

BIO-302 Complex Systems and Organisms

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The Complex Systems and Organisms research group is a multidisciplinary team engaged in the study and solving of problems ranging from basic matters pertaining to Biomedicine and Neuroscience, to the interaction of (human and non-human) organisms. It understands that science is collaborative and in this regard it adheres to the Open Science ethos.

The group has full equipment in place for registering and analyzing EEG-ERP signals. The equipment is a 32-channel Brain Vision actiCHAMP, with a 32-channel Brainamp amplifier + 8 AUX channels, several 32-channel caps with Acticap active electrodes and an ERP StimTracker interface for sending markers. It also has software for reviewing and analyzing obtained signals (Analyzer2 and BrainVision Analyzer).

Research lines

- Neurocomputational models for the study of awareness
- Linear and nonlinear analysis of biosignals and their application in the field of severe mental illnesses
- Infodemiology
- Fractal analysis in neurological diseases
- Systems biology in neurological diseases, mainly autism, multiple sclerosis and spinal cord injury
- Systems biology in endometrial receptivity and blastocyst implantation
- Application of cooperative play theory to the analysis of microarrays

Related services and products

- [System for the automatic classification of olives](#)
- [Image analysis](#)
- [Analysis of experimental data](#)
- [Systems biology - Modelling](#)
- [System dynamics - Modelling](#)
- [Specialization courses in Complex Systems and Organisms.](#)

Spanish website: <https://bit.ly/2CqXvBb>