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EDUCATION

Case Western Reserve University Ph.D. Cellular Physiology	2001
Venezuelan Institute of Scientific Research (IVIC) MSc Student in Biochemistry and Biophysics	1992-1993
Universidad Central de Venezuela Licenciado in Biology (Cell Biology)	1989

PROFESSIONAL EXPERIENCE

<i>Assistant Professor</i> Department of Biology, Western Washington University	Fall 2007-
<i>Postdoctoral Fellow</i> Oregon Health & Science University School of Medicine Department of Physiology and Pharmacology	2003-July 2007
<i>Postdoctoral Fellow</i> Oregon Health & Science University The Vollum Institute	2001-2002
<i>Graduate Student Research Assistant</i> Case Western Reserve University Department of Physiology and Biophysics	1995-2000
<i>Research Assistant</i> Instituto Venezolano de Investigaciones Cientificas (IVIC)	1992-1993
<i>Research Assistant</i> Instituto Venezolano de Investigaciones Cientificas (IVIC) and Petróleos de Venezuela, S.A. (PDVSA)	1990-1992

AWARDS

- Project Development Award: “ Mechanisms of Cell volume regulation in Astrocytes”*
Western Washington University 2008
- Cystic Fibrosis Foundation Postdoctoral Research Award* 2005-2007
Oregon Health & Science University
- Postdoctoral Award for Academic Excellence (declined)* 2001
University of Virginia
- Fellowship for Doctoral Studies* 1993
Case Western Reserve University
Inter-American Development Bank
Consejo Venezolano de Ciencia y Tecnologia

ARTICLES

- **Serrano, JR**, Liu, X., Borg, E.R, Alexander, C.S, Shaw III, C.F and Dawson, DC (2006) CFTR: Ligand Exchange between a Permeant Anion ($[\text{Au}(\text{CN})_2]^-$) and an Engineered Cysteine (T338C) Blocks the Pore. *Biophys. J.* 91: 1737-1748
- Liu, X, Alexander, C, **Serrano, J**, Borg, E and Dawson, DC (2006) Variable Reactivity of an Engineered Cysteine at Position 338 in Cystic Fibrosis Transmembrane Conductance Regulator Reflects Different Chemical States of the Thiol. *J Biol Chem.* 281(12):8275-85.
- Frazier, CJ, **Serrano, JR**, George, EG, Yu, X, Viswanathan, A, Perez-Reyes, E and Jones, S.W. (2002) Gating Kinetics of the α -II T-Type Calcium Channel. *J. Gen Physiology* 118(5) 457-470.
- **Serrano, J.R**; Dashti, Shervin R, Perez-Reyes-E and Jones, S.W 2000 “Mg²⁺ Block Unmask Ca²⁺/Ba²⁺ Selectivity of α -1G T-Type Calcium Channels” *Biophys. J.* 79(6) 3052-3062.
- **Serrano, J.R**, Perez-Reyes-E and Jones, S.W (1999) “State Dependent Inactivation of α -1G T-Type Calcium Channels. *J. Gen Physiology.* 114 (2) 185-201.
- Rojas, H., **Serrano, J.R** and Dipolo, R. (1995) Determination of Micro and Macronutrients in the Cattle of the Venezuelan Plains and their Influence on the Origin of Bovine Paraplegic Syndrome. (In Spanish) *Acta Cient. Venezuela* 45(2) 127-139.

ABSTRACTS

18 abstracts presented in both Venezuela and the United States (full list available upon request).

- **Serrano J.R** , Liu X., Alexander C.S, Borg E.R, Knollman P.T, Norimatsu Y., Ivetac A., Sansom, M.S.P., and Dawson, D.C. (2007) . CFTR: Patterns of thiol reactivity in the sixth trans-membrane segment revealed by a multi-reagent cysteine scan. LI Biophysical Meeting, Baltimore-USA.
- **Serrano J.R**, Liu, X, Borg, E. and Dawson, D.C. (2004). CFTR: Cysteine Substitutions in The CFTR Pore Stabilize the Binding of Anions Containing a Metal Center. XLVIII Biophysical Meeting, Baltimore-USA.
- Frazier C.J, **Serrano J.R**, Viswanathan A, Perez-Reyes, E and Jones, S.W (2001) Complex Gating Kinetics of the α 1I T-Type Calcium Channels. XLV Biophysical Meeting, Boston-USA. Biophysics. J. 80(1) A468.
- **Serrano, J.R**, Perez-Reyes, E and Jones, S.W (2000) “Selectivity and Mg²⁺ Block Of α -1G T-Type Calcium Channels”. XLIV Biophysical Meeting, New Orleans-USA. Biophysics. J. 78(1) A455.
- **Serrano, J.R**, Cribbs, L.L, Perez-Reyes-E and Jones, S.W. (1999) “State Dependent Inactivation of α -1G T-Type Calcium Channels” XLIII Biophysical Meeting, Baltimore-USA. Biophysics. J. 76(1) A409.
- **Serrano, J**, Obejero-Paz, C.A, Matteo, R. and Scarpa, A. (1995) “L-Type Calcium Channel Availability in A7r5 Cells” XXXIX Biophysical Society Meeting, San Francisco-USA. Biophysics J. 68(2) A207.
- **Serrano, J.R.**, Rojas, H., Dipolo, R. and Lopez. I. (1991) Levels of Macro and Micronutrients in Liver and Serum in Bovines from Venezuelan Plains and its Relation with Paraplegic Syndrome” XLI Annual Meeting of Asovac Nov 1991. Maracaibo-Venezuela.
- **Serrano, J.R**, Rojas, H, Condrescu, M. and Dipolo, R. (1990). Studies of Mitochondrial Function and ATP Levels in Bovines from Guarico State”. XL Annual Meeting of Asovac Nov 1990. Cumana- Venezuela.

TEACHING EXPERIENCE

- *Instructor in the advance course: “The Structural basis of membrane Transport Proteins” for senior undergraduates and Master students (445/545).*
Fall 2007
Western Washington University
- Instructor of the course Cell Biology (BIOL323) Winter and Spring 2008.
Western Washington University
- *Training approximately four students in my lab, one officially registered in Biology 495 and three working in the lab between 4-6 hours per week.*
Fall 2007
Western Washington University.
- *Invited lecturer in Physiology*
2005, 2006
Allied Health Program, Oregon Health & Science University.
- *Laboratory Teacher for Medical Students*
2002-2005
School of Medicine, Oregon Health & Science University.
- *Teaching Assistant in Neurobiology*
1999-2000
Biology Department, Case Western Reserve University.

SERVICE

Biology Department

2007 Neurobiologist Search Committee.

2007 Student admission committee for The Behavioral Neuroscience major.

REFERENCES

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References continued on following page:

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