



### **Roulette William Smith**

*Further study, University of California (San Francisco) School of Medicine (1976-1980)*

*Ph.D., Mathematical Models of Educational Processes, Stanford University, 1973*

*M.S., Computer Science, Stanford University, 1965*

*M.S., Mathematics, Stanford University, 1964*

*B.S., Mathematics, Morehouse College, 1961*

In 2001, Roulette joined the core faculty of the Institute of Transpersonal Psychology as an Associate Professor after having served as an adjunct research faculty member since 1996. He teaches courses on quantitative methods, and has supervised numerous dissertations. He was a co-founder and member of the Board of Directors for the Institute of Human Potential Psychology (Palo Alto, CA) in the early 1970s. For the past 20 years he has conducted research under the auspices of the Institute for Postgraduate Interdisciplinary Studies, Palo Alto, CA. Roulette was Testing Officer at California State University, Dominguez Hills (1999 to 2003). He previously was Associate Director of Testing and Evaluation at San Jose State University (1997 to 1999), and Professor of Psychology. From 1970 to 1975, he was Assistant Professor of Psychology and Education at the University of California, Santa Barbara. Smith is a founding Executive Editor of *Instructional Science* and of *Health Policy*, two scholarly journals originally published by Elsevier Publishing Company, Amsterdam, The Netherlands.

Roulette's research generally is interdisciplinary. His research interests include: "the unknowingly needy"; "worried well"; normal and aberrant commonsense, and other consequences of arrested psycho-socio-spiritual development; slow virus diseases (especially those caused by HIV and prions) of brain and immune systems; aberrations and diseases of the "transpersonal" (e.g., "transmissible negativism" and its association with some aberrant commonsense); and, molecular bases of long-term memories [LTM]. His current research include studies of HIV, AIDS, prion-related diseases, and a project aimed at identifying molecular and genomic markers in non-gene-encoding regions in the human genome that may play a causal or correlative role in aberrant psycho-socio-spiritual development.

In 1979, Roulette first put forth a novel and somewhat provocative model of LTM. The model was derived from observations that all "slow viruses" cause derangements in memory – both in brain and the immune system. This led to a hypothesis that LTM in brain must involve changing DNA from A\*T-rich to G\*C-rich sequences in non-encoding (i.e., non-proteomic) regions of brain. Obvious consequences are that Darwinian and Lamarckian evolution now must be revised. More importantly, his thesis suggests that molecular mechanisms for encoding LTM differ from the genetic code, and may be consistent with concepts put forth by Carl G. Jung to account for archetypes, dreaming, etc. A corollary of this model of LTM suggests that vaccines against relatively uncommon opportunistic pathogens may offer hope in HIV/AIDS.