We expect the clinic to attract a broad range of patients. We also hope to offer involvement in clinical research protocols, that will facilitate understanding of these rare disorders,” Dr. Theos says.

The Genetic Skin Disorders Clinic, which accepts physician and self-referrals, meets one Thursday a month in the Hugh Kaul Human Genetics Building. For more information, or to refer a patient, contact genetic counselor Patricia Page at 205-934-5567 or page Dr. Theos at 205-934-3411 or www.ccweb.uab.edu.

Remembering A Pioneering Pediatric Cardiologist

Lionel M. Bargeron, Jr., MD, who served as professor of pediatrics and director of pediatric cardiology at UAB from 1966 until his retirement in 1989, died January 9 at age 81. A graduate of the Medical College of Alabama, he completed residency training at Columbia-Presbyterian Hospital in New York and a U.S. Public Research Fellowship.

Dr. Bargeron was a superb diagnostician and teacher and, along with UAB colleagues, developed the technique of axial biplane cineangiography for evaluation of congenital heart disease, which is now standard practice.

In 1991, Dr. Bargeron delivered the 28th Distinguished Faculty Lecture, “Remembrance of Things Past,” and in 1993 the University of Alabama Board of Trustees named the Pediatric Cardiology Suite in the New Hillman Building in his honor. In 1966, the board established the Lionel M. Bargeron, Jr., MD, Endowed Chair in Pediatric Cardiology. He was the author of numerous landmark articles and texts on pediatric cardiology, as well as a devoted student of French and the works of Marcel Proust.

The family suggests donations to the L. M. Bargeron Memorial Division of Pediatric Cardiology, NHB 320, 620 20th St S, Birmingham, AL 35249.