

Dr. Elizabeth Young, Professor of Psychiatry and Senior Research Professor at the Molecular and Behavioral Neuroscience Institute (MBNI) and member of the Depression Center at the University of Michigan passed away on September 1, 2009 after a yearlong battle with leukemia. She was 59 years old.

Dr. Young was an internationally renowned biological psychiatrist and neuroendocrinologist. She conducted seminal work on stress biology and its role in severe depression and other mood disorders.

Elizabeth was raised in the Detroit and Chicago area and received her undergraduate education at the University of Dayton in Ohio. She earned her medical degree from the Ohio State University in 1976, and completed her residency in Psychiatry at the same institution in 1979.

Elizabeth came to the University of Michigan Medical School in July 1979 as a research fellow in the Department of Psychiatry Clinical Studies Unit. In 1981 she received a postdoctoral fellowship to work in the laboratories of Drs. Huda Akil and Stanley Watson at the Molecular and Behavioral Neuroscience Institute (MBNI). She went on to receive a physician scientist training grant and joined the faculty of the MBNI and Psychiatry where she moved through the ranks to the senior positions she occupied at the time of her death.

Dr. Young was the quintessential translational physician scientist—a role she fashioned for herself before its critical importance was widely appreciated. Early in her career, she conducted fundamental research on the biology of endorphins and on the regulation of the hypothalamo-pituitary-adrenal axis by stress. Simultaneously, she undertook groundbreaking studies on the dysregulation of the stress system in major depression. At the time she began her work, stress biology was viewed as offering an indirect and rather imperfect way of studying the otherwise inaccessible brain of depressed individuals— “a window into the brain”. Moreover, the tools available for this analysis were limited— primarily measures of blood cortisol. But Elizabeth posited that abnormal responsiveness to stress could be part and parcel of the pathophysiology of mood disorders. She was fully aware of the intricacies of the stress system at the molecular, brain circuit, and neuroendocrine levels. Therefore, she realized that there were many points of vulnerability where the system could be disrupted, but also many approaches to resetting its intricate balance. It is because of these unique insights that she spent a significant portion of her career devising novel strategies to challenge the stress system and examine its responses in normal subjects and patients with mood disorders. She used pharmacological and neuroendocrine approaches, coupled with exquisite clinical assessment, to surgically dissect the nature of the disruption of stress physiology in mood disorders, uncovering the role of brain areas such as the hippocampus in this dysregulation. She analyzed the stress disruption not only in severe depression but also in related and sometimes co-morbid illnesses, such as anxiety disorders or post-traumatic stress disorder (PTSD). Her body of work stands as one of the most systematic and mechanistic analyses of the biology of mood disorders in modern psychiatry.

Elizabeth had many other scientific interests, most prominent among them the role of gender differences in vulnerability to mood disorders. Why are women more prone to these diseases than men? Why do they respond differently to antidepressants? What is the role of gonadal hormones in this difference? And what is the relative role of hormones versus other biological, psychological and social factors that may contribute to depression vulnerability? Many of these questions remain unanswered. One of Elizabeth's last scientific contributions, completed while battling her cancer, was a thorough review of the biology of gender differences in depression, currently in press in *Molecular Psychiatry*. Her contributions to the field will continue, however, as she has established the basis for many lines of enquiry into human psychopathology.

But Elizabeth was much more than a talented and visionary physician scientist. She was also a loving wife and stepmother, a caring physician, a wonderful collaborator and mentor, an ardent gardener and appreciator of the best that life has to offer, and a devoted friend. She accomplished all she did with warmth, integrity, and the very highest values imaginable. It is rare to know someone so talented and so accomplished who is also so kind, warm, genuine and selfless.

During her ordeal, while battling leukemia and undergoing complex therapies and bone marrow transplant, she and her equally remarkable husband, Dr. Peter Hinman, maintained a blog in which they shared their trials and their triumphs with their countless friends and colleagues. Their courage, love, thoughtfulness and generosity towards their friends were inspiring. In knowing her, those of us who love her learned not only how to live well, but also how to die well.

She is survived by her husband Dr. Peter Hinman, her step-daughter Dr. Mira Hinman and two step-granddaughters Annika and Celia McDermott-Hinman.

A Memorial Fund has been created to establish **The Elizabeth A. Young Lectureship on Stress and Mood Disorders** at the University of Michigan. Donations to the Fund can be sent to MBNI, 205 Zina Pitcher Place, Ann Arbor, MI 48109. Att: R. Freedman.