

PhD Position Available

To study the mechanisms underlying psychopathologies associated with the brain reward and motivation system

Two PhD positions (3 years) are available in the laboratory of Prof. Roberto Ciccocioppo at the School of Pharmacy, Pharmacology Unit, at the University of Camerino, Italy.

The research of our laboratory is mainly focused on the study of the neurobiological basis of abnormal behavioral and brain functions relevant to human psychopathology with emphasis on drug addiction and eating disorders. The majority of this work is directed at the understanding the neurological mechanisms responsible for these aberrant behaviours and at identifying innovative pharmacological targets to aid the development of new more effective treatments. Attention is also dedicated to the study of neurocircuitry and molecular mechanisms controlling emotional and cognitive disturbances associated with protracted exposure to drugs of abuse or chronic stress.

We utilize rodents self-administration assays to assess the reinforcing, motivational and drug-seeking effects of psychostimulants, opioids and alcohol, molecular biology and immunohistochemical techniques to assess cellular effects. We also aim to use optogenetic and Designer Receptors Exclusively Activated by Designer Drugs (DREADD) to explore at neurocircuitry level the consequence of protracted exposure to drugs of abuse and to study how manipulation of circuitries involved in the regulation of motivated behavior and emotion modulates seeking and taking responses for drugs of abuse as compared to natural reinforcers.

We are seeking a highly motivated candidate with experience in *in vitro* electrophysiology or behavioral/molecular pharmacology to expand the technical abilities of our laboratory.

Successful candidates should have:

- experience with *in vitro* brain electrophysiology
- immunohistochemistry and use of viral vectors
- Creative thinking skills, command of the neuroscience literature
- Affinity for performing experimental animal research
- Ability to work collaboratively with excellent communication skills
- Proficiency in the English language

For more information contact Roberto Ciccocioppo at:
roberto.ciccocioppo@unicam.it