Transition, Innovation In Surgery

Christine Finck, MD, has been named chief of Pediatric General Surgery at Connecticut Children's. An associate professor of surgery in the University of Connecticut School of Medicine’s Department of Pediatrics and Surgery, Dr. Finck was until recently the associate director of the Pediatric General Surgery Division. Donald Hight, MD, who served as director for many years, is limiting his clinical hours and will work with the Medical Center and the Connecticut Children’s Foundation to promote the health of children through public policy advocacy.

Commenting on her new role, Dr. Finck says, “My vision is to increase the division’s visibility in the Connecticut area, including growth into new areas. We will continue to provide top-of-the-line services, minimally invasive procedures and robotic surgery, and will maintain our leadership in providing cutting-edge treatment for chest wall deformities. We will also continue to vigorously support the region's pediatric Level I Trauma Program.”

New Services Offered

The division offers the full range of pediatric surgical care, from the simple to the complex. It provides complex neonatal surgery (including prenatal counseling), minimally invasive surgery, Level I trauma care, circumcision, orchidopexy, and weight loss surgery, as well as surgical treatment of cancer, colorectal diseases, chest wall deformities, hydroceles and hernias.

In addition, the division recently introduced new services. It is expanding into providing surgical capabilities for extracorporeal membrane oxygenation (ECMO). Working in collaboration with neonatal and pediatric intensive care units, the division’s surgeons place the catheters required to provide access for ECMO support. Until now, this treatment was available only in New Haven or Boston.

Continued on page 3

UROLOGY DIVISION’S Reconstructive and Solid Tumor Surgical Program Named Premier Program

Connecticut Children’s exceptionally skilled and experienced team of pediatric urologists means that children who need even the most rare and complex urological surgical procedures can have them performed right here at Connecticut Children’s. In recognition of their outstanding reputation and ability to provide the highest level of care, the Medical Center has named its Reconstructive and Solid Tumor Surgical Program, the centerpiece of its Urology Division, as one of its three Premier Programs. The other Premier Programs are Neonatology and Digestive Diseases.

The Urology Division’s medical team includes Fernando Ferrer, MD, the Medical Center’s surgeon-in-chief and director of the Center for Pediatric Urology; pediatric urologists Christina Kim, MD, and John Makari, MD; and pediatrician Jill Bernstein, MD. All are members of the faculty of the University of Connecticut School of Medicine. An additional pediatric urologist will join the team this summer.

The Urology Division provides comprehensive services covering all abnormalities of the genitourinary system. Three areas of specialized expertise include:

- The reconstructive urology program, focused on managing all reconstructive, complex urologic problems such as hypospadias, neurogenic bladder, extrophy/epispadias complex, vesicoureteral reflux, ureteropelvic junction obstruction and other congenital abnormalities

- The maternal-fetal urology program, which focuses on antenatal urologic abnormalities, providing prenatal consultations and postnatal care

- A urodynamics and incontinence center managing all bladder incontinence problems, whether related to neurogenic bladder dysfunction or voiding disorders related to bowel and bladder dysfunction.

Connecticut Children’s pediatric urology team has received international recognition for its work in both major
Presentation

AB is a 4-month-old Caucasian male who presented to our private practice with fussiness and poor feeding in the midst of a local outbreak of coxsackievirus. He became progressively more somnolent and irritable during 10 days of illness. He had not experienced fever, congestion or cough. He did have intermittent non-bilious, non-bloody emesis without associated diarrhea. He was exclusively breast-fed and taking approximately half of his normal volume. The patient’s mother was evaluated one week prior to his illness for what was presumed to be viral meningitis. She had since made a full recovery.

Medical history was significant for gastroesophageal reflux. Growth and development had been normal until the onset of this illness, when his mother noticed that he was no longer lifting his head when prone. He is an only child cared for exclusively by his parents.

The patient’s examination revealed a mildly ill-appearing infant with weight loss and a yellow-gray discoloration to his skin. He had a shallow, yellow-white ulceration that was 1 cm in diameter covering the ventral surface of his tongue. There were no other oral or skin lesions. His liver was 2 cm and his spleen was 3 to 4 cm below the costal margins. He had low tone and could not lift his head or chest when prone.

Diagnosis/Treatment

When AB’s weakness and skin discoloration progressed he was referred to Connecticut Children’s infectious diseases specialist Alberto Cohen-Abbo, MD, for subspecialty evaluation. Complete blood count revealed severe macrocytic anemia (Hg 5.9 g/dL, MCV 973 fl), thrombocytopenia (platelets 80 THOU/µL) and neutropenia (WBC 4.8 THOU/µL, ANC 336). AB’s lactate dehydrogenase level was elevated (1474 U/L).

AB was admitted to Connecticut Children’s Medical Center for transfusion and ongoing evaluation by the Hematology-Oncology team.

Bone marrow aspiration revealed megaloblastic morphology. A folate level was normal but his vitamin B12 (cobalamin) level was low.

With cobalamin supplementation the patient’s level normalized over a one-month period. He regained his previous color, energy level and muscle tone. His disposition markedly improved, and he began to gain weight appropriately. He is now a thriving 9-month-old. He has maintained normal B12 levels without further supplementation. His mother was subsequently found to have pernicious anemia.

Discussion

Cobalamin and folate deficiency are uncommon in infancy. However, when they do present, it is typically at 4 months of age. Adults and older children have sufficient cobalamin stores to last three to five years, but infants born to mothers with low stores show symptoms earlier.

The microorganisms that produce cobalamin do not colonize humans. While many vegetables and supplemented grain products contain folate, cobalamin is obtained by ingestion of fish, eggs, cheese and meats. Therefore, strict vegetarians (vegans) are most at risk of cobalamin nutritional deficiency. By extension, exclusively breast-fed infants of vegan mothers are also at high risk.

Cobalamin plays an important role in both DNA synthesis and hemopoiesis. The vitamin must be coupled with intrinsic factor in the stomach to be absorbed from the terminal ileum. To enter the cells of the liver (for storage) or bone marrow, cobalamin must then be coupled with transcobalamin II in the plasma. Pernicious anemia (PA) can therefore be the result of inadequate cobalamin ingestion or a disorder of absorption.

In infants, nutritional deficiency in breast-fed infants is the most common cause of PA. There is an extremely rare autosomal recessive form of congenital pernicious anemia, a condition in which patients have an inability to secrete gastric intrinsic factor. Adult type, autoimmune PA can be seen in older children (typically 9- to 10-year-olds). These children have antibodies against intrinsic factor or the parietal cells that secrete it and may suffer from additional endocrine abnormalities.

The most common presenting symptoms of PA are insidious: anorexia, diarrhea and irritability. Classic signs include a “lemon yellow” pallor (due to concurrent anemia and jaundice), glossitis and neurologic deficits due to demyelination of the dorsal and lateral columns of the spinal cord. In infants, the neurologic deficits can include hypotonia, developmental delay or developmental regression. Older children can also present with paresthesias, ataxia or neuropsychiatric changes.

Many of the hematologic manifestations are identical in folate and cobalamin deficiencies. As in our patient, laboratory findings typically include severe anemia; associated thrombocytopenia and leukopenia; macrocytes and hypersegmented neutrophils on blood smear; vitamin B12 level less than 100pg/µL; normal folic acid level; and elevated lactate dehydrogenase (due to ineffective erythropoiesis). Excessive excretion of methylmalonic acid in the urine is also a reliable and sensitive test for cobalamin deficiency.

Treatment is initially with cyanocobalamine 100mcg via daily IM injection for two weeks then with weekly injections until the hematocrit normalizes. It is important to ensure adequate folate levels prior to treatment. Many patients with pernicious anemia also have low folate levels in their red blood cells because cobalamin is a co-factor in folate metabolism. Giving folic acid alone to a patient with cobalamin deficiency can lead to irreversible neurologic damage.

Our patient had a brisk response to IM therapy and was quickly transitioned to oral supplementation. It is typical for reticulocytosis to begin within two to four days of parenteral B12 administration. After one month of treatment, AB’s cobalamin level was high, and supplementation was stopped.

Incisional biopsy of the tongue lesion revealed immature skeletal fibers consistent with a hamartoma. This was a perplexing finding given the appearance of the lesion and its slow resolution with cobalamin repletion.

Review of the mother’s medical history revealed an episode of anemia six years prior to her pregnancy that required transfusion and was thought to be secondary to iron deficiency. Although she had followed a vegetarian diet in the past, she had eaten meat and taken oral B12 supplements since her episode of anemia. She has since been found to have autoantibodies to intrinsic factor and is receiving parenteral B12 treatment.

What was the cause of AB’s cobalamin deficiency? As Arnold Altman, MD, of Connecticut Children’s Hematology-Oncology Division, explained: “1) Our patient’s mother had developed antibodies against intrinsic factor resulting in her low serum B12 level. 2) AB failed to receive adequate B12 from his mother. Furthermore, he acquired intrinsic factor antibodies via transplacental transfer and from breast milk, which prevented him from absorbing dietary vitamin B12. 3) Supplementation with parenteral vitamin B12 allowed AB to recover hematopoiesis and normalize his blood counts. It also had a markedly beneficial effect on his neurologic status. 4) Now that the acquired maternal antibodies are cleared from his system, AB appears to be absorbing dietary vitamin B12 satisfactorily.”

Special thanks to Drs. Jennifer Schwab, John Fote, Alberto Cohen-Abbo, Arnold Altman and Nicole Murray for their exceptional care of AB and for their contributions to this case review. I am also grateful to AB’s parents for their thoughtful comments and willingness to share their son’s story.
Transition, Innovation In Surgery, continued from page 1

“This will allow us to give better care to our sickest infants and children right here in Central Connecticut,” says Dr. Finck.

In December 2010, under the leadership of Michael Bourque, MD, the division began offering another new service: anorectal manometry for children with chronic constipation and disorders of intestinal motility.

The division’s bariatric surgery program for childhood obesity continues, with about 15 patients having had Lap-Band® surgery to date. Surgeons work closely with endocrinologists, nutritionists and psychologists at Connecticut Children’s to provide a comprehensive weight management program for children and adolescents.

Expanded Staff, Enhanced Access

Dr. Finck says that one of the division’s goals is improving service to referring providers and their patients. Recent and upcoming staff additions will support this goal. The division now has two RNs staffing the office full time and has hired a physician assistant, who joins the three advanced practice registered nurses on staff. The expanded staff is good news for referring providers and their patients who now have faster access to the division’s services.

“This means we can take emergency referrals into the office up until 4 p.m.,” says Dr. Finck. “In the office, those patients can be evaluated rapidly, which translates into better service to the community.” She notes that patients referred outside of office hours would need to go through the Emergency Department.

In addition to Drs. Finck, Hight and Bourque, the division’s current physicians are Drs. Brendan Campbell and Richard Weiss. Dr. Campbell recently began performing fetal surgery to date. Surgeons work closely with endocrinologists, nutritionists and psychologists at Connecticut Children’s to provide a comprehensive weight management program for children and adolescents.

Ongoing Research

Members of the division are actively involved in both basic science and clinical research. Dr. Finck recently received a $1.2 million, five-year NIH grant to continue her investigation into developing lung tissue from embryonic mouse stem cells. The ultimate goal is to find a way to use novel tissue engineering and cell-based therapies to alleviate neonatal pulmonary hypoplasia. Dr. Campbell’s research focuses on quality of care in pediatric surgery and injury prevention, and he is the principal investigator on a three-year, $750,000 federal grant studying the role of driving simulator training and crash risk in Connecticut teenagers.

To refer a patient, call the Pediatric General Surgery office at 860.545.9520

Premier Program, continued from page 1

reconstructive surgery and minimally invasive surgery, including robotics, laparoscopy and endoscopy. Members are expert in dealing with abnormalities that are very rarely seen. They work collaboratively with parents, psychiatrists, geneticists, endocrinologists and others for children born with ambiguous genitalia. They provide medical care and perform reconstructive procedures for children with neurogenic bladder dysfunction, as is often seen in children with spina bifida.

Members of the division are also considered leaders in pediatric research and discovery. Dr. Ferrer has a laboratory at the University of Connecticut Health Center where he conducts research on the development and removal of cancerous tumors of the kidneys and bladder.

As a Premier Program, Urology will focus on further developing strengths in key areas. It has obtained ACGME accreditation for fellowship training in pediatric urology, providing the necessary training for American Board of Urology subspecialty certification in pediatric urology. It is developing care coordination models for children with issues such as disorders of sexual development (DSD), which involve multiple subspecialties. It will continue to enhance its maternal-fetal program, working prenatally with physicians at Hartford Hospital and the University of Connecticut Health Center to develop postnatal plans of care for infants born with genitourinary problems. Other areas of focus include improving the patient and family experience through timely scheduling of appointments and surgeries, improving wait times, continuing to develop more robust care coordination, and expanding research activities through the use of registries to track outcomes for robotic surgery and DSD management.

To schedule an appointment for your patient, call 860.545.9520

New CT Scanner: Faster Scans, Lower Radiation Dose

Connecticut Children’s new, 64-slice CT scanner was installed late last year and, after extensive staff training, is up and running.

The new scanner offers many advantages, including improved image resolution and reduced scanning time. It is the only one in the industry with the Dose Shield feature, which eliminates radiation exposure to surrounding areas—in some cases by as much as 40 percent. It offers more capability, too, allowing Connecticut Children’s to perform interventional studies such as abscess drainages and biopsies and advanced dynamic studies such as CT angiogram and renal studies.

Radiology Manager Diane Jay says that outpatients referred for CT can usually be seen the same day or the next.

To arrange for a CT scan, call the Radiology scheduling desk at 860.545.9135
Exploring Genetics And Type 2 Diabetes

Elizabeth Estrada, MD, pediatric endocrinologist and associate professor of pediatrics at the UConn School of Medicine, began her career at Connecticut Children’s in 1996, just about the same time that the incidence of type 2 diabetes in children began its upward spiral. Studying and treating this disease and related health issues in children soon became the focus of her academic career.

Dr. Estrada runs the Medical Center’s Type 2 Diabetes Clinic. She developed, in conjunction with the diabetes team, an educational curriculum for treatment of type 2 diabetes. And she is the medical director of Connecticut Children’s multidisciplinary treatment program for obesity, which encompasses medical and behavioral treatment and bariatric surgery. The program was recently honored when the National Association of Children’s Hospitals and Related Institutions invited Connecticut Children’s to participate in a focus group to develop guidelines for best practices in treatment of obesity in children. Dr. Estrada co-chairs one of the focus group’s subcommittees.

TODAY Genetics Study

Dr. Estrada is conducting a number of clinical trials, including the Genetics Study that is part of the National Institutes of Health-funded TODAY study. TODAY, which stands for Treatment Options for type 2 Diabetes in Adolescents and Youth, is a multi-year, multi-site study aimed at identifying the best treatments for young people with this disease. The centers involved in the study are all recognized pediatric endocrine centers around the country.

The recently added genetics component, Dr. Estrada says, is designed to “look at all the genetic markers to see if in the future we might be able to screen children for predisposition to type 2 diabetes or identify any genetic markers that will help predict outcomes and improve treatment.”

The resulting data will help researchers see whether genetic makeup correlates to development of type 2 diabetes, obesity, cardiovascular complications and insulin resistance.

Dr. Estrada seeks to contribute to the 2,500 blood samples the study is looking to collect from patients who have been diagnosed with type 2 diabetes before age 18. She began recruiting participants in 2010 and has until January 2012 to complete recruitment.

“The incidence of type 2 diabetes in children has increased because of the epidemic of obesity,” Dr. Estrada says. “This study will provide important information about this condition in the future.”

Looking Ahead

Dr. Estrada has other research projects in the offing, including one that will explore food addiction in children with obesity. Imaging studies have shown that consuming certain foods—typically those combining sweet, salt and fat—activates the same brain pathways as heroin. The multidisciplinary team will assess traits of addictive behaviors and impulsivity among children in the clinics.

“Based on those results, we might change our approach in the obesity treatment programs to try to address those behaviors,” Dr. Estrada says.

If you have a patient under age 18 diagnosed with type 2 diabetes who might be a candidate for the Genetics Study, please call the study coordinator, Hendriana Gutierrez, at 860.545.9273.

Community- and Hospital-Based Surgeons Collaborate

In January of this year, orthopedic surgeon Kenneth Paonessa, MD, of Norwich Orthopedic Group PC, and Connecticut Children’s pediatric orthopedic surgeon Mark Lee, MD, collaborated to perform spinal surgery to correct scoliosis in a 14-year-old patient. After successful surgery, the patient received postoperative care at Connecticut Children’s, experienced no complications and was discharged five days after surgery.

“Dr. Paonessa has elected to bring his spinal deformity patients to Connecticut Children’s,” says Dr. Lee. “He will probably bring six to 10 cases a year for this type of procedure.”

In December, Dr. Paonessa and Connecticut Children’s pediatric neurosurgeon Jonathan Martin, MD, together operated on a teenage patient who had a tumor in his cervical spine. Dr. Paonessa, who is on the medical staff of William W. Backus Hospital, has been on courtesy staff at Connecticut Children’s for 20 years, beginning with Newington Children’s Hospital.

“Because of the advanced pediatric care that Connecticut Children’s can offer, I have decided to do my surgeries at Connecticut Children’s for any patient who is under age 18,” Dr. Paonessa says. “I perform spinal reconstructive surgeries for both adults and children, and I was very impressed with the care that my two patients received at Connecticut Children’s. I think it is very important to have nurses and other care providers who have training in taking care of pediatric patients after spinal surgeries, and I think this will help with the recovery of my patients.”

Dr. Lee says that many community hospitals are reluctant to support such cases, given the complexity of operating around the spinal cord and the need for close monitoring and specialized expertise during and after the procedures.

“Patients can have infections, bleeding, progressive neurological deterioration and more,” says Dr. Lee. “You need pediatric specialists willing to deal with acute medical problems. Connecticut Children’s has been doing this for a long time, and we have in place all the protocols necessary for postoperative management.”

Connecticut Children’s performs between 80 and 100 cases of scoliosis spinal fusion cases per year.

Dr. Paonessa says he has several other patients for whom he will perform scoliosis surgery at Connecticut Children’s, working with both Dr. Lee and Director of Orthopaedic Surgery Jeffrey Thomson, MD.
New Resources For Managing Obesity

Physicians at Connecticut Children’s have developed resources to help primary care providers ensure optimal evaluation and treatment of children with obesity and related co-morbidities. The goal is to help PCPs follow national evidence- and consensus-based guidelines in evaluating children with obesity to determine which patients need medical treatment in addition to lifestyle intervention.

Elizabeth Estrada, MD, medical director of Connecticut Children’s Obesity Program, led a multidisciplinary team of specialists to develop an Obesity Co-Morbidity Co-Management Plan. Patients ages 3 to 18 with a BMI above the 85th percentile are eligible for the Obesity Co-Management protocol. Resources include a co-management toolkit, links to community resources available to support lifestyle interventions, referral guidelines and educational opportunities for PCPs. In addition, the Co-Management Plan highlights the behavior-based programs that are available at Connecticut Children’s. These include six separate options based on age, severity of obesity, and diagnosis, including a bariatric program and behavior-based program for adolescents with polycystic ovary syndrome (PCOS).

The Obesity Co-Management Toolkit uses the structure Karen Rubin, MD, chief of the Division of Pediatric Endocrinology, and her colleagues developed last year as part of the Co-Management Pilot Study. It contains algorithms for initial screening of the overweight/obese child and for co-morbidities including obstructive sleep apnea, hypertension, fatty liver disease, glucose abnormalities, lipid abnormalities and PCOS.

The algorithms were developed collaboratively over the last two years by Connecticut Children’s subspecialists from a variety of disciplines. Use of these algorithms will help PCPs determine which overweight/obese patients need to be referred to subspecialists at Connecticut Children’s.

A Growing Health Problem

Obesity is becoming the single most prevalent health problem in the United States. It is estimated that 33 percent of children and 34 percent of adolescents are overweight or obese. Almost 130,000 children in Connecticut are obese. In Hartford, more than 40 percent of children are overweight or obese. The medical complications of obesity can be great. For example, diabetes secondary to obesity, until recently limited to the adult population, now comprises up to 45 percent of new cases of diabetes in adolescents. Other medical co-morbidities such as obstructive sleep apnea, hypertension, PCOS and hyperlipidemia are common. When children with obesity have co-morbidities requiring referral to a subspecialist, they are most often referred to endocrinology. From 2009 to 2010, the number of patients referred to the Division of Endocrinology at Connecticut Children’s increased by approximately 40 percent, from 689 to nearly 1,000.

“This pattern has been occurring over the last 10 years,” says Dr. Rubin, “and it’s unsustainable.”

The Role of Primary Care

Without intervention, obesity co-morbidities in children are linked to chronic health conditions in adulthood, including cardiovascular disease. Early identification and management of these co-morbidities in youth may decrease the adult burden of chronic disease. Primary care providers play a critical role in this early intervention process. The American Academy of Pediatrics has asserted that screening children for obesity co-morbidities is within the purview of the primary care medical home.

“As pediatricians, we need to recognize that we have the potential to minimize poor adult outcomes,” says Dr. Rubin. “Identifying early manifestations of adult conditions is part of what we do. This has become one of our most important roles—not just keeping kids healthy in childhood, but doing our best to transition them to a healthy adulthood.”

On-Site Training Available

Dr. Elizabeth Estrada will make herself available to provide on-site training for primary care practices wishing to co-manage patients with obesity. During the session, Dr. Estrada will go through the toolkit and answer any questions. Other CME opportunities, such as lectures and online streaming video may be considered for the future.

The Obesity Co-Management Toolkit and Obesity Referral Guidelines are available on the Referring Provider section of www.connecticutchildrens.org.

To arrange for on-site training, contact Laura Chandhok, MPH, at 860.545.9735, lchandhok@connecticutchildrens.org.

Danbury Hospital Is Newest Affiliate

Patients, pediatricians and other primary care providers in Western Connecticut now have enhanced access to Connecticut Children’s services thanks to a strategic partnership established by the Medical Center and Danbury Hospital.

Under the arrangement, Connecticut Children’s will provide selected subspecialty services at Danbury Hospital’s Children’s Health and Wellness Center located at 79 Sand Pit Road. Cardiology and Digestive Diseases, the first two subspecialties to be offered, began seeing patients in Danbury in February. When patients at Danbury Hospital need a tertiary level of care, the hospital will preferentially transfer them to Connecticut Children’s. In addition, Connecticut Children’s will work with Danbury Hospital to provide education and training to community-based physicians in the area. For example, grand rounds will now be televised weekly at Danbury Hospital and will also be conducted on-site at Danbury Hospital four times a year.

“This agreement benefits both institutions,” says Dean Rapoza, president of Connecticut Children’s Specialty Group. “More importantly, it will benefit children from Western Connecticut and the Greater Danbury area.”
New Referral Form For Rehab Services

Now it’s easier than ever for physicians to refer patients to Connecticut Children’s for outpatient rehabilitation services. The Department of Education and Rehabilitation Services has developed a single referral form for Occupational Therapy, Physical Therapy, Speech-Language Pathology, Audiology and all special services, such as the Feeding Team and the ASAP program for autism diagnosis. The form also provides, on the reverse, a handy list of ICD 9 codes.

“By providing one form for these outpatient services, we hope to streamline processes for referring providers and make their lives a little easier,” says department Director Barbara Brown.

The form can be found on the Referring Provider section of connecticutchildrens.org or you can request one by calling 860.545.9398 or e-mailing khaydus@connecticutchildrens.org.

NIH Research Grant Awarded

Connecticut Children’s Department of Digestive Diseases, Hepatology and Nutrition has received a $424,000 planning grant from the National Institutes of Health to help prepare for a larger $5 million, multi-center grant proposal that will be submitted next year.

According to Jeffrey Hyams, MD, director of the Division of Digestive Diseases, Hepatology and Nutrition, the planning grant is in preparation for a larger research study that will test numerous therapies in children diagnosed with ulcerative colitis. The project is entitled “The PROTECT Study: Predicting Response to Standardized Pediatric Colitis Therapy.”

“Previous studies on the natural history of ulcerative colitis have shown that children have frequent relapses and that there are no reliable clinical or biological markers that can predict the severity of disease course and response to various therapies in these children,” Dr. Hyams says.

The U-34 NIH grant that Dr. Hyams received will help establish a research team, develop tools for data management and research oversight, and will finalize the protocol and preparation of an operations/procedures manual for a larger multi-center grant that includes 20 high-volume pediatric inflammatory bowel disease centers from around the country.

Dr. Hyams’ co-investigator on the study is Lee Denson, MD, medical director of the Pediatric Inflammatory Bowel Disease Center at Cincinnati Children’s Hospital and Medical Center.

“We have a very exciting research project in the planning stages,” says Connecticut Children’s Director of Research Georgine Burke, PhD. “With Drs. Hyams and Denson leading this study, the NIH has the established experts in the field of pediatric inflammatory bowel disease assembled for this project.”

Dr. Hyams says the team’s proposal will be to enroll about 450 children in the study that is designed to evaluate the safety and efficacy of a standardized initial therapy for the treatment of children 4 to 18 years of age newly diagnosed with ulcerative colitis. At diagnosis each patient will have biospecimens (blood and colonic tissue) obtained that will be used to better understand disease expression and treatment response at the molecular level. Patients with Crohn’s disease will not be a part of the study.

“Our hypothesis is that the initial response to therapy by 30 days from the time of diagnosis, as well as genetic factors that control inflammation at the cellular level, will help predict the severity of the disease as reflected by the need for increased medical therapy or surgery,” Dr. Hyams says.

More Fellowships Added

The number of fellowships offered at Connecticut Children’s continues to grow. The most recent to be approved is in Urology (see page 3). Approval of still another new fellowship is expected later this spring. In all, the number of fellowships offered has doubled in just the past year and a half.

“Strong fellowships are a key component of an academic medical environment,” says Susan Duckworth, director of academic administration at Connecticut Children’s. “They enhance the academic environment and provide the institution with a wonderful tool for recruitment and retention of physicians.”

Connecticut Children’s now offers fellowships in Medical Genetics, Pediatric Emergency Medicine, Pediatric Endocrinology, Pediatric Pulmonary Medicine, Neonatal-Perinatal Medicine, Pediatric Gastroenterology and Pediatric Urology.
Clinical Pathways Expanding

A multidisciplinary team led by Anand Sekaran, MD, medical director of Inpatient Services, continues to move ahead with the Medical Center’s Clinical Pathways Program. The Asthma Clinical Pathway was implemented in fall 2010. It joined clinical pathways that had already been developed for several other conditions, including septic shock, diabetic ketoacidosis and eating disorders. Two additional pathways, one for bronchiolitis and one for neonatal jaundice, are now under development. In addition, the team has created a clinical pathways template for use by individual departments, so that pathways are consistent throughout the institution. This will facilitate the collection of data that can be used to measure performance.

The development and use of clinical pathways is part of a sweeping change taking place in health care nationally and internationally. With medicine having become so complex, says Dr. Sekaran, “the use of tools such as pathways and checklists help ensure that we use best practices, provide evidence-based care and ensure a high minimum standard of practice for all patients.”

Dr. Sekaran’s team, in collaboration with the Quality Improvement Department, collects data from existing pathways and reports back to each department to let providers know how they’re doing. “The whole idea is to use standardization and systems to improve quality of care,” says Dr. Sekaran.

Continuous Improvement

Since the asthma pathway was implemented last fall, pathway utilization has gone from 38 percent to 78 percent. The frequency with which controller medications are initiated prior to discharge has risen from 40 percent to 71 percent. The frequency with which the patient’s home treatment plan is faxed to his/her primary care doctor has gone from 25 percent to 75 percent. The home treatment plan form is being redesigned to reduce the portion that is handwritten.

Pathways can affect care outside of the hospital, too. Dr. Sekaran notes, “We’ve traditionally been very good at the acute treatment of asthma in the hospital, but need to pay more attention to correctly classifying chronic asthma severity, as well. We are now preparing to take the next step, which is to track how well we link chronic severity to the correct controller medication. As far as I know, no one else is tracking how well this is done in the inpatient setting via the use of a clinical pathway.”

Connecticut Children’s hospitalists, who now admit more than 80 percent of general pediatric inpatients, are particularly focused on measuring their own performance. They call a patient’s primary care provider at discharge more than 95 percent of the time and provide an asthma home treatment plan more than 90 percent of the time. Chief of Pediatric Endocrinology Karen Rubin, MD, who heads the Medical Center’s Referring Provider Relations Program, is leading a group seeking to ensure that all subspecialties optimize discharge communication to primary care providers.

For more information about clinical pathways, contact Dr. Sekaran at pager 860.220.1992 or at asekarant@connecticutchildrens.org.

New Fracture Table Enhances Capabilities

Thanks to funds raised by the 2010 Geno Auriemma Fore the Kids Charity Golf Tournament, Connecticut Children’s Division of Orthopaedic Surgery has a new, state-of-the-art fracture table.

The hana® fracture table by Mizuho OSI provides a number of innovative features that benefit both surgeons and patients, including leg spars that move in all directions, a carbon fiber framework that allows for intraoperative X-rays, and a patient-weight capacity of up to 450 pounds.

According to Jeffrey Thomson, MD, the director of Orthopaedic Surgery, “This new table enhances our ability to handle more-difficult lower extremity fractures as well as hip arthroscopy and complex hip reconstruction cases. The table can also accommodate heavier patients. It is an advanced device that will enhance the care of children with orthopaedic disorders and injuries.”

Same- and Next-Day Appointments In Ortho

The Division of Orthopaedic Surgery now offers same-day and next-day appointments. If a referring provider calls the division in the morning, the patient will be scheduled for the same day, between 3 and 4 pm. Call in the afternoon, and the patient will be given an appointment between 8 and 10 am the following morning. The faster scheduling is made possible in part by the addition of a new staff member, Aimee Ilardi, PA.

To request an appointment, call 860.545.9100.

Continuing Medical Education Programs

Connecticut Children’s now offers programs in several communities:

SHELTON
Connecticut Children’s Specialty Care Center, 4 Corporate Dr.

WEST HARTFORD
The Pond House Café, 1555 Asylum Ave.

WATERBURY
Saint Mary’s Hospital, 56 Franklin St.
Pediatric Evening Lecture Series
Unless otherwise noted, schedule is: 5:30 – 6:30 pm, registration and buffet dinner; 6:30 – 8 pm, lecture; 8 – 8:30 pm, Q&A.

April 6, 2011 – Shelton
Cardiology in the Pediatric Patient

April 7, 2011 – West Hartford
When Pain Is the Problem: Functional Pain Syndromes in Childhood

May 4, 2011 – Waterbury
Rheumatology: When to Refer

To register or obtain more information, contact Diane Mouradjan (860.610.4264 or dmouradjan@connecticutchildrens.org) or Deirdre Palmer (860.610.4281 or dpalmer01@connecticutchildrens.org).
Connecticut Children’s Medical Center At Your Service

Connecticut Children’s provides a variety of services at locations statewide and beyond. Here’s a summary:

**Danbury**, Danbury Hospital, 24 Hospital Avenue
- Cardiology • Digestive Diseases

**Farmington**, 399 Farmington Avenue
- Center for Motion Analysis • Digestive Diseases • Endocrinology
- Hematology/Oncology • Occupational Therapy • Orthopaedics
- Physical Therapy • Pulmonary Medicine • Radiology • Speech-Language
- Sports Medicine • Surgery • Urology

**Farmington**, 11 South Road
- Otolaryngology-Head & Neck Surgery • Audiology • Speech-Language

**Glastonbury**, 310 Western Boulevard
- Audiology • Cardiology • Digestive Diseases • Endocrinology
- Hematology/Oncology • Neurology • Occupational and Physical Therapy
- Orthopaedics • Otolaryngology-Head & Neck Surgery • Pulmonary Medicine
- Radiology • Rheumatology • Speech-Language

**Manchester**, 71 Haynes Street
- Cardiology

**Middletown**, 520 Saybrook Road
- Cardiology

**New Britain**, 100 Grand Street
- Pulmonary Medicine

**New London**, 365 Montauk Avenue
- Rheumatology

**Norwich**, 44 Stott Avenue
- Genetics

**Putnam**, 320 Pomfret Street
- Cardiology

**Shelton**, 4 Corporate Drive
- Cardiology • Digestive Diseases • Endocrinology • Hematology/Oncology
- Nephrology • Orthopaedics • Pulmonary Medicine • Rheumatology
- Surgery • Urology

**Southbury**, 22 Old Waterbury Road, Suite 201
- Cardiology

**Stamford**, 32 Strawberry Hill Court
- Endocrinology • Orthopaedics • Rheumatology

**Torrington**, 157 Litchfield Street
- Cardiology • Endocrinology

**Waterbury**, 64 Robbins Street
- Cardiology

**Massachusetts**, 516 Carew Street, Springfield
- Rheumatology • Neurosurgery

To make an appointment, call the specialty’s main number as listed in the Directory of Medical Programs and Services found at www.connecticutchildrens.org.