

**FOUNDATIONAL SYMPOSIUM OF THE SPANISH
NETWORK ON OLFACTION
RED OLFATIVA ESPAÑOLA-ROE**



Chair:

LAURA LÓPEZ-MASCARAQUE, INSTITUTO CAJAL-CSIC, MADRID, SPAIN

Speakers:

1. **CARLOS VICARIO.** Instituto Cajal, Madrid
2. **FERNANDO DE CASTRO** (Unidad de Neurología Experimental, Hospital Nacional de Paraplégicos, Toledo; INCyL, Univ. de Salamanca;)
3. **J. RAMÓN ALONSO** (INCyL, Univ. de Salamanca)
4. **ADOLFO TOLEDANO.** Fundación Hospital Alcorcón, Madrid
5. **MANUEL SANCHEZ-MONTAÑES.** Grupo de Neurocomputación Biológica (GNB). Escuela Politécnica Superior. Universidad Autónoma de Madrid, Madrid
6. **IVÁN RODRÍGUEZ** Dept. de Zoología, Univ. de Ginebra-Suiza.

Summary

Among the different groups studying olfaction in Spain, we have selected some of them, covering different fields and approaches. Dr. Vicario will explain the generation

and differentiation of excitatory and inhibitory neurons in the olfactory bulb, and the role of IGF-I and BDNF. Dr. de Castro will speak about the molecular basis of the interneuron precursors that form the rostral migratory stream towards the olfactory bulb, especially emphasizing the role that Anosmin-1 plays in this on different phases of the embryonic and postnatal development. Dr. Alonso will summarize work in his lab about plastic changes in the adult olfactory system: adaptative responses in mutant animals that show specific degeneration of olfactory bulb cell populations, including when neurons could be not fully compromised, and then, putative objective of therapeutic strategies. Dr. Toledano studies subjective and objective methods to measure the sense of smell in humans (such us CCCRC test), as well as their usefulness in postviral, posttraumatic and toxic anosmias. Dr. Sánchez-Montañés studies theoretical models of the brain, and he will present two theoretical studies of olfactory receptor neurons. Finally, we have invited Dr. Rodríguez as an expert in the development of the receptors for pheromones, the fascinating cells of one accessory olfactory system that has been recently proposed to be 'remasterized' in its physiology and functions.