Editorial

Welcome to the Inaugural Edition of the IMCEN

Let me start by welcoming all of you to the first edition of the Inter-university Master in Clinical and Experimental Neuropsychology (IMCEN). This is also the first issue of our Newsletter. Every month we will bring you here news and announcements from IMCEN.

A few years ago, faculty from the Universities of Coimbra, Lisbon and Minho (Portugal), decided to put together their research and clinical expertise in neurosciences and launched an innovative inter-university program in clinical and experimental neuropsychology.

Our core faculty includes some of the top Portuguese researchers in the psychological neurosciences with a diversity of backgrounds and expertise (see pages 3-5). Our resident labs integrate, altogether, more than 100 researchers (among faculty, researchers, postdocs and PhD students) and provide state of the art facilities for neuro-biochemistry, psychophysiology, neuropsychological testing, neuromodulation, neurophysiology, neuroimaging and psychophysics research (see page 6).

Neuropsychology is a discipline dedicated to the study of brain-mind relationship in an applied and / or experimental context. The practice of neuropsychology includes the assessment, treatment and rehabilitation of individuals with brain disorders. The practice of clinical neuropsychology needs to be grounded in current scientific knowledge derived from rigorous experimental work.

During the last decades, technological advances in neuroscience research allowed for the possibility of unparalleled visualization and modulation of brain functioning, in real-time. These advancements are revolutionizing neuropsychology, calling for an integration of knowledge from a diversity of domains such as psychology, biology, neuropsychiatry, neuroimaging, psychometry or computer science.

The IMCEN program aims at training the next generation of neuropsychologist with a solid background in experimental neurosciences.

IMCEN students will be integrated in one of the three resident campi but will benefit from the educational, experimental and clinical resources of all cooperating universities. Theoretical lectures will be provided locally or on line to students at three camps. Students will also benefit from joint practical training (research and clinical) through workshops held in each of the labs. All students are required to complete a laboratory rotation (major) at the host university (resident lab), along with a second rotation (minor) at one of the other cooperating universities. Finally, the program includes a master's thesis held at the host university and a neuropsychology practicum at one of the cooperating clinics.

Coming from different institutions but with a common endeavor we want this Clinical and Experimental Neuropsychology Newsletter to be the scaffolding of a new emerging identity.

Enjoy your reading!

Óscar F. Gonçalves, PhD – Program Director
Meet our Core Faculty

University of Minho

Óscar F. Gonçalves

Full Professor at the University of Minho - Portugal and Senior Research Associate at the Spaulding Neuromodulation Center, Spaulding Rehabilitation Hospital-Harvard Medical School - USA. He held faculty positions at the University of Porto - Portugal (Assistant Professor), University of California Santa Barbara - USA (Assistant Professor) and Northeastern University - USA (Full Professor and Chair of Applied Psychology). He graduated in Psychology from University of Porto and completed two doctoral degrees: one from the Counseling, School and Consulting Psychology Program, University of Massachusetts, Amherst – USA; and another one in Neurosciences from the Faculty of Medicine - University of Santiago de Compostela – Spain. He is a licensed Clinical and Health Psychologist with board certifications in neuropsychology and psychotherapy.

Adriana Sampaio

Assistant Professor and director of the Psychological Neuroscience Lab in the School of Psychology, University of Minho, Portugal. She holds an MD by the University of Porto and a PhD by the University of Minho. She is licensed both as Psychologist and as a Medical Doctor. Her main research is in the field of developmental cognitive neuroscience, namely in the structural and neurofunctional and genetic basis of (ab)normal cognitive and emotional processes. In particular, using cutting edge technologies that combine morphometric with functional neuroimaging measures, her work aims to map specific neurodevelopmental processes associated with normal higher cognitive function and their age-related trajectories, by looking at the dynamic interplay between genetic, biological, and environmental factors that shape brain development.
Meet our Core Faculty

University of Coimbra

Mário R. Simões

Full Professor and Director of PsyAssessmentLab

He is PI of the Research Group Neuropsychological Assessment and Ageing Processes (NAAP) of Center for Research in Neuropsychology and Cognitive Behavioral Intervention (CINEICC) of the University of Coimbra. He is a licensed psychologist and a PhD in Psychological Assessment with board certification in Neuropsychology by the Portuguese Psychological Association. He participated actively as a principal investigator of projects with external funding (FCT, FCG) and/or as a supervisor of doctoral theses and master's dissertations in research that led to the adaptation and/or validation of more than 30 tests and other (neuro) psychological assessment instruments for the Portuguese population (e.g., MPCR, WISC-III, WAIS-III, BANC, ACE-R, MoCA, TeLPI, FCSRT, CANTAB, IAFAI, EPQ-R, BDI-II, TOMM).

Jorge Almeida

Associate Professor at the Faculty of Psychology and Educational Sciences of the University of Coimbra - Portugal and Director of the Proaction Lab. He graduated in Psychology from University of Lisbon, and obtained his Master's and Doctoral degree from the Department of Psychology, Harvard University – USA. He is currently the PI or Co-PI in 4 FCT research projects, and he is PI of the first ERC grant in the field of Psychology in Portugal – ContentMAP. His core research topics are: Cognitive Neuroscience, object recognition, neural organization of conceptual knowledge, category specificity in the brain, and effects of neurostimulation on neural processing.
Meet our Core Faculty

University of Lisbon

Ana Pinheiro

Assistant Professor at the Faculty of Psychology - University of Lisbon and Coordinator of the Voice, Affect & Speech (VAS) Neuroscience Lab. She graduated in Psychology from the University of Minho, and obtained her PhD from the University of Minho, having completed Doctoral and Post-Doctoral training in Clinical Neurosciences at Harvard Medical School. She is a licensed Clinical and Health Psychologist with board certification in neuropsychology. She is currently PI or co-PI of several research projects funded by FCT or BIAL. Her core research topics are: neuroscience of voice/speech perception, psychosis and hallucinations, and the effects of sensory prediction on brain processing. She keeps active collaborations with researchers at University of Maastricht and Harvard Medical School.

Ana Raposo

Assistant Professor at Faculty of Psychology - University of Lisbon and member of the Research Center for Psychological Science (Memory and Language Lab). She is currently executive director of the Mind-Brain College of ULisboa. She received her PhD from the University of Cambridge and conducted postdoctoral research at Duke University. She is interested in the cognitive and neural bases of human memory. Her research combines behavioral and neuroimaging (fMRI) methods to gain a better understanding of the mechanisms that support retrieval of past experiences and expression of knowledge. She keeps active collaborations with researchers at Fundação Champalimaud, University of East London and UCL.
Visit our Resident Labs

Voice, Affect & Speech Neuroscience Lab - University of Lisbon

We use behavioral, neurophysiological and neuroimaging tools to probe voice, affect and speech. Ultimately, these studies aim to bring us closer to understanding why some people hear voices when there is nobody speaking. This work has been possible due to a combination of skills and knowledge from psychologists, biomedical engineers, computational linguists, and medical doctors.

https://vaslaboratory.wordpress.com/

Cognition in Context Research Group of CICPSI - University of Lisbon

CO2 investigates the cognitive mechanisms and neural underpinnings of voice and speech perception, long-term memory, literacy acquisition and reading development. An interdisciplinary approach is used to study neurocognitive adaptation and plasticity in learning and changing contexts with multiple methods: behavioral paradigms (e.g. eye-movement recordings), neuroimaging techniques (fMRI, EEG) and neuropsychological studies (dyslexia, autism, dementia, schizophrenia).

https://www.psicologia.ulisboa.pt/cicpsi/co2/

Proaction Lab - University of Coimbra

Currently we have three main areas: object recognition and the organization of object knowledge; how connectivity shapes neural processing and organization; and on neuroplasticity in special populations. Our laboratory uses a multimethod approach to address these research questions. We have been using Visual Psychophysics (fast presentation monitors and custom made fast PIO button boxes), fMRI (SIEMENS Trio Tim 3T MRI Scanner), and neuromodulation (TMS and tDCS with neuronavigation). We also have access to Eyetracking (tobii), and Motion Tracking (Optotrak).

https://gaius.fpce.uc.pt/pessoais/jorgealmeida/proaction_home.html

Psychological Neurosciences Lab - University of Minho

The main objective of the PNL is the development of research in the area of human clinical neurosciences. We take advantage of several methodological approaches as autonomic measures (polygraph and biofeedback), EEG/ERP, TMS/tDCS, neuroimaging, and neurobiochemistry in pursuing the neural and physiological correlates of human behaviour.

https://psychologicalneurosciencelab.weebly.com/

PsyAssessmentLab - University of Coimbra

In the PsyAssessmentLab we do research with testing and other instruments of (neuro)psychological assessment. The PsyAssessmentLab team has knowledge and experience in the area of Psychological Assessment in Portugal at different levels (Research, Practice, Teaching), in different contexts of application and professional practice (clinical, health, forensics, education, organizational).

http://psyassessmentlab.fpce.uc.pt
Understand our Training Model

Potentiating Faculty Resources

IMCEN is an innovative graduate program joining the faculty and research resources from three top Portuguese Universities (Universities of Coimbra, Lisbon and Minho).

Neuropsychological Practice

IMCEN aims at training students in providing and innovating neuropsychology practice grounded on the most recent developments from experimental neurosciences.

Large Scope Training

We have a large scope master program providing extensive training in neuropsychological assessment and rehabilitation along with training in experimental system’s level and/or cognitive neuroscience.

Combined Teaching Model

Our combined teaching model potentiates student and faculty interaction across the three campi, relying on four main strategies: (1) opportunities for distance learning; (2) joint intensive workshops integrating students and faculty from the three universities; (3) hybrid model combining online and live training; (4) intensive research and clinical practicum.

Four Semester Training Program

Distance Learning - Some of the courses include weekly lectures taught at one campus and provided in real time to the other two campi: Functional Neuroanatomy; Cognitive, Emotional and Social Neurosciences; Neuropsychological and Psychopathological Syndromes.

Joint intensive workshops - Other courses consist of intensive joint workshops provided simultaneously to all students alternating at different campi: Research Methods in Neuropsychology and Clinical Neuropsychology Skills.

Hybrid Model - Still other courses will follow an hybrid model in which online weekly sessions in real time will be followed up by practical activities in each of the campi: Neuropsychological Assessment and Neuropsychological Rehabilitation.

Intensive Research and Clinical Practicum - Finally, the experimental neuropsychology rotations (major and minor) and master thesis, along with the clinical neuropsychology practicum, include intensive practical training in the associated labs and/or clinics. Clinical and research residence activities are followed up with weekly seminars provided real time to students from the three campi.

<table>
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<tr>
<th>1st Semester</th>
<th>2nd Semester</th>
<th>3rd &amp; 4th Semesters</th>
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<tbody>
<tr>
<td>Functional Neuroanatomy – 5 ECTS</td>
<td>Clinical Neuropsychology Skills – 10 ECTS</td>
<td>Practicum in Clinical Neuropsychology – 30 ECTS</td>
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<tr>
<td>Cognitive, Emotional and Social Neuroscience – 5 ECTS</td>
<td>Neuropsychological Assessment – 5 ECTS</td>
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<tr>
<td>Experimental Neuropsychology Rotation - Major – 15 ECTS</td>
<td>Neuropsychological Rehabilitation – 5 ECTS</td>
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<td>Experimental Neuropsychology Rotation - Minor – 5 ECTS</td>
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How to Become an IMCEN Student

If you have an undergraduate degree in Psychology or Psychological Sciences and are interested in pursuing a research/clinical career in neuropsychology, consider applying to IMCEN

We are looking for highly motivated international young graduates with solid training in psychology and neurosciences. All the teaching will be in English and you are required to be fluent in written and spoken English language.

All the applications will take place online and the applications procedures can be found at:


1. In the case of empty slots from the 1st call

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**Before you Apply**

- Get Familiar with Faculty Research
  - [https://www.psi.uminho.pt/en/education/imcen/Pages/faculty.aspx](https://www.psi.uminho.pt/en/education/imcen/Pages/faculty.aspx)
- Explore Lab Resources
  - [https://www.psi.uminho.pt/en/education/imcen/Pages/resident-labs.aspx](https://www.psi.uminho.pt/en/education/imcen/Pages/resident-labs.aspx)

**Prepare a Personal Statement**

- Establish your Objectives
- Match your Objectives with Faculty Expertise and Program Resources

**Show Who You are**

- Prepare your CV
- Organize your Transcripts
- Contact your Referee

**Apply**

- Rank your Campus Choice
- Submit your Application
- Prepare for the Interview

... Welcome to the IMCEN!