



VANDERBILT CUTTING-EDGE DISCOVERY

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EPIGENETICS, TRANSCRIPTION, AND DISEASE

**J. DAVID SWEATT, PH.D.**  
**WILLIAM P. TANSEY, PH.D.**

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OCTOBER 26, 2017  
4:00 P.M.  
208 LIGHT HALL

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Upcoming Discovery Lecture:

**SALLY E. WENZEL, M.D.**

*Professor of Medicine*

*Director, University of Pittsburgh Asthma Institute at University of Pittsburgh Medical Center  
and University of Pittsburgh School of Medicine*

*University of Pittsburgh Medical Center Chair in Translational Airway Biology*

*Subsection Chief of Allergy, Pulmonary, Allergy and Critical Care Medicine*

*November 9, 2017*

*208 Light Hall / 4:00 P.M.*

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VANDERBILT  UNIVERSITY  
MEDICAL CENTER



**J. DAVID SWEATT,  
PH.D.**

**PROFESSOR AND CHAIR,  
DEPARTMENT OF PHARMACOLOGY  
ALLAN D. BASS CHAIR IN PHARMACOLOGY**

David Sweatt obtained his B.S. in Chemistry from the University of South Alabama before attending Vanderbilt University, where he was awarded a Ph.D. in Pharmacology for studies of intracellular signaling mechanisms. He then did a post-doctoral fellowship at the Columbia University Center for Neurobiology and Behavior, working on memory mechanisms in the laboratory of Nobel laureate Eric Kandel. From 1989 to 2006 he was a member of the Neuroscience faculty at Baylor College of Medicine in Houston, Texas, rising through the ranks there to Professor and Director of the Neuroscience Ph.D. program. In 2006 he moved to the University of Alabama at Birmingham where he served for ten years as the Evelyn F. McKnight endowed Chairman of the Department of Neurobiology at UAB Medical School, and the Director of the Evelyn F. McKnight Brain Institute at UAB.

Dr. Sweatt's laboratory studies biochemical mechanisms of learning and memory, most recently focusing on the role of epigenetic mechanisms in memory formation. In addition, his research program also investigates mechanisms of learning and memory disorders, such as intellectual disabilities, Alzheimer's Disease, and aging-related memory dysfunction. He is currently the Allan D. Bass endowed Chairman of the Department of Pharmacology at Vanderbilt University School of Medicine, and has expanded his research program to include developing Pharmacogenetic approaches to enable new treatments for cognitive dysfunction.

Dr. Sweatt has won numerous awards and honors, including an Ellison Medical Foundation Senior Scholar Award, and election as a Fellow of the American Association for the Advancement of Science. In 2013 he won the Ipsen Foundation International Prize in Neural Plasticity, and in 2014 he was the recipient of the PROSE Award for the most outstanding reference volume published in 2013, for his book, *Epigenetic Mechanisms in the Nervous System*. The book was also one of five finalists for the 2014 Dawkins Award for the most outstanding academic book published in 2013. In 2014/2015/2016 Thomson-Reuters named him as a "Highly Cited Researcher" and as one of the "World's Most Influential Scientific Minds". Also a visual artist, Dr. Sweatt explores the use of painting as a medium for expressing topics of interest in contemporary biomedical research. In 2009 he published a textbook, *Mechanisms of Memory*, which is illustrated with original paintings and describes current models for the molecular and cellular basis of memory formation.



**WILLIAM P. TANSEY  
PH.D.**

**INGRAM PROFESSOR OF CANCER RESEARCH  
PROFESSOR, DEPARTMENT OF  
CELL AND DEVELOPMENTAL BIOLOGY**

William Tansey was born and raised in Sydney, Australia. He earned his B.Sc. and Ph.D. from the University of Sydney, where he studied processes that regulate human growth hormone production. After completing his doctoral studies in 1992, he moved to the United States to pursue further postdoctoral training at Cold Spring Harbor Laboratory in New York. There, his work centered on unraveling the biochemical processes that human cells use to control gene activity. In 1997, he was promoted to the faculty of Cold Spring Harbor Laboratory, and established his independent laboratory focusing on gene regulation and how it goes awry in cancer. He was promoted to Associate Professor in 2001 and full Professor in 2005 where he held the title Lita Annenberg Hazen Professor of Biological Sciences. During his time at Cold Spring Harbor Laboratory, he was actively involved in undergraduate and graduate education, serving as Assistant Director of the Undergraduate Research Program and as one of the architects, and Director, of the newly-established Watson School Graduate Program. In 2009, he moved to Vanderbilt University, where he is currently Professor of Cell and Developmental Biology and Ingram Professor of Cancer Research. He also serves as Co-Director of the Genome Maintenance Program for the Vanderbilt-Ingram Cancer Center. Dr. Tansey's current research centers on developing new methods to therapeutically target the cancer-causing gene MYC, which causes the cancer-associated deaths of 100,000 Americans each year.

Dr. Tansey's research has been continually funded by the National Institutes of Health since 1998. He is the recipient of numerous awards including the University Medal from the University of Sydney, Kimmel Foundation Scholar, Leukemia and Lymphoma Society Scholar, and Stohlman Scholar. In 2012 he was named as a Fellow of the American Association for the Advancement of Science.