

### UMR 5105 - CNRS / UGA / USMB

**Faculty:** UFR Literature, Language and Human Sciences

**PhD school:** Engineering for Health, Cognition and the Environment (ISCE)

#### FIELDS OF TRANSVERSAL SKILLS

- Behavioural Sciences, Images, Cultures, Societies
- Fundamental Science, Earth sciences and Environment

#### KEY WORDS

Cognitive psychology ■ Neuropsychology  
■ Neuroimaging ■ Modeling ■ Language ■  
Dyslexia ■ Memory ■ Perception ■ Sensory-  
motricity ■ Cognitive psychopathology

#### SECTORS

- Health
- Education

The Psychology and Neurocognition Laboratory is an inter-university research structure including: the Université Grenoble Alpes and the Université Savoie Mont Blanc. This laboratory was originally dedicated to experimental psychology; it has extended within the last ten years its field of competence towards neuroscience, neuropsychology and cognitive psychology. The LPNC is particularly involved in two Federative Research Structures that develop a transversal research activity with several universities in the Grenoble-Alps site: "Health and Society", "RMN and Neurosciences", the cognition centre and the shared unity of services UMS IRMaGE.

#### RESEARCH THEMES

The scientific programme of the Psychology and Neurocognition Laboratory for the 2016-2020 period is based on the study of human cognition and more particularly on perception, sensori-motricity, memory, language and learning.

The LPNC is organised into three groups:

- «Perception & sensory-motricity»
- «Memory & development»
- «Language»

Several cross-disciplinary axes developed in **neuropsychology, neuroimaging and cognitive psychiatry** have guided the Laboratory's research for more than a decade and warrant the necessary interdisciplinarity to understand cognitive functions.

The LPNC's research is characterized by their broad spectrum, from the study of low level perceptual processing up to memory concepts organisation. The purpose is to encourage interactions between scientists working at different levels of this spectrum in order to build highly integrated models of human behaviour.

#### KEY DATA\*

- 38** researchers and professors and hospital practitioners
- 11** administrative and technical staff
- 33** PhD students
- 17** post-doctoral students, ATER (temporary lecturers & research students), guests...

\* Academic year 2014-2015

#### SPECIFIC EQUIPMENT AND EXPERTISE

- Psychology consulting centre (remediation & cognitive therapy) at the Université Savoie Mont Blanc
- Virtual reality platform
- Functional neuroimaging group of the LPNC (fMRI, EEG, TMS)
- Ocular recording system...

#### PHD STUDENTS SKILLS

- Experimental psychology and data analysis
- Cognitive processes simulation
- Applied research
- Writing research projects

#### NETWORKS / PARTNERSHIPS

##### Academic cooperations

- Boston University School (USA)
- Imperial college of London (UK)
- University of Medicine and Pharmacy, Cluj (Romania)
- Centre for Visual Cognition, University of Copenhagen (Denmark)

##### Institutional cooperations

- Psychiatry and Neurology Centre, CHU Grenoble
- Paediatric service, CHU Grenoble
- Psychopathology service, CHU Grenoble
- Inter-university Health Service, UJF, Grenoble
- Clinique Mutualiste maternity service, Grenoble
- Memory centre Grenoble Arc Alpine

##### Industrial cooperations

- Idea's Lab (CEA Grenoble)
- La cigale (Pedagogical materials editing)
- Hogrefe (Psychometrical materials editing)

#### INTERNATIONAL RELATIONS

- Scientific partner of several European projects (COST ERN-LWE, NEURODYS, NEUROMED project etc.)
- Partnership with the University of Geneva (Switzerland)
- Numerous international academic projects and partners