

1993 M/9

**ACADEMY OF NEUROLOGIC COMMUNICATION
DISORDERS & SCIENCES**

NOVEMBER 18, 1993: FALL MEETING

**Place: Anaheim Marriott, 700 W. Convention Way, Anaheim, California
92802, (714) 750-8000, Orange County Ball Rooms 2 & 3.**

Meeting Agenda

- | | | |
|------------|----------|---|
| 9:00 am - | 12:30 pm | Dr. Larry Squire: <u>Memory, Amnesia, and Brain Systems</u> |
| 12:30 pm - | 2:00 pm | Luncheon |
| 2:00 pm - | 5:00 pm | Special Extended Business Meeting |
- Executive Board report and recommendations for credential(s)
 - Discussion of the form of the credential(s)
 - Report of Morgan Downey, ANCDs counsel

DR. LARRY SQUIRE

Dr. Larry R. Squire is Professor of Psychiatry at the University of California School of Medicine, San Diego, and Research Career Scientist at the Veterans Administration Medical Center, San Diego. He received his Ph.D. degree from the Massachusetts Institute of Technology and did postdoctoral study at the Albert Einstein College of Medicine before going to UCSD in 1970. Dr. Squire is recognized internationally for his research investigating the organization and neurological foundations of memory. His work involves the study of memory-impaired patients and nonhuman primates, and uniquely combines the traditions of cognitive science and neuroscience. His publications include approximately 210 scientific research articles and an influential, widely-read book Memory and Brain (Oxford Press, 1987). He is Editor-in-Chief of the journal Behavioral Neuroscience, published by the American Psychological Association, Editor-in-Chief of the Encyclopedia of Learning and Memory, and was formerly Section Editor for Behavioral Neuroscience for the Journal of Neuroscience (1984-1989). He serves on the editorial board of approximately 10 other journals including Psychological Review and Trends in Neurosciences. He was elected Secretary of the Society for Neuroscience (1988-1990). In 1992, he was elected to the position of President-Elect, Society for Neuroscience. His one-year term as President is from November, 1993 to November, 1994. He was recently elected to a three-year term as Council Delegate of the Electorate (Section J, AAAS).

MEMORY, AMNESIA, AND BRAIN SYSTEMS

Studies of animals with complex nervous systems, including humans, have provided new insights about how memory is organized in the brain. One new development is the possibility of studying the anatomy of memory in humans using magnetic resonance imaging. In addition, work with monkeys, using an animal model of human amnesia, has led to identification of the major components of the medial temporal lobe memory system. The system includes the hippocampal formation and adjacent, anatomically-related cortex, especially perirhinal and parahippocampal cortex. Neuropsychological analysis of patients with circumscribed memory impairment (amnesia) has led to a distinction between declarative (conscious) memory, which is dependent on the structures damaged in amnesia, and nondeclarative (unconscious) memory, which is independent of these structures. The brain system damaged in amnesia is essential for the formation and storage of declarative memory, and for its retrieval during a lengthy period of consolidation and reorganization. As time passes, the role of the hippocampal formation in memory diminishes, and a more permanent memory gradually develops elsewhere, probably in neocortex.