

CURRICULUM VITAE

PERSONAL BACKGROUND

Name: **Oswaldo Daniel UCHITEL**

Date of Birth: 13 July 1947

Status: Married - two children.

Address: Lisandro de la Torre 743, Vicente López, (1638) Pcia de Buenos Aires

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ACADEMIC BACKGROUND

Graduate in Medicine (M.D.), 1969 Facultad de Medicina, Universidad de Buenos Aires -UBA (School of Medicine, University of Buenos Aires- UBA)

Doctor in Physiology (Ph.D.), 1995 Facultad de Medicina, UBA.-Started in 1972 under supervision of Dr. E Stefani, defended under supervision of Dra A. Pellegrino de Iraldi, 1995.

PRESENT POSITION:

Research Scientist, (at Senior top level) since 1999. Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET) (National Board of Scientific and Technical Research)

Full Professor, Departamento de Fisiología, Biología Molecular y Celular, Facultad de Ciencias Exactas y Naturales, UBA. (Department of Physiology, Molecular and Cellular Biology, School of Exact and Natural Sciences -UBA)

Director, Instituto de Fisiología, Biología Molecular y Neurociencias. IFIBYNE-CONICET (Institute of Physiology, Molecular Biology and Neurosciences)

RESEARCH FELLOWSHIPS (selected)

1974 – 1975 Pre-doctoral fellowship, CONICET, Argentina.

1975 - 1977 International Post-doctoral Fellowship, National Institute of Health, U.S.A.

1977 - 1978 Muscular Dystrophy Association of America, Post-doctoral Fellowship.

POSTDOCTORAL TRAINING

1975 - 1977 Case Western Reserve University, Department of Anatomy, Cleveland, Ohio, USA. Adviser: N. Robbins, MD, PhD, Field: Nerve muscle trophic interaction / Neuroscience.

1977–1982 University College London, Department of Biophysics, UK Adviser: R. Miledi, MD, PhD, FRS, Field: Synaptic transmission / Physiology.

VISITING SCIENTIST

1984, Wellcome Foundation, Department of Biophysics, University College London, UK, R. Miledi, FRS. (Acetylcholine receptors).

1986, 1987, Baylor College of Medicine, Department Neurology, Houston, Texas, USA, S.H. Appel, MD. (Amyotrophic lateral sclerosis / Neuroscience).

1988, Mayo Clinic, Department Neurology, Rochester, Minnesota, USA. A.G. Engel, MD. (Congenital myasthenic syndromes / Neuroscience).

1991, New York University Medical Center, Department: Physiology and Biophysics, New York, USA R.R. Llinas, MD. PhD. (Calcium channels / Neuroscience).

1996, University of the Saarlandes, Department Physiology, Homburg, Germany. A. Konnerth, PhD. (Calcium channels in motoneurons / Neuroscience).

1998, University of Tokyo School of Medicine, Department Neuroscience, Tokyo, Japan. T. Takahashi MD, PhD. (Calcium channels and synaptic transmission in CNS / Neuroscience).

1999- 2002, University of California, Department of Anaesthesiology, Los Angeles, UCLA, USA, E. Stefani MD. Ph.D. (Calcium channels immunohistochemistry).

2003, University of Leicester, Department of Cell Physiology & Pharmacology, School of Medicine, Medical Sciences Building, UK, Ian Forsythe (Presynaptic calcium currents in calyx of Held).

PRICES AND AWARDS

Award "Estímulo a la Investigación Científica" (Fostering to Scientific Research) 1972. Facultad de Farmacia y Bioquímica, UBA.(School of Pharmacy and Biochemistry, UBA)

First Price in Medicine "Coca-Cola in Arts and Sciences" 1984, Argentina

Honor Award granted by the Centro de Estudios para el Desarrollo de la Industria Químico Farmacéutica. Argentina, 1992. (Study Center for the Development of the Chemo-Pharmaceutical Industry, Argentina)

Guggenheim Fellow 1996. John Guggenheim Memorial Foundation, New York. USA

Premio Bernardo Houssay 2006 , Ministerio de Educación, Sec de Ciencia y Tecnica.

INSTITUTIONAL ACTIVITIES (selected)

Founder and Director of the Laboratorio de Fisiología y Biología Molecular, Facultad de Ciencias Exactas y Naturales, UBA. since 1997.

Grant Coordinator in Medical Sciences. Argentine Secretary of Sciences. Agencia Nacional de Promoción Científica y Tecnológica, Secretaria de Ciencia y Técnica 11/99-11/01.

Vice-President. Sociedad Argentina de Neuroquímica 2002-2003.

President. Sociedad Argentina de Neuroquímica 2003-5.

International Brain Research Organization. Member of Publishing Committee

International Brain Research Organization LatinoAmerican Committee 2004-2008

SELECTED PAPERS

1. Stefani R. & Uchitel O.D. "Potassium and calcium conductance in slow muscle fibres of the toad". **J. Physiol.** 255:435-448. (1976). (*)

2. Cull-Candy S.G., Miledi R., Trautmann A. & Uchitel O.D. "On the release of transmitter at normal, myasthenia gravis and myasthenic syndrome affected human end-plates". **J. Physiol.** 299:621-638. (1980). (*)

3. Miledi R. & Uchitel O.D. "Properties of postsynaptic channels induced by acetylcholine in different frog muscle fibres". **Nature** 291:162-165. (1981). (*)

4. Cull-Candy S.G., Miledi R. & Uchitel O.D. "Denervation changes in normal and myasthenia gravis human muscle fibres during organ culture". **J. Physiol.** 333:227-250. (1982). (*)
5. Uchitel O.D., Appel S.H., Crawford F. & Szczupak L. "Immunoglobulins from amyotrophic lateral sclerosis patients enhance spontaneous transmitter release from motor nerve terminals". **Procc. Natl. Acad. Sci.** 85:7371-7374. (1988).
6. Uchitel O.D., Protti D.A., Sanchez V., Cherksey B.D., Sugimori M. & Llinas R.R. "P- type voltage dependent calcium channel mediates presynaptic calcium influx and transmitter release in mammalian synapses". **Procc. Natl. Acad. Sci. USA.** 89:3330-3333. (1992).
7. Uchitel O.D., Engel A.G., Walls T.J., Nagel A., Atassi M.Z. & Brill V. "Congenital Myasthenic Syndromes. II. Syndrome Attributed to Abnormal Interaction of Acetylcholine with Its Receptor". **Muscle & Nerve** 16:1293-1301. (1993).
8. Katz E., Ferro P.A., Weisz G. & Uchitel O.D. "Calcium channels involved in synaptic transmission at the mature and regenerating mouse neuromuscular junction". **J. Physiol.** 497:687-697. (1996).
9. Katz E., Protti D.A., Ferro P., Rosato Siri M.D. & Uchitel O.D. "Effects of Ca²⁺ channel blocker neurotoxins on transmitter release and presynaptic currents at the mouse neuromuscular junction". **British Journal of Pharmacology** 121:1531-1540. (1997).
10. Iwasaki S., Momiyama A., Uchitel O.D. & Takahashi T. "Developmental Changes in Calcium Channel Types Mediating Central Synaptic Transmission". **J. Neuroscience** 20:59-65. (2000).
11. Pagani R., Song M., Mcenery M., Qin N., Tsien R.W., Toro L., Stefani E. & Uchitel O.D. "Differential expression of α_1 and α_2 subunits of voltage dependent ca²⁺ channel at the neuromuscular junction of normal and P/Q ca²⁺ channel knockout mouse". **Neuroscience** 123(1):75-85 (2004).
12. González Inchauspe C., Martini F.J., Forsythe I.D. & Uchitel O.D. "Functional compensation of P/Q by N-type channels blocks short-term plasticity at the Calyx of Held presynaptic terminal. **J. Neuroscience** 17;24(46):10379-83. (2004).
13. Pagani M.R., Reisin C.R. & Uchitel O.D. "Calcium Signaling Pathways mediating Synaptic Potentiation triggered by Amyotrophic Lateral Sclerosis IgG in Motor Nerve Terminals". **J. Neuroscience.** 26(10):2661-2672. (2006).
14. González Inchauspe C., Forsythe I.D. & Uchitel O.D."Changes in synaptic transmission properties due to the expression of N-type calcium channels at the calyx of Held synapse of mice lacking P/Q-type calcium channels" **J. Physiol.** in press. (2007).
- 15 Perissinotti PP. Giugovaz Tropper B. Uchitel OD L-type calcium channels are involved in fast endocytosis at the mouse neuromuscular junction. **E. J. Neuroscience** 27: 1333–1344, (2008).

