

## **IN MEMORIAM**

## Albert Silverman, 1925–2002

Albert Jack Silverman, M.D., C.M., a noted psychiatrist, neuroscience researcher and former chair of two university psychiatry departments, died Friday, May 10. He was 77. The cause was cancer.

In the mid-1950s, Silverman led research for the US Air Force on space neuroscience and psychology, which rose from obscurity to prominence literally overnight in 1957 with the launch of Sputnik and the dawn of the space race. In addition to performing key research on physical and psychological responses to G-force acceleration and space travel as chief of the stress and fatigue section of the Aero Medical Laboratory at Wright-Patterson Air Force Base, he helped invent a device that used pilots' brain waves as an oxygen-deprivation warning system.

During his career, Silverman sought to bridge the divide between the rising field of neuroscience-based psychiatry and traditional psychoanalysis. In 1963, he was one of three founders of the Rutgers Medical School and chaired its first psychiatry department. The school later became part of the New Jersey Medical School at the University of Medicine and Dentistry of New Jersey.

In 1970, he became chair of psychiatry at the University of Michigan (U-M) Medical School. He is credited with redirecting the department's research, education and treatment programs, and leading during a time of great change. He returned to research and clinical care in 1981, and retired in 1990, but continued as professor emeritus. A research conference named for him has been held annually for 12 years at the U-M.

"Al was truly a force to be reckoned with, an international leader in the field of psychosomatic medicine, and an important figure in the development of psychiatry at Michigan and beyond into a field that embraces all aspects of the human brain and psyche," says John Greden, M.D., current department chair and executive director of the U-M Depression Center. "We will miss him terribly, but we know that his contributions will live on."

He is survived by his wife Halina W. Silverman of Santa Barbara, CA; son Barry Evan Silverman (Nancy)



of Pittsburgh, PA; daughter Marcy Silverman Mullan (John) of Carpinteria, CA; four grandchildren, Luke, Kelly, Erin and Mark; and brother Marvin Silverman, M.D. of Ottawa, Canada.

Silverman served on the National Board of Medical Examiners for many years, including a term from 1984 to 1987 as chair of the committee that designed the behavioral sciences portion of the national medical licensing examination. From 1975 to 1976, he was president of the American Psychosomatic Society, which focuses on the mind-body connection in disease.

A native of Montréal, where he was born January 27, 1925, Silverman earned his B.S. and M.D. at McGill University. It was at McGill that he discovered his interest in the physical underpinnings of psychological phenomena—a field called psychophysiology. After a residency in psychiatry at the University of Colorado Medical Center, he followed his mentor Ewald W. Busse to Duke University, where he became a member of the faculty.

He was naturalized as an American citizen in June 1955, and entered the Air Force that year. During his two and one-half years of service at Wright-Patterson Air Force Base, he completed his board examinations in both neurology and psychiatry.

In a 1991 oral history interview, Silverman recalled the experience:

"This was right at the beginning of space exploration. Just prior to the Russians' putting up Sputnik, we were doing G-tolerance studies with the human centrifuge. We weren't allowed to call them moon trajectories or anything like that, because the senators were very negative about 'all of this space nonsense.' But in under 24 hours of Sputnik's going up, we got these hurry-up telegrams from headquarters saying, 'What are we doing in space [research]?' So we dusted off all the old technical reports we had been doing anyway, but under nonspace names such as 'acceleration in unusual environments.' That kind of vague name now became 'G-forces necessary for a moon trip,' which now became very kosher."

Silverman left the service as a captain in 1957. He returned to Duke, heading the psycho-physiology lab and then the behavior studies lab until leaving for Rutgers in 1963. In all, his research during this period of his career led to more than 100 publications and presentations.

He studied psychoanalysis at the Washington Psychoanalytic Institute, graduating in May 1964. After founding the Rutgers Psychiatry Department, Silverman left New Jersey when the state merged several medical programs under a new structure.

At the U-M, he set out to bridge the gap between the Mental Health Research Institute, home to noted basic research in the neurosciences, and the then psychotherapy-focused psychiatry faculty. In addition to strengthening the clinical trials program, he helped the U-M implement new clinical treatments and research programs emphasizing psychopharmacology, biofeedback, stress-

neuroendocrine relationships and supported starting the clinical studies unit for affective disorders. He also revamped the curriculum for medical students to include more psychiatric training, improved the residency program, and attracted young neuroscientists.

In addition to the NBME and APS, Silverman was a charter fellow of the American College of Psychiatrists; a fellow of the American Association for the Advancement of Science, the American Academy of Psychoanalysis, and the American College of Neuropsychopharmacology; a former chairman of several committees for the American Psychiatric Association; and an honorary fellow of the American Society of Psychoanalytic Physicians.

An amateur musician and sculptor, Silverman was a patron of the U-M University Musical Society, a friend of the U-M Museum of Art, and a Patron of the Detroit Institute of Arts.

A memorial celebrating Silverman's life was held in Santa Barbara for family and friends. A memorial in Ann Arbor, MI is being planned. In lieu of flowers, donations in his memory may be made to the U-M Department of Psychiatry (301 E. Liberty, Suite 300, Ann Arbor, MI 48104-2251, USA), Hadassah, or the Music Academy of the West.

John F. Greden, M.D. University of Michigan

Rachel Upjohn, Professor of Psychiatry and Clinical Neurosciences Chair Department of Psychiatry Executive Director The University of Michigan Depression Center