

Thomas A. Buchanan, MD

Dr. Buchanan's work focuses the on etiology, pathogenesis and prevention of type 2 diabetes, especially after gestational diabetes.



1. What is the current focus of your research?

My research focuses on the etiology, pathogenesis and prevention of type 2 diabetes.

2. What is the most positive aspect of being a researcher? What is the most frustrating?

The most positive aspect of being a researcher is discovering things – especially about human biology as they can be applied to better patient care. The most frustrating aspect is the mountain of outside regulation that is imposed on researchers by people who don't really work in research, just regulate it.

3. How did you choose your field and specialty and why?

My residency program director was an endocrinologist. He arranged a presentation from a woman who was managing diabetes in pregnancy with new glucose meters. It was the first time I was hopeful that something could be done about diabetes complications. I did a fellowship in a large diabetes and pregnancy center and went into research on diabetes and pregnancy, including gestational diabetes. That led to current work on etiology, pathogenesis and prevention of type 2 diabetes, especially after gestational diabetes.

4. What has been the biggest surprise of your career?

The biggest surprise of my career has been the discovery that pancreatic beta-cell function loss in people progressing toward type 2 diabetes can be stopped by treating insulin resistance.

5. What are the most promising developments in the specialty?

The most promising developments are genetic tools to identify people who will develop diabetes if they become insulin resistant, and pharmacological tools that can either treat insulin resistance or enhance development of new/more pancreatic beta-cells. ■

FAST FACTS

- Program Director, General Clinical Research Center, and Chief, Division of Endocrinology and Diabetes, at the University of Southern California Keck School of Medicine
- Attending Physician, Los Angeles County + University of Southern California Medical Center
- Professor of Medicine, Obstetrics and Gynecology, and Physiology and Biophysics, University of Southern California Keck School of Medicine

MEMBERSHIPS

- American Diabetes Association (California Affiliate and Los Angeles Chapter)
- American Federation for Clinical Research (Western Section)
- Western Society for Clinical Investigation
- Diabetes in Pregnancy Study Group (West Charter Member)
- International Diabetes Federation
- The Endocrine Society
- American Federation for Medical Research
- European Association for the Study of Diabetes
- American Heart Association (Council on High Blood Pressure)