

CLINICAL AND RESEARCH UPDATES FROM *THE UNIVERSITY OF MARYLAND SCHOOL OF MEDICINE*  
AND *THE UNIVERSITY OF MARYLAND MEDICAL CENTER*



**KEY  
POINTS:**

## NEUROCRITICAL CARE UNIT

*Optimizing Outcomes for Neurologically Injured Patients*

- The NCCU cares for patients with nontraumatic neurologic injuries, such as cerebrovascular diseases, CNS tumors and spinal disorders
- Since July 2012, the NCCU has grown from 12 beds to 22, and is one of the largest units of its kind in the country
- The NCCU uses cooling devices to stabilize temperature in brain injury patients who have high fever unresponsive to conventional treatment (up to 70% of such patients)
- Exceptional clinical tools found at UMMC's neurocritical care unit are continuous EEG with 24/7 video monitoring, CNS microdialysis and continuous renal replacement therapy

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Recently, a patient with no history of head trauma lapsed into a coma and was admitted immediately to her local community hospital. The team of physicians assigned to the case conducted a thorough workup for vascular, infectious and toxic disorders, but the underlying cause of the patient's coma remained elusive. The patient was then transferred to the University of Maryland Medical Center's NeuroCritical Care Unit (NCCU), where specialists reviewed the case in detail with the team of physicians from the community hospital. In light of the clinical findings to date and a

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# SUBSPECIALTY CLINICS PROVIDE TEAM-BASED APPROACH TO DIABETES AND ENDOCRINOLOGY CARE

Treating challenging conditions like diabetes, endocrine tumors and rare metabolic bone diseases requires experience and focus. That's why the University of Maryland Center for Diabetes and Endocrinology (UMCDE) is home to several subspecialty clinics staffed by expert endocrinologists who often

focus on only one organ, such as the pituitary or thyroid gland.

"This means patients are treated by providers who are up to date on the latest research and understand the subtleties of diagnosing and managing disorders in their specific subspecialty," says Kristi Silver, M.D., an endocrinologist and acting director of the center at the University of Maryland, which is ranked 11<sup>th</sup> among the nation's best for diabetes and endocrinology care by *U.S. News & World Report*.

helped clinicians earn recognition for diabetes care from the National Committee for Quality Assurance.

The clinic offers onsite HbA1c testing, with results available during the visit, so providers can immediately use this information to adjust treatment strategies, if necessary. Patients also have access to the latest insulin pumps and continuous glucose sensors, which can help keep blood sugars from reaching dangerous levels. In addition, patients can benefit from individual and group classes — recognized by the American Diabetes Association — focused on coping with their lifelong condition.

Managing the risk factors for diabetes complications including cardiovascular disease is also part of the patient's treatment plan, Dr. Silver says. "We work with the patient's primary care physician to manage blood pressure, cholesterol and other risk factors."

UMCDE physicians are also involved in clinical research. This research ranges from drug trials to understanding the pathophysiology causing diabetes to genetic studies. For example, one research study underway at the University of Maryland uses a personalized medicine approach to identifying patients with genetic forms of diabetes [e.g., maturity-onset diabetes of the young (MODY)] and then tailoring treatment to the specific genetic defect.

## NEW SERVICES TARGET OBESITY, LIPID DISORDERS

The diabetes center has added a program to specifically focus on

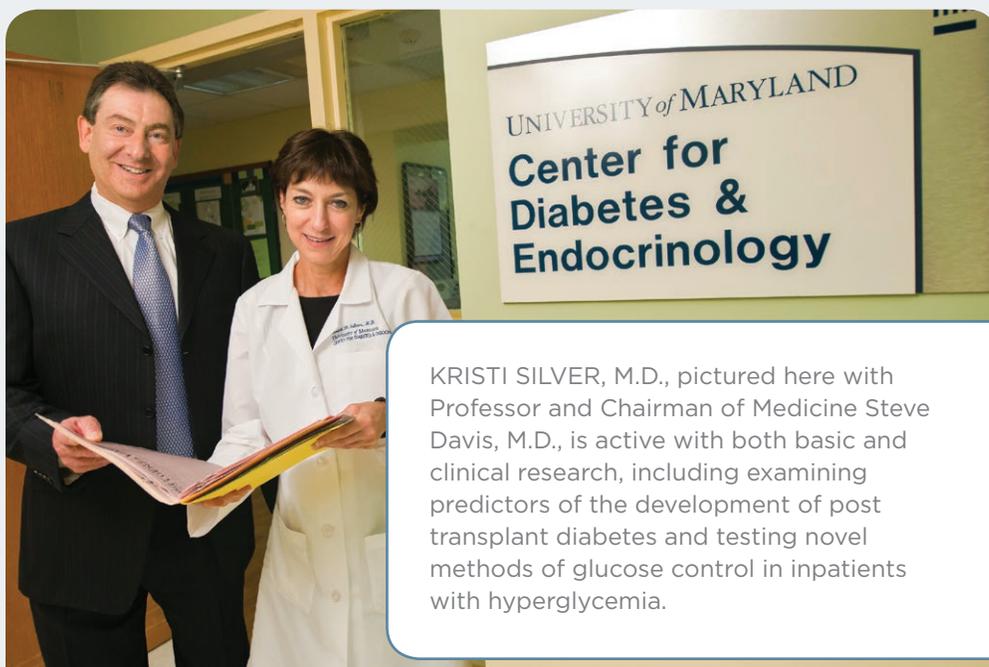


- The University of Maryland Medical Center was ranked 11<sup>th</sup> among the nation's best hospitals for diabetes and endocrinology
- New clinics treat obese patients with diabetes and patients with mixed lipid disorders, statin intolerance, hypertriglyceridemia and genetic lipid disorders
- The clinic for pituitary disorders offers a multidisciplinary approach to pituitary tumors as well as pituitary hormonal dysfunction
- Genetic testing can help some patients avoid thyroid surgery
- Patients with common and rare bone and mineral disorders can receive expert evaluations and genetic testing

## TEAM DRIVES PERSONALIZED APPROACH TO DIABETES CARE

Each subspecialty clinic, such as the diabetes clinic, is staffed by a multidisciplinary care team. When treating patients — from those who are newly diagnosed with diabetes to others who have not made progress on their current therapy — team-based care often leads to better outcomes, says Dr. Silver, an associate professor of medicine. "In addition to the provider, patients at the diabetes center are usually seen by a certified diabetes educator and nutritionist. By each having a slightly different approach, the team is more likely to pick up on problems, such as psychiatric or social issues, that need to be addressed before patients can succeed in treatment."

At the end of their visit, patients receive personalized dietary and medication plans, as well as personalized goals for glucose control and weight loss if needed. Additionally, they might also see a podiatrist, psychiatrist or other provider. This comprehensive approach has



KRISTI SILVER, M.D., pictured here with Professor and Chairman of Medicine Steve Davis, M.D., is active with both basic and clinical research, including examining predictors of the development of post transplant diabetes and testing novel methods of glucose control in inpatients with hyperglycemia.

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- KRISTI SILVER, M.D.

obesity and weight management in diabetes patients, led by assistant professor of medicine Ava Port, M.D., M.P.H., an endocrinologist with specialized training in nutrition and obesity. The program offers individualized treatment plans for overweight and obese patients with diabetes. The program focuses on the medical, nutritional and psychosocial aspects of weight loss and may include weight-loss medications and very-low calorie diets. The clinic, which works with the University of Maryland’s bariatric surgery program, also offers classes in healthy eating and behavior modification. (Obese patients without diabetes are seen at the Faculty Practice Office located on 419 West Redwood Street.)

In addition, the endocrinology practice recently opened a lipid disorders clinic, led by Rana Malek, M.D., an assistant professor of medicine. The clinic provides evaluation and treatment for patients with common lipid disorders as well as those with mixed lipid disorders, statin intolerance, hypertriglyceridemia, genetic lipid disorders and other difficult-to-treat conditions.

### CLINIC FOR PITUITARY DISORDERS

Another subspecialty clinic at the University of Maryland treats patients with pituitary tumors and pituitary hormonal dysfunction. This multidisciplinary clinic is led by endocrinologist Kashif Munir, M.D.; neurosurgeons Charles Sansur, M.D., and Graeme Woodworth, M.D.; and radiation oncologist Young Kwok, M.D., who focus specifically on pituitary issues. The team also includes two other pituitary surgeons as well as specialists from neuroradiology, nuclear medicine, pathology and neuro-ophthalmology. The neuro-ophthalmologist is on hand to conduct studies to assess patients with visual field deficits. In most cases, patients see each physician involved in their care during one appointment at the downtown medical center.

“Collaboration is the future of medicine,” says Dr. Munir, an assistant professor of medicine. “When we treat patients as teams rather than as individual doctors, we can establish a dialogue with multiple providers to give patients the best care that we possibly can.”

As an adjunctive therapy to surgery or radiation, the clinic also offers investigational medicines through clinical trials.

### HELPING PATIENTS AVOID THYROID SURGERY

Until recently, thyroid nodules with indeterminate cytology have presented a treatment dilemma for physicians. But now, endocrinologists at the multidisciplinary thyroid clinic are utilizing an approach that can help spare some patients unnecessary surgery. Using gene expression classifier testing, physicians can check for genetic markers that suggest whether a nodule is more likely to become malignant down the road. “This can help patients avoid unnecessary surgery to remove part or all of the thyroid if they have a low cancer risk,” Dr. Munir says.

At the thyroid clinic, patients benefit from the expertise of specialized endocrine surgeons, along with radiologists, pathologists and nuclear medicine specialists. Working alongside endocrinologists, these physicians provide comprehensive care for thyroid cancer, hypothyroidism,

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hyperthyroidism and other thyroid disorders.

## EXPERT EVALUATIONS FOR METABOLIC BONE AND MINERAL DISORDERS

The bone and mineral disorders program at the University of Maryland specializes in evaluating patients with common bone disorders as well as those with diagnostic dilemmas, particularly those with puzzling bone and mineral problems. Some of the common conditions treated at the clinic include osteoporosis, Paget disease, vitamin D deficiency and parathyroid disorders. Rare conditions treated include rickets, osteogenesis imperfecta, osteoporosis pseudoglioma, fibrous dysplasia and osteonecrosis.

Patients with these disorders benefit from the team's expertise in genetics, says associate professor of medicine Elizabeth A. Streeten, M.D., director of the bone and mineral program and co-director of the genetics and personalized medicine clinic. As a medical geneticist and endocrinologist, Dr. Streeten helps referring physicians distinguish between a metabolic bone disorder and a skeletal dysplasia, some of which may be very rare. "Many conditions can look like an endocrine or metabolic disorder but they are actually a skeletal dysplasia," she says.

Dr. Streeten, who has more than 20 years of experience in the diagnosis and management of

metabolic bone problems, will review a patient's history, current symptoms, lab work and previous bone density scans. If a new bone density scan is needed, it can be scheduled for the same day and in the same location. Genetic testing and counseling is also available. In addition, the program is one of only a few in the Baltimore area to offer a comprehensive metabolic evaluation for patients with kidney stones. +



To learn more about the diabetes care available at the University of Maryland or to make an appointment at the diabetes center, call **1-888-567-5468** or visit [www.umm.edu/diabetes/](http://www.umm.edu/diabetes/). Appointments for other endocrine issues can be made by calling **410-328-6219**.

## UPCOMING CME ACTIVITIES

Offered by the University of Maryland School of Medicine in conjunction with University of Maryland Medical Center.

### >> 2013 INSTITUTE FOR HUMAN VIROLOGY (IHV) CASE CONFERENCE MONTHLY SERIES

January through December

### >> ADVANCES IN VASCULAR SURGERY AND ENDOVASCULAR THERAPY

May 9-11

### >> FUNDAMENTALS OF CRITICAL CARE SUPPORT

June 6-7  
Sept. 26-27  
Oct. 24-25  
Dec. 5-6

### >> 4<sup>TH</sup> ANNUAL GI CANCER SYMPOSIUM

June 7

### >> CURRENT TECHNIQUES IN MANAGEMENT OF COMPLEX FRACTURES FOR THE COMMUNITY ORTHOPAEDIC SURGEON

June 21-22

### >> WILLIAM J. WEINER, M.D., TOWN/GOWN NEUROLOGY UPDATE XII

June 26

### >> LEADING-EDGE ECHOCARDIOGRAPHY INTERVENTIONAL PROCEDURES FOR ACUTE CARE AND TRAUMA PHYSICIANS

June 28  
Sept. 13  
Nov. 15

Most events will be held on the University of Maryland Baltimore campus. For details and registration information, please visit: <https://cmetracker.net/UMD/Catalog>