

THE REWARDS OF CARING FOR PATIENTS WITH CHRONIC CONDITIONS

Few things are as rewarding—or challenging—as helping a patient through a chronic condition. For this reason, the Division of Endocrinology, Metabolism and Genetics hosts numerous multidisciplinary programs dedicated to caring for patients with a range of diseases including diabetes, osteoporosis, thyroid cancer and other thyroid diseases, as well as adrenal, pituitary, ovarian, testicular and genetic disorders.

Internal Medicine residents rotate through inpatient and outpatient services, learning diabetes management for acutely ill patients and long-term management strategies for diabetes and other endocrine diseases. An Endocrinology Fellowship trains internists in the specialty of Endocrinology, Diabetes and Metabolism. The Endocrine Division also provides a number of educational classes for patients and physicians in the community.

Division director Leland Graves, MD, trained at the University of Kansas Medical Center from 1983 to 1988. When he was offered the opportunity to return as director of the Endocrinology Division in 2001, he didn't think twice.

"It was an opportunity to work with my mentors," he says, referring to Barbara Lukert, MD, Neil Schimke, MD, and Joseph Kyner, MD.

In particular, he was drawn to research into osteoporosis conducted through the Hiatt Osteoporosis Clinic. Lukert developed the Hiatt Osteoporosis Clinic to advance patient care and research and understanding of bone and skeletal health. Research projects have included numerous trials to test new medications for osteoporosis, along with studies investigating the role of vitamin D and exercise in prevention and treatment of osteoporosis. Currently, Leigh Eck, MD, is directing two trials studying the impact of vitamin D and DHA supplementation on lactation-associated bone loss. Rajib Bhattacharya, MD, recently completed a study examining the prevalence of osteoporosis in patients with Parkinson's disease leading to increased rates of fractures.

The Cray Diabetes and Self Management Center and the KU Diabetes Institute are also forging new ground. Director David Robbins, MD, is leading two NIH-funded trials:

- The I-KAN Study will assess the effectiveness of an Internet course that teaches insulin management to patients with type 2 diabetes in rural or semi-rural Kansas through four weekly "live" sessions.
- The multi-centered vitamin D for diabetes trial (D2D) will test whether daily vitamin D supplementation affects how the body uses glucose.

In addition, Robbins is working on a collaboration with Children's Mercy Hospital to create a diabetes transition clinic for patients with type 1 diabetes who are graduating from pediatric care. This will facilitate the care of these patients into adult practice. Along those same lines, the diabetes clinic is collaborating with the pulmonary division in the care of patients with cystic fibrosis who frequently develop diabetes. The goal is to provide a more multi-disciplinary team approach to these patients.

Grave's interest in thyroid cancer has led to him working alongside Faris Farassati, PhD, PharmD, in the Hematology/Oncology Division to investigate potential abnormal gene markers for thyroid cancer that may be targeted for therapy. Potential candidate genes are being investigated as potential targets for oncolytic viral therapy to add potential new treatment for anaplastic thyroid cancer, a particularly aggressive thyroid cancer.

Rudrudee Karnchanasorn, MD, is developing a thyroid biopsy multi-disciplinary clinic, working with otolaryngology physicians. Patients can now move forward with a thyroid biopsy and see the surgeon more quickly to complete the evaluation of a concerning thyroid tumor. She is studying these patients using newly developed genetic testing of the aspirated material to help improve the accuracy of the biopsy. In this setting she is also training the endocrine fellows in ultrasound and

biopsy techniques.

Rajib Bhattacharya, MD, has had a long interest in osteoporosis and the effects of low testosterone on bone health in men. Bhattacharya, a member of the TESTIM Registry, has recently published several papers on long-term effects of testosterone replacement in men with testosterone deficiency.

All this demonstrates the drive and enthusiasm of physicians working to improve the treatment of the myriad conditions that result from disorders of the endocrine system.

"It is exciting to work with the dedicated staff of Endocrinology," said Graves. **"They have a passion for taking care of our patients and investigating new treatments and other ways to improve the lives of our patients."**



Leland Graves, MD