Editorial

A celebration of Franco-Argentinean neuroscience

Cultural exchanges and interactions between France and Argentina are not restricted to tango, exile stories, sports or fiction literature. Indeed, scientific interactions represent one of the most active areas of collaboration between the two countries.

This Special Issue of the Journal of Physiology (Paris) includes some of the papers presented at the First Franco-Argentinean Symposium in Neurosciences, which was held in Buenos Aires in November, 2010.

This was the first joint meeting of the Sociedad Argentina de Investigación en Neurociencias (SAN) and the Société des Neurosciences Française (SNF), and brought together many Argentinean neuroscientists as well as French guest speakers.

Scientific cooperation between the two countries has a long tradition and has been very fruitful in many disciplines, including of course Biomedicine and, in particular, Neuroscience. While the first scientific cooperation treaty between the two countries was signed in 1964, the ECOS Sud program, which is now 14 years old and running, testifies the close ties between France and Argentina, with thousands of researchers participating in exchange programs.

The history of scientific cooperation often involves key historical figures that served as nodes for fertile interactions, discussions and, moreover, excellent science. In this sense, both the Symposium and this issue of the Journal of Physiology are dedicated to the figure of Professor Hersch “Coco” Gerschenfeld, a prominent neurobiologist who excelled in the area of cellular neurophysiology during the sixties and pioneered Franco-Argentinean cooperations by developing many of the first academic ties between Argentina and France, from his position as head of the Laboratoire de Neurobiologie at the Ecole normale supérieure in Paris. Professor Gerschenfeld was born in Poland in 1925 and arrived in Argentina a few years later. Trained as a neuropathologist, he joined the laboratory of Eduardo de Robertis in 1957, where he applied the new tool of electron microscopy to the study of astrocytes and oligodendrocytes. A few years later, he came to Paris to work with Ladislav Tauc on acetyl-choline (ACh) effects on molluscan neurons, a research that opened the way to the later studies of Eric Kandel and JacSue Kehoe.

Back in Buenos Aires in 1962, he produced a series of remarkable publications on molluscan neurons receptors, characterizing the ionic selectivity of the various channels opened by ACh, and providing the first description of excitatory serotonin receptors.

Due to the political situation in Argentina, he moved in 1966 to the laboratory of Steve Kuffler at Harvard Medical School, where he returned to the study of glial cells. Then, in 1969, he joined the French CNRS, first working at the University of Orsay and then, in 1971, he created with other well renowned French scientists the Laboratoire de Neurobiologie at the Ecole normale supérieure in Paris. There, he continued to study synaptic transmission in molluscan neurons, and in particular serotonin receptors. But he also worked in synaptic and electric transmission in the turtle retina, their modulation by dopamine, and on the role of this modulation in color vision.

Born in Poland, raised in Argentina, a French citizen, Hersch Gerschenfeld, a prototypical example of a scientist seeing science as a world affair, has maintained though out his career active links with the Latin-American community of neuroscientists.

The papers presented in this special issue span over the most diverse areas of Neuroscience, from synaptic physiology and receptor structure to sensory and motor control. The present stage of Franco-Argentinean scientific cooperation (which includes several international associated laboratories and plans for a future joint institute) allow foreseeing a very productive future for research interactions. Current science depends extensively on international collaborations, and the two countries are deeply engaged in maintaining and expanding such tradition.

Finally, we would like to thank the support of both Neuroscience societies (SAN and SNF), IBRO-LARC, the French Embassy and the Alliance Française in Argentina and the CNRS, which made possible this first Franco-Argentinean symposium of Neuroscience, hopefully the first of many to come.

Editors
Daniel J. Calvo
Diego A. Golombek
Daniel E. Shulz

---

1 An extended version of Professor Gerschenfeld biography from which extracts have been presented here has been published by Professor Philippe Ascher on the IBRO website (www.ibro.info).