

INS Distinguished Career Award Winners Boston

Ennio De Renzi:

Ennio De Renzi was born in Cremona, in December 1924. He graduated in Medicine at Pavia University in 1959 with a thesis in neurology under the guidance of Carlo Berlucchi, the professor of neuropsychiatry, whose personality and the intriguing lectures were instrumental in drawing the students' interest on the enigma of mind. He was also lucky enough to avail himself of the advice of a college friend who had just spent a year in the laboratory of Sir Ronald Fisher, one of the founders of the modern statistics. De Renzi thus became familiar with the principles of inferential statistics in an era when this discipline was generally ignored, at least by clinicians.

Following his early training in Pavia, De Renzi had a successful career at the University of Milan, and then in 1969 he got a chair in neurology at the University of Trieste and in 1974 at the university of Modena.

De Renzi's interest in neuropsychological symptoms had been first aroused by encounters with a few patients who presented a full-blown syndrome: a patient with a flourishing Wernicke aphasia, one with a post-traumatic Korsakov and autobiographic delusions of grandeur, another with loss of topographical memory and a fourth with multisensory neglect. At that time insights on how mental skills were organized in the brain were mainly based on the correlation between the locus of lesion and the derangement of a given mental ability, investigated in the single case. It required the luck to run into an informative patient, a skillful investigation and the availability of anatomical findings, which occurred only rarely. A new avenue was opened by group studies, in which patients were classified based on clinical signs pointing to the hemispheric side of lesion and/or its antero-posterior extension, and their performances on specific mental skill tests were also compared with those of a normal control group. In the late fifties this methodology involved the examination of large groups of patients and normal subjects and required, consequently, the efforts of many investigators. De Renzi transmitted his enthusiasm for this new branch of research to a number of young neurologists, who joined with him to form what has been known as the Milan group: Pietro Faglioni, Hans Spinnler and Luigi Vignolo are among those of the group who have gained wide reputation for their contributions to clinical neuropsychology.

In Italy as well as in other European countries (with the partial exception of England), neuropsychological research was still in the hands of neurologists; then the situation progressively changed and the findings of neurologists were complemented by those obtained by a few physiologists and psychologists (such as Berlucchi, Marzi, Rizzolatti and Umiltà) who had become interested in studying the hemispheric representation of mental abilities in normal subjects with the methodology developed by Sperry and co-workers to examine patients submitted to commissurotomy for the relief of epilepsy.

In 1965, De Renzi spent some time in Arthur Benton's laboratory in Iowa City and visited other places where neuropsychological research was actively pursued in U.S. They were few, but De Renzi found that people there were delighted to meet others who shared their area of interest.

Main fields of research

It is no wonder that, due to its frequency and clinical relevance, aphasia was one of the topics that first attracted De Renzi's interest and we owe to him and Luigi Vignolo the development of the Token Test, a test which gained wide popularity all over the world for its sensitivity in detecting subtle impairment of aphasic subjects' comprehension.

Apraxia was a second area to which De Renzi devoted much of his efforts, both in its ideomotor and ideational varieties, which he demonstrated to be a feature of left hemisphere damage at least as specific as aphasia. For detecting ideomotor apraxia, left and right brain-damaged patients were compared for their imitation of the examiner's gestures carried out with the hand ipsilateral to each patient's lesion (i.e., under the motor control of the healthy hemisphere) and the prevalence and frequency of the impairment following damage to the left side of the brain was striking. Ideational apraxia was tested by requiring the patient to demonstrate the use of objects he/she was shown, but not permitted to handle. Error feature analysis suggested to De Renzi that the disorder was independent not only from sensory-motor

impairments, but also from ideo-motor apraxia, and led him to conceive of it as a specific form of semantic amnesia, characterized by the loss or unavailability of use of objects representations; in this view ideational apraxia was and similar, in a way, to amnesia for other object attributes (their sound or color), reported in left brain-damaged patients.

The area which became the focus of De Renzi' interest for several years concerns the wide spectrum of disorders of space exploration and cognition that follow focal brain damage and manifest themselves with a variety of symptoms such as neglect for the contralateral space, defective analysis of spatial orientation, organization of the spatial arrangement of segments in drawing, loss of topographical memory, etc.. He was the one of the first investigators to provide unequivocal evidence that in right-handers these abilities are mainly represented in the right side of the brain, which can no longer be considered the "minor" hemisphere, but varies its role according to the kind of ability. The impairment is also marked when the brain is engaged in the recognition of a known face and, given the attention paid by De Renzi to the issues related to hemispheric specialization, it is no wonder that he also gave substantial contribution to the peculiar, though rare, disorder called prosopagnosia.

In the early sixties, at approximately the same time Henry Hécaen had taken the initiative to edit *Neuropsychologia* (1963), De Renzi and Vignolo promoted the birth of the journal *Cortex* (1964), which became the second journal entirely devoted to the relation of brain to behavior. The idea gained the support of colleagues from other countries and Arthur Benton, Mac Donald Critchley, Norman Geshwind, Alexander Luria and Klaus Poeck shared the idea that time was ripe for developing a medium of communication among the increasing number of people who became interested in neuropsychology. Soon De Renzi became the chief editor of the journal and this endeavour absorbed much of his energy until the time of his retirement.

In 1967 De Renzi was one of the founders of the Research Group on Aphasia of the World Federation of Neurology.

In 1973 Ennio De Renzi was one of the founders and the first President of the Italian Neuropsychological Society.

He was President of the European Brain and Behaviour Society from 1972 to 1975.

In the 70s and 80s he regularly attended INS meetings; his participation declined in these last years mainly due to old age.

He received the Riquier award for neurological studies in 1980 and in 1994 a Laurea honoris causa in psychology at the Sapienza University in Rome

He was included in the list of scientists who were asked to write their biography for the series *The History of Neuroscience in Autobiography*, ed. by Larry R. Squire per Elsevier

In brief, Ennio De Renzi was the prime mover of neuropsychology in Italy; his research spanned over a wide spectrum of deranged abilities, the study of which provided crucial information on the cerebral organization of mental skills. With the publication of *Cortex* he contributed to spreading neuropsychological knowledge around the world.

Eileen Fennel:

Dr. Eileen B. Fennell was born in Massillon, Ohio and subsequently found her professional passion stimulated and satisfied in Gainesville, Florida, where she has earned international recognition as a pre-eminent pediatric neuropsychologist, superb teacher, supportive mentor, and outstanding researcher. Her career began with a Bachelor's of Arts degree in 1964, Master's Degree in 1975, and Ph.D. in 1978, all earned at the University of Florida in Psychology. Her Master's thesis, "Lateral differences in the perception of pressure", and Doctoral dissertation, "A longitudinal test of the lag theory of developmental dyslexia", were both directed by Paul Satz, Ph.D. She held several early Research Assistant positions: in 1965 with Dr. Satz, Frederick King, Ph.D., and Lamar Roberts, M.D. in the Department of Neurosurgery; in 1965-1970 with Dr. Satz in the Department of Clinical Psychology; in 1972 with Louis D. Cohen, Ph.D. in the Departments of Clinical Psychology and Community Medicine; and, in 1972-1973 with John Schwab, M.D. in the Departments of Psychiatry and Sociology. In 1974, she was Projects Coordinator for the Health Systems Research Division of the Office of the Vice President, J. Hillis Miller Health Center, and from 1974-1975 she was a Graduate Research Assistant, in the Neuropsychology Laboratory

of the Department of Clinical Psychology, followed by a USPHS Pre-Doctoral Fellowship in 1975-1977 and Clinical Internship in the Department of Clinical Psychology and VA Hospital from 1977-1978. By 1978, Dr. Fennell became Director of the Psychology Clinic at Shands Teaching Hospital (1978-1980; 1982-1991), served as Director of the Neuropsychology Service from 1979-1985, and became Director of Neuropsychology Training in the Department of Clinical Psychology in 1982. She was appointed Assistant Professor in the Department of Clinical Psychology in 1978, Associate Professor in 1983, and Professor in the Department of Clinical and Health Psychology in 1987, and she has held joint appointments in the Departments of Psychology since 1980, and in Neurology since 1987. She also is a member of the Graduate Faculty of the Center for Gerontological Studies and Doctoral Research Faculty since 1979, University of Florida Faculty Co-Director of the Center for Neuropsychological Studies since 1983, and also served terms on the Graduate Student Faculty, Alcohol and Aging Research Center Faculty, Senate, and University of Florida Graduate Council.

Included among her numerous honors and awards are J. Hillis Miller Scholar; Phi Beta Kappa; Sigma Xi Scientific Society; Molly Harrower Psychodiagnostic Award; Outstanding Promise as a Clinical Psychologist; Outstanding Student Research Award; Outstanding Teacher; Distinguished Visiting Professor, United States Air Force Hospital, San Antonio, Texas; Outstanding Psychological Research Award of the Florida Psychological Association; American Psychological Association Fellow (Division 40 - Clinical Neuropsychology); National Academy of Neuropsychology, Fellow; Excellence in Teaching Award; International Neuropsychological Society Board of Governors; President, Division 40 of the American Psychological Association; Council of Representatives, American Psychological Association; President, Regional Chapter, Florida Psychological Association; and, Board of Governors, American Board of Clinical Neuropsychology. Additionally, she has served on a number of task forces and scientific program committees in various capacities throughout the years.

Dr. Fennell's extraordinary range of interests and extensive experience are exemplified by funding awarded to her as Principal Investigator or Co-Principal Investigator to study some of the most intractable and complex pediatric conditions, including grants awarded for psychophysiological correlates of affect perception in schizophrenia; callosal dysfunction in schizophrenia; teaching coping strategies to families of patients with dementia; pediatric renal failure therapy: neurobehavioral effects; covert physiologic recognition in alcoholic amnesia; neurobehavioral correlates of Acute Lymphocytic Leukemia; competitive graduate research assistantships; neuropsychological dysfunction in pediatric cancer patients; attentional and memory dysfunction in pediatric brain tumors; neurological and neurobehavioral development in pediatric HN infection; neurobehavioral subtypes of X-linked mental retardation; Lyme disease, and attention and memory in pediatric mild brain injury.

Her clinical acumen and research proficiency have resulted in more than 85 peer-reviewed publications, more than 20 book chapters, one co-authored volume (Baron, I.S., Fennell, E.B. & Voeller, K.J. (1995). *Pediatric Neuropsychology in the Medical Setting*. New York: Oxford University Press), many Editorial Board positions, including as Associate Editor of the *Journal of the International Neuropsychological Society* (1994-1999), and invitations to sit on prestigious scientific review panels.

Besides her brilliant intellectual leadership in clinical practice, early research investigation of disease and conditions not previously studied, and foundational teaching to her many trainees, at the core of Dr. Fennell's contributions to the profession are unique personal qualities that are beloved by her colleagues and friends, and which have made her the caring clinician that has endeared her to her patients and their families. Her unwavering support for her many devoted students and trainees and the strong and conscious mentorship and encouragement of colleagues have combined to be a profound example of what it means to be someone deserving of an award such as this high honor, the International Neuropsychological Society Distinguished Career Award, given to the most deserving of neuropsychologists

Marcel Kinsbourne:

Marcel Kinsbourne has practiced medicine, conducted research, and taught and supervised medical, undergraduate, graduate, and postdoctoral students in England, Canada, and the United States over a period of more than five decades. He has published more than 400 scientific articles, books, book chapters and reviews. His contributions have impacted diverse fields ranging from cognitive science to special education, from neurology to philosophy of mind, and from visual perception to hemispheric specialization to consciousness. He is the discoverer of a neurological disease that bears his name. Born in Vienna, Austria, Dr. Kinsbourne received his bachelors, masters, and medical and doctoral degrees from Oxford University. He specialized in pediatrics and neurology at the Hospital for Sick Children at Great Ormond Street in London, the National Hospital, Queen Square in London, Bellevue Hospital in New York and Oxford Medical School.

After completing the requirements for his specializations in 1964, Dr. Kinsbourne became University Lecturer in Experimental Psychology at Oxford University. He moved to North America in 1967 to become Chief of the Division of Child Neurology at Duke University Medical Center and Fellow at the Duke Center for the Study of Aging and Human Development. In 1974 he became Professor of Pediatrics, Neurology and Psychology at the University of Toronto. He moved to the Boston area in 1980, as Director of Behavioral Neurology at the Eunice Kennedy Shriver Center in Waltham, Massachusetts. He established additional affiliations with Harvard Medical School, Massachusetts General Hospital, Brandeis University, Boston University, and Tufts University. From 1995 to the present, his primary position has been Professor of Psychology at the New School for Social Research in New York City, where he received the University Award for Teaching Excellence in 2008. He is ex-president of the International Neuropsychological Society and the Society for Philosophy and Psychology.

Among Marcel Kinsbourne's many contributions to medicine, psychology, education, and philosophy, the following are especially notable: (1) discovery of myoclonic encephalopathy of infancy (Kinsbourne disease); (2) the first modern classification system for sub-typing children with learning disabilities [with Elizabeth Warrington]; (3) a novel orientational model for the mechanisms of unilateral spatial neglect; (4) an original experimental paradigm for deducing motor laterality from interference between concurrently performed tasks ; (5) an attentional model for explaining visual, auditory, and tactile laterality; (6) language transfer to the right hemisphere of aphasics with left hemisphere strokes; (7) the nature of the amnesic syndrome as episodic memory impairment; (8) a novel behavioral laboratory paradigm to elucidate the effects of stimulant medication on children with attention deficit hyperactivity disorder and the underlying mechanisms of drug action [with James Swanson]; (9) the concept of functional cerebral space as a general principle for understanding limitations on human performance; (10) the concept of left lateralization for approach and right lateralization for withdrawal in cognition and emotion; (11) the discovery that auditory hallucinations are subvocalized speech; (12) a neuropsychological model for the nature of consciousness.

Through many decades of influential scholarly and scientific accomplishment, Marcel Kinsbourne has established himself as our era's pre-eminent proponent of a neuropsychology in which the human forebrain is understood to be a dynamic and highly interconnected neural network. Some fifty years ago, when the traditional brain model based on hardwired pathways between processing centers still held sway, Dr. Kinsbourne's experiments were already demonstrating a new paradigm grounded in the principles of interconnectivity and gradients of neural activation. Though he adapted to neuropsychology the celebrated neurophysiology of Sherrington and Hughlings Jackson, he was regarded as an iconoclast and his ideas sometimes met intense opposition. Nonetheless, as one can confirm by scanning the literature in any of the fields in which he has worked, Dr. Kinsbourne's empirical and theoretical contributions have had enormous influence. Among other things he was a forerunner of the cognitive neuropsychology movement. Just as the innovation and iconoclasm of Sherrington and Hughlings Jackson enriched the neurophysiology of their times, the innovation and iconoclasm of Marcel Kinsbourne has enriched the neuropsychology of his time, and it continues to do so.

Steven Mattis:

Dr. Steven Mattis is one of the founding fathers of modern clinical neuropsychology in the United States, with a career spanning almost 50 years as a clinician, researcher, teacher, mentor, and political leader. After receiving a Ph.D. from Columbia University, his work at the Jewish Guild for the Blind sparked an interest in the field of neuropsychology. Subsequently, Dr. Mattis went on to head three esteemed clinical programs, as the Chief of Clinical Neuropsychology within the Department of Neurology at Montefiore Hospital and Medical Center; as the Chief of the Neuropsychology Section within the Division of Psychology at New York Hospital/Cornell Medical Center, and as the Director of Psychological Services in the Department of Psychiatry at the Zucker-Hillside Hospital.

Dr. Mattis has held the academic appointment of Professor or Clinical Professor of Neurology at three of the country's top medical schools: at The Albert Einstein College of Medicine, at Cornell University Medical College, and at NYU School of Medicine. Universally applauded as an outstanding teacher, Dr. Mattis' hospital rounds are always among the most requested and the most well attended. He has inspired the careers of countless graduate students and medical residents, sat on numerous dissertation committees and mentored innumerable externs, interns, and post-doctoral fellows.

Throughout his research career, Dr. Mattis has contributed skillfully to the field of neuropsychology, with over 50 peer reviewed articles and book chapters, and is the author of a widely used measure of cognitive impairment in adults. He has done pioneering work in such diverse areas as learning disabilities, memory, dementia, late life depression and, most recently, pediatric bipolar disorder. Because of his extensive expertise, Dr. Mattis was asked to sit on Study Sections with the National Institute of Health and with the National Institute of Aging. He has also had a seat on the editorial boards of three of our field's most important journals: The Clinical Neuropsychologist, Developmental Neuropsychology, and the Journal of Experimental and Clinical Neuropsychology.

Our professional community has made good use of his wisdom and experience, relying on his leadership often throughout the years. Among the founding members of several of the field's professional organizations, Dr. Mattis has served as President, as Vice-President, as Secretary, as Eastern Time Zone Coordinator and as Member of the Board of Directors of the American Board of Clinical Neuropsychology (ABCN). On the American Board of Professional Psychology (ABPP), ABCN's parent organization, Dr. Mattis served as President, as Member of the Northeast Regional Board, and as Member of the Board of Trustees. He served as President of the American Psychological Association (APA) Division 40 (Neuropsychology) and both as President and as Member of the Board of Governors of the International Neuropsychology Society.

Yet it is perhaps as a clinician that Dr. Mattis truly shines. When presented with a complex problem, Dr. Mattis has the ability to almost instinctively identify relevant information and discard background noise. This uncanny ability combines with keen insight, depth of knowledge, experience, and compassion to form a clinical acumen that has made him one of the most sought after and lauded neuropsychologists today.

James Reed:

Dr. James Reed received his Masters degree from the State University of Iowa in 1949, and his PhD from the University of Chicago in 1958. He then pursued his interest in statistics and experimental design as a Fullbright Research Scholar at the Indian Statistical Institute in Calcutta. He was introduced to neuropsychology very early by Dr. Arthur Benton in Iowa during his Masters training, and later received neuropsychological training as a post-doctoral fellow with Dr. Ralph Reitan at Indiana University.

During his lengthy career Dr. Reed has held faculty positions in a number of university departments, including in the Department of Psychology at Wayne State University, the Indiana University Department of Neurology, the Tufts University Departments of Pediatrics and Rehabilitation and Physical Medicine, and the Harvard University Graduate School of Education. He has been a dedicated clinician-scholar and teacher throughout, and is a Diplomate in Clinical Neuropsychology of the American Board of Professional Psychology. He has directed clinical programs in two major hospitals, as well as the University of Chicago Reading Clinic, and has been a consulting neuropsychologist in five school systems and several hospitals and clinics. In one of these consulting roles Dr. Reed worked for 16 years at Dr. Eugene Spitz's Neurosurgical Clinic in Morton, Pennsylvania. There he had the opportunity to

examine a number of Dr. Spitz's adult patients who had hemispherectomies before the age of 5. There was no significant difference between Verbal and Performance IQs in either the right or left hemispherectomy groups, whereas adults with adult-onset lateralized lesions frequently can be distinguished as having right or left sided lesions on the basis of Verbal-Performance IQ differences. Dr. Reed has published a number of research articles and book chapters on psychometric issues, normal and abnormal cognitive development, and cognitive remediation of deficits due to learning disabilities (especially reading disorders) and acquired brain insults. He developed the first normative data for the Reitan-Indiana Battery of Neuropsychological Tests for younger children and for the Reitan-Indiana Neuropsychological Battery of tests for older children. He has also served on the editorial boards of several journals, including The Journal of Clinical and Experimental Neuropsychology, the Journal of Learning Disabilities, and Neuropsychology Review.

Last but not least, Dr. Reed has been a dedicated member of the International Neuropsychological Society since its inception, when it had only about 50 members. He served as the INS Treasurer for 4 years in the early days, and he and his wife Mary have attended more INS meetings than most of us have or ever will.

Barbara C. Wilson: (Posthumous Recognition)

Barbara C. Wilson, Ph.D. (1928-2010), former dancer and artist (Fulbright award for sculpting), evolved into a true leader in the field of pediatric neuropsychology. A student of Hans-Lukas Teuber, Dr. Wilson obtained her Ph.D. from New York University. In 1972 she founded the Neuropsychology Division at North Shore University Hospital, which she led for over 30-years. One year later she established the Preschool Development Program, which was renamed in her honor in 2006. This groundbreaking program, which began in the basement of a small church, was the first school on Long Island to provide center-based services specifically for children with communication disorders. It expanded into a comprehensive developmental preschool program educating and treating approximately 150 children yearly.

Through her unique observations and clinical classification of children with Developmental Language Disorders, Dr. Wilson became a world renown leader in the field of neuropsychology. Among the founding members of the American Board of Clinical Neuropsychology (ABCN) and the International Neuropsychology Society (INS), she championed her profession with zeal and determination. During her presidency of INS, her hard work, vision and in the end personal and professional sacrifice, INS developed its own journal (Journal of the International Neuropsychological Society). Within the INS, she served as President, Secretary and a Member of the Board of Governors. She chaired the INS Scientific and Professional Affairs Committee and represented INS on both the APA-INS Task Force on the Accreditation and Credentialing Standards for Neuropsychology and on the Child Neurology Society-INS Task Force on Nosology in Child Neurology. Within the American Psychological Association (APA), she served on the Council of Representatives for Division 40 (Neuropsychology), on the Executive Committee for Division 40 and as the APA liaison to the American Academy of Cerebral Palsy and Developmental Medicine. Dr. Wilson also served on the National Institute of Health Study Section on Human Development and Aging, and chaired the National Institute of Mental Health's Committee on Neuropsychological Assessment in Children with AIDS. Further, she was on the editorial Board of the Journal of the International Neuropsychological Society, Journal of Clinical and Experimental Neuropsychology, Applied Neuropsychology, and Journal of Communication Disorders.

Barbara C. Wilson, Ph.D., was profoundly influential at the state level, serving as a Member of the Executive Committee of the New York State Consortium of Infant and Early Childhood Educational Programs for Children with Special Needs, and as Vice President and as a Member of the Board of Directors for the New York State Branch of the Orton Dyslexia Society. New York politicians would expect an audience with this grand dame of neuropsychology whenever there was relevant legislation that could affect early childhood services in the state.

Dr. Barbara C. Wilson leaves a tremendous legacy through the neuropsychologists she mentored and trained, the teachers and therapists who practiced in her school, and the thousands of children who have passed through the doors of the programs she created. Dr. Wilson lived her life with class, passion, generosity and humor, and she will always be remembered for her tenacity, immense energy, diversity of skills and interests, and resolve.