PERSONAL

Date and place of birth: October 18th, 1963; Cordoba, ARGENTINA Citizenship: Argentina. Permanent resident of the USA (1993)

EDUCATION

Ph.D. December 1989. Biology Department, Faculty of Sciences, Cordoba National University, Cordoba, Argentina.

M.Sc. March 1986. Biology Department, Faculty of Sciences, Cordoba National University, Cordoba, Argentina.

SCIENTIFIC APPOINTMENTS

A. FACULTY

1998-present. Assistant Professor. Department of Neurobiology, University of Alabama at Birmingham, Birmingham AL.

1995-1998. Senior Staff Fellow (Research-Track Assistant Professor equivalent). Laboratory of Neurobiology, National Institute of Neurological Disorders and Stroke, National Institutes of Health, Bethesda MD.

B. POSTDOCTORAL TRAINING

1992-1995. Postdoctoral Fellow. Calcium transients in spines and dendrites of hippocampal neurons activated by glutamatergic synaptic transmission using simultaneous whole-cell recording and digital fluorescence imaging . Mentor: Dr. John A. Connor, Roche Institute of Molecular Biology, Hoffmann-LaRoche Inc., Nutley NJ. 1990-1992. Postdoctoral Research Associate. Structure at dendritic spines and presynaptic terminals in hippocampal neurons using rapid freezing and freeze fracture for electron microscopy . Mentor: Dr. Dennis M.D. Landis, Department of Neurosciences, School of Medicine, Case Western Reserve University, Cleveland OH.

C. PREDOCTORAL TRAINING

1986-1989. Graduate Research Student. Dissertation Title: Postnatal development of the hypothalamus: Influence of gonadal hormones . Mentor: Prof. Dr. Agustin Aoki, Electron Microscopy Center, School of Medicine, Cordoba National University, Argentina. 1984-1986. Undergraduate Research Student. Thesis Title: Increase in the concentration of benzodiazepine receptors in chick brain after habituation to manipulation before sacrifice . Mentor: Prof. Dr. Augusto Arce, Laboratory of Biological Chemistry, Department of Biology, Faculty of Sciences, Cordoba National University, Argentina.

HONORS

A. FELLOWSHIPS

1999. Fellows Award for Research Excellence. National Institutes of Health (NIH) Bethesda, MD.

1996. EMBO Fellowship. I Physiologisches Institut, Universitat des Saarlandes, Homburg/Saar, Germany.

1995. Lakian Foundation Summer Research Fellow. Marine Biological Laboratory, Woods Hole MA.

1994. Grass Foundation Summer Research Fellow in Neurophysiology. Marine Biological Laboratory, Woods Hole MA.

1992. Postdoctoral Fellowship, Roche Institute of Molecular Biology, Hoffmann La Roche Inc., Nutley, NJ.

1986. Predoctoral Fellowship, National Council for Scientific and Technological Research (CONICET) of Argentina.

B. EDITORIAL ACTIVITIES

Reviewer of manuscripts for publication in Proceedings of the National Academy of Sciences USA, Neuroscience, Biophysical Journal, Journal of Neurobiology, and Journal of Neurophysiology.

C. INVITED SEMINARS

The role of BDNF in hippocampal synaptic plasticity .32ndAnnual Gatlinburg Conference on research and theory in mental retardation and developmental disabilities, Charleston, SC. March 1999.

The role of BDNF in hippocampal synaptic plasticity: Impairment in synaptic vesicle docking and synaptic protein distribution in BDNF knockout mice . Chairman of the session Neurotrophins and neuronal plasticity at the VI Spring Hippocampal Research Conference, Grand Cayman, BWI. April, 1998.

Compartmentalized calcium signals in hippocampal dendrites and spines: possible implications in synaptic plasticity . Neurobiologie et Diversite Cellulaire, Ecole Superieure de Physique et de Chimie Industrielles, and Laboratoire de Neurobiologie, Ecole Normale Superieure, Paris, France. March, 1998.

Dendritic calcium signaling in the hippocampus mediated by synaptic NMDA and metabotropic glutamate receptors . Department of Cellular and Molecular Physiology, Yale University School of Medicine, New Haven CT. October, 1997.

Calcium signaling in spines and dendrites in the hippocampus: Role of NMDA and metabotropic glutamate receptors . Department of Neurobiology, School of Medicine, The University of Alabama at Birmingham, Birmingham AL. June, 1997.

Calcium signaling in hippocampal spines and dendrites: Participation of synaptic NMDA and metabotropic glutamate receptors . Department of Anatomy and Neurobiology, University of Maryland School of Medicine, Baltimore MD. May, 1997.

Calcium transients in hippocampal spines and dendrites: Role of synaptic NMDA and metabotropic receptors . Laboratory of Molecular Biology, Medical Research Council, Cambridge, UK. April 1997.

Intracellular calcium release and sequestration by dendritic endoplasmic reticulum mediated by synaptic activation of glutamate receptors . Department of Biophysics, Scuola Internazionale Superiore di Studi Avanzati, Trieste, Italy. October 1996.

Dendritic calcium signaling in hippocampal pyramidal neurons: synaptic activation of glutamate receptors . Georgetown Institute for Cognitive and Coputational Sciences, Georgetown University Medical Center, Washington DC. June 1996.

Calcium signals in pyramidal cell dendrites in the hippocampus: synaptic activation of glutamate receptors . Institute for Neurosciences and Department of Physiology,

Northwestern University Medical School, Chicago IL. May 1996.

Calcium metabolism in neurons . Guest Lecture, Neurobiology Summer Course at the Marine Biological Laboratory, Woods Hole MA. August 1995.

SCIENTIFIC MEMBERSHIPS

1995-present: Regular Member of The Biophysical Society.1991-present: Regular Member of The Society for Neuroscience.

REFERENCES

Dr. John A. Connor Department of Neuroscience School of Medicine University of New Mexico, Albuqerque 87131 Phone 505-272-8103 E-mail: jconnor@salud.unm.edu

Dr. Rodolfo R. Llinas Department of Physiology and Neuroscience New York University School of Medicine 550 First Avenue, New York, NY 10016 Phone: 212-263-5415 E-mail: <u>llinar01@popmail.med.nyu.edu</u>

Dr. Thomas S. Reese Laboratory of Neurobiology National Institute of Neuronal Disorders and Stroke National Institutes of Health Building 36, Room 2A-29, Bethesda, MD 20892 Phone: 301-496-1354 E-mail: tsr@codon.nih.gov

Dr. Dennis M.D. Landis Departments of Neurology and Neurosciences School of Medicine Case Western Reserve University 2109 Adelbert Road, Cleveland, OH 44106 Phone: 216-368-2641. E-mail: ddl@pop.cwru.edu