



After his training as a Biologist at Universidad de Chile, Santiago, Francisco V. Sepúlveda studied for his PhD degree at Lausanne University in Switzerland (1974-1978) with a Zyma-Nyon scholarship. He did his postdoctoral studies at AFRC Institute of Animal Physiology and Genetics Research, Babraham, Cambridge, UK, between 1978 and 1980. After a stay at the University of Nice, France, as a Maître de Conférences Associé at the Faculty of Sciences, he returned to Babraham, Cambridge as a Senior Scientific Officer in 1979. While he was there, he was promoted to Principal Scientific Officer and, within the Individual Merit Award national scheme he was promoted to Senior Principal Scientific Officer in 1990. In 1994, he returned to Chile as Professor at the Facultad de Medicina from Universidad de Chile and the Centro de Estudios Científicos de Santiago. He has been awarded the Presidential Chair in Science (Chile) 1996-1998; the Rectoral Medal from Universidad de Chile and an International Fellowship of the Howard Hughes Medical Institute (1997-2001). In March, 200, he moved to Valdivia, Chile, along with the new Centro de Estudios Científicos. His current work focuses on understanding the cellular and molecular mechanisms of water and electrolyte transport and the regulation of cellular volume. He has over 100 published articles in international scientific magazines.

SELECTED PUBLICATIONS

A conserved pore-lining glutamate as a voltage- and chloride-dependent gate in the CIC-2 chloride channel. *J. Physiol.* 553: 873-879.

Niemeyer, M. I., L. P. Cid, L. Zúñiga, M. Catalán and F. V. Sepúlveda (2003)
The Patagonian Ice Fields: A Unique Natural Laboratory for Environmental and Climate Change Studies. New York: Kluwer Academic/Plenum Publishers, pp. 192.

Casassa, G., F. V. Sepúlveda, and R. Sinclair (2002)
Expression of CIC-2 chloride channels in surface epithelium of guinea pig colon: mRNA, protein and functional evidence. *Am.J.Physiol.* 283: G1004-G1013.

Catalán, M., I. Cornejo, C. Figueroa, M. I. Niemeyer, F. V. Sepúlveda, and L. P. Cid (2002)
A voltage-independent K⁺ conductance activated by cell swelling in Ehrlich cells is modulated by a G-protein-mediated process. *Biochim. Biophys Acta.* 1562: 1-5.(2002)

Niemeyer, M. I., A. Stutzin, and F. V. Sepúlveda.
Cloning, cellular distribution and functional expression of small intestinal epithelium guinea-pig CIC-5 chloride channel. *Biochim.Biophys.Acta* 1512: 367-374

Cornejo, I., M. I. Niemeyer, F. V. Sepúlveda, and L. P. Cid (2001).
Characterisation of a novel cell swelling-activated K⁺-selective conductance of Ehrlich ascites tumour cells. *J. Physiol.* 524: 757-767.

Niemeyer, M.I., Hougaard, C., K. Hoffmann, E.K., Jørgensen, F., Stutzin. A., and Sepúlveda, F.V. (2000)
Effect of the inactivating "ball" peptide of Shaker B on intermediate conductance Ca²⁺-dependent inwardly rectifying K⁺ channels of HeLa cells. *Pflugers Arch. Eur. J. Physiol.* 438:879-882.

Riquelme, G., Fernández, A.M., Encinar, J.A., González-Ros, J.M., and Sepúlveda, F.V. (1999).
Modulation by extracellular and intracellular iodide of volume-activated Cl-current in HeLa cells. *Pflugers Arch. Eur. J. Physiol.* 436:152-154.

Stutzin, A., Eguiguren, A.L., Montes, N., and Sepúlveda, F.V. (1998).
Defective volume regulation in intestinal epithelial cells of cystic fibrosis mice. *Proc. Natl. Acad.*

Sci. USA 92:9038-9041.

Valverde, M.A., O'Brien, J.A., Sepúlveda, F.V., Ratcliff, R., Evans, M.J., and Colledge, W.H. (1995)

Activation of Na⁺/K⁺/2Cl⁻-cotransport system by phosphorylation in crypt cells isolated from guinea-pig distal colon. Gastroenterology 109: 387-396.

Del Castillo, J.R., and Sepúlveda, F.V. (1995)

Protein kinase C-mediated phosphorylation of the human multidrug resistance P-glycoprotein regulates cell volume-activated chloride channels. EMBO J. 14:68-75.

Hardy, S.P., Goodfellow, H.R., Valverde, M.A., Gill, D.R., Sepúlveda, F.V., and Higgins, C.F. (1995)

CONTACT

Telephone : +56-63-234503

Fax : +56-63-234517

E-mail :

lc.scec@adevlupesf