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▪ **RESEARCH INTEREST**

1. **Calcium signaling.**
2. **Neurodegenerative diseases, screening of neuroprotectant compounds.**

In the past ten years, I focused on the regulation of the calcium channel named CALHM1 “Calcium Homeostasis Modulator 1”. First, CALHM1 was involved as a risk factor in **Alzheimer disease**; however, its role on the pathophysiology of this disease is controversial, and upon revision. From its physiological point of view, CALHM1 play a role in the taste pathway of the sweet, salt and human. In addition, it is a voltage dependent channel that its opening regulates the neuronal action potential. For this reason my work hypothesis in which I am working on, is to clarify whether CALHM1 its implicated on the propagation of neuronal death in the stroke. **Pharmacology of CALHM1 with potential therapeutic application in neurodegenerative diseases and stroke.** In 2015, I published a paper showing that a compound called CGP was able to modulate CALHM1, using the HeLa cells as a model. CGP and its derivate could be a potential neuroprotective compounds and with potential therapeutic applications to neurodegenerative diseases (particularly Alzheimer’s disease) and cerebrovascular diseases (stroke). **Research focus.** I would focus the basic research on the understanding of the role of CALHM1 and the mitochondrial sodium/calcium exchanger in ischemia and neurodegenerative diseases. In addition, I will try to develop newly synthesized compounds as **neuroprotective medicines for Alzheimer’s disease and ischemia**, taking as model the mitochondrial sodium/calcium estranger as goal of the neuroproteccion.

▪ **RECENT PUBLICATIONS**

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