DOCUMENTS OF THE GENERAL FACULTY

REPORT OF THE MEMORIAL RESOLUTION COMMITTEE FOR DEVENDRA SINGH

The special committee of the General Faculty to prepare a memorial resolution for Devendra Singh, professor, psychology, has filed with the secretary of the General Faculty the following report.

Sue Alexander Greninger, Secretary
The General Faculty

IN MEMORIAM
DEVENDRA SINGH

Devendra Singh, a consummate teacher and eminent scientist, passed away on May 18, 2010, at the age of seventy-two, in his forty-first year as a faculty member in the Department of Psychology at The University of Texas. Dev, as he was affectionately known by his colleagues, was born in Urai, India. He was the second youngest of six children. His father, Thakur Sughr Singh, hoped that Dev would follow him in pursuing a career in law enforcement. But, Dev had his own ideas and studied philosophy at Agra University, where he earned his B.A. and M.A. He then gained admission to the Ph.D. program in experimental psychology at The Ohio State University and left India in 1962 with a one-way ticket bound for the United States. Dev earned his Ph.D. from The Ohio State University in 1966 and was awarded the J. P. Guilford Creative Research Award by the American Psychological Association that same year. Upon graduating from Ohio State, Dev held positions at Wright State University, the Fels Research Institute, and North Dakota State University, before moving to The University of Texas at Austin in 1969. Dev was promoted to associate professor at UT in 1972, and then served as professor of psychology from 1998 until his death in 2010.

Dev’s scholarly interests were focused on human motivation. His undergraduate course on motivation was highly popular with students for decades, and his research on motivation touched on classic issues, starting with food intake and ending with sexual behavior and mate preference. During the early years of his career, Dev conducted research with laboratory rats in the tradition of classic physiological psychology. As was common at the time, he investigated the role of various brain areas (septal and ventromedial hypothalamus or VMH) by examining the behavioral effect of targeted lesions in laboratory rats. He was particularly interested in lesions of the ventromedial hypothalamus which produced hyperphagia (overeating) and obesity in rats. VMH hyperphagia and obesity attracted the attention of some of the best minds in psychological psychology, who interpreted the effect as unique to food intake. Dev took exception to that interpretation and provided a much broader account.

In the best tradition of physiological psychology, Dev developed a theory to explain VMH hyperphagia using both physiological and psychological concepts. The psychology that he employed was based on Clarke Hull’s concept of response hierarchy. Through learning, practice, and opportunity, some responses become more prevalent than others. Dev proposed that VMH lesions cause a general deficit in the ability to inhibit responses that are high in an organism’s hierarchy. Since eating is such a response, VMH lesions typically produce overeating. But, according to Dev’s theory, VMH lesions should produce failures to inhibit other prepotent responses even if those are not related to feeding. Furthermore, if VMH hyperphagia is a reasonable model of human obesity, general deficits in response inhibition should also be evident in humans who are overweight. Dev tested these ideas in a series of very clever animal and human studies that provided extensive support for his theory and brought him well-deserved eminence in the physiological psychology community.

Later in his career, Dev turned his attention to other forms of motivated behavior, including alcohol intake and human mate choice. Given his grounding in biological determinants of behavior, Dev was attracted to the emerging field of evolutionary psychology, which sought to integrate evolutionary principles into explanations of human behavior. In one of his first papers in this area, Dev explored the evolutionary origins of alcohol intake. He discussed the consumption of alcohol in various animal species through the ingestion of overly ripe...
fruit and explored the physiologically beneficial effects of consuming alcohol in low doses. His work in this area predated similar recent arguments in the medical literature.

Dev's most famous contributions to evolutionary psychology focused on the determinants of physical attractiveness in females. His work on body form and beauty follows a tradition going back to the early Greeks, where perfection of physical form was viewed as a reflection of inner quality and moral fiber. In this venerable tradition, Dev turned his attention to the characteristics of anatomical features that specified female beauty, determining that human mating strategies, factors related to health and vigor, and reproductive capacity link these features together.

One of his principal findings was that males and females, prefer an adult female form that has the shape of an “hourglass,” with the specific ratio of waist-to-hip measurement of 0.7. This preferred body ratio generalizes across many cultures and circumstances, opening the possibility that beauty is not only an attribute of the “social mind” but is related to the evolution of reproductive performance.

Dev’s work capitalized on this possibility by showing that major deviations from the waist-to-hip ratio of 0.7 are associated with increased disease susceptibility, deviations in hormone levels critical for reproduction, depressed reproductive activities, and decreased male evaluations of female beauty. In other words, what the male prefers are the traits related to reproductive competence, symbolized by the body form ratio of 0.7, and directly related to the capacity to successfully reproduce. From this perspective, the ultimate “cause” of female beauty lies in the evolution of signals that allow interacting partners to anticipate reproductive success.

From 1993 through 2010, Dr. Singh published thirty-five scientific papers that focused heavily, but not exclusively, on the role of waist-to-hip ratio in human mating strategies. The participants in his studies ranged widely and included populations from India; South Africa; Jamaica; Bakossiland, Cameroon, Africa; Komodo Island, Indonesia; Samoa; and New Zealand (as well as the United States). In addition to the work described above, Dev made contributions to domains such as body scarification, sexual orientation, fluctuating asymmetry, childhood gender nonconformity, body satisfaction, odor cues to ovulation, gestational diabetes, second to fourth digit ratio, and sexual functioning. His many research collaborators and co-authors included several prominent evolutionists—John Manning, Randy Thornhill, and Robert Trivers. He also has publications with two of his daughters, Dorian Singh and Adrian Singh.

Dev Singh's visionary and elegant work on the significance of body form helped establish his work as central to the understanding of mate selection, physiological variations, evolution of behavior, and the aesthetic features of body physique that inform us about the qualities of life and procreation.

In addition to the legacy that Dev leaves behind in physiological and evolutionary psychology, Dev will be remembered by the thousands of students who took his courses during his long teaching career at UT. Dev regarded teaching to be a noble profession—at once a huge privilege and a huge responsibility. He often said he loved teaching. For him it always came first, no matter what else he might have been doing at the time. Even during his later years, when Dev’s health presented escalating challenges, to the point where simply getting to and from class became an enormous effort, he insisted on meeting his classes if at all possible.

Dev was a highly entertaining and engaging speaker. He developed a flair for the dramatic early in life, performing and writing plays in India. He brought his flair for drama to all of his presentations, whether he was describing the “tomato surprise” in a talk about his research on obesity or Barbie dolls in discussing the waist-to-hip ratio. He took a personal interest in his students, knowing many of them by name even in classes of 100 or more, and often gently teasing students individual students, thus achieving a sense of intimacy, even in classes of 100 or so. He had a great sense of humor. He once expressed astonishment that so many students felt that they had a personal relationship with him, but it was no surprise because it was so clear that he had a personal interest in all of them.

Dev was frequently nominated for teaching awards. He was winner of the first Golden Apple Teaching Excellence Award presented by the School of Social and Behavioral Sciences Council in 1976. In 1995, he was one of eight University faculty and staff members given an Excellence Award for “Unselfish devotion to the University” by the Eyes of Texas honor society. In 2001, he was given the Continuing Education Faculty
Award for Region III (consisting of thirteen states and Puerto Rico) by the University Continuing Education Association. In 2006, he was named Preferred Professor by the Mortar Board Honor Society. The basic fact that Dev's teaching had an important impact at the state level and presumably beyond is indicated by his receiving an award from the University of Texas Medical School at Houston for "Recruitment of able students to the field of medicine" in 1996.

However, the greatest honor to Dev was the high esteem in which his students regarded him. Students remember his unique, personalized teaching style; his habit of rewarding successful students with figs ("an excellent source of serotonin"); his insistence that passing on knowledge was one of the most profound acts a human can perform; and his belief that humor is a wellspring for life and that laughter must be sought even in the most unlikely of places.

His teaching awards wildly underestimate how good a teacher he was. Looking at the responses students made to his courses over the years it becomes hard to imagine that any teacher was ever more well-received. Commonly encountered adjectives included "wonderful," "enthusiastic," "memorable," "inspirational," and of course "awesome." He had a relatively elaborate philosophy of life with a lot of positive elements in it that infused his classes and was often the explicit topic of his last lecture. Many students talked about what an inducement to positive thinking he provided. Some said, in one way or another, that he gave them a new perspective on life. One said, "you cannot imagine how many students you have touched."

Beyond personal responses, students sometime organized group responses to his courses. Once, they presented him with their own teaching award at the end of classes. In the summer of 2009, they threw a post-semester party for him. Clearly, as a teacher, in the modern vernacular used by many students "he rocked."

Dev is survived by his wife, Barbara Singh; daughter, Dorian Sharda Singh, and her husband, Mat Savelli; daughter, Adrian Sandhya Singh; daughter, Anne Deepak, and her husband, Daniel Deepak and their sons, Arjun and Kash; his sister, Mano, and her husband Soni.

The memorial resolution was prepared by a special committee consisting of Professors Peter F. MacNeilage (chair), Michael Domjan, and Delbert Thiessen.

Distributed to the dean of the College of Liberal Arts, the executive vice president and provost, and the president on December 13, 2010. This resolution is posted under "Memorials" at: http://www.utexas.edu/faculty/council/.