

## 1. Personal details

- Lioumis Pantelis (Male)
- 21.05.1978, Athens, Greece
- Adjunct Professor in Cognitive Neuroscience, Faculty of Medicine, University of Helsinki
- https://orcid.org/0000-0003-2016-9199; https://people.aalto.fi/pantelis.lioumis

## 2. Degrees

- 12-12-2012, Doctor of Science in Technology, Aalto University, Engineering Physics -Biomedical Engineering, supervisor: Prof. Risto Ilmoniemi
- March of 2003, Diploma of Engineering (M.Sc.), Electrical engineering and Computer Science, Democritus University of Thrace, Xanthi, Greece

## 3. Current employment

- 2019-2025 Research Fellow, Department of Neuroscience and Biomedical Engineering, Aalto University School of Science. Applications for closed-loop EEG-triggered multilocus TMS and dissemination responsible in ConnectToBrain EU Synergy grant. TMS studies in combination with advanced neurophysiology and neuroimaging (hdEEG, MEG, fMRI, DTI) techniques for basic and clinical research.
- Consultant scientist at HUS Neuroimaging for speech cortical mapping prior to surgeries, Helsinki University Central Hospital.

## **4.** Previous work experience

- 2017-2019: Project Scientist, Temerty Institute for Brain Stimulation (Prof. Jeff Daskalakis), CAMH, Toronto, ON, Canada. Project Scientist in NIMH sponsored project "Confirmatory Safety and Efficacy Trial of Magnetic Seizure Therapy for Depression".
- 2005-2014 & 2016-2017: Doctoral student (2005-2012), Postdoctoral researcher (2012-2014) and Independent researcher at BioMag Laboratory, Helsinki University Hospital (HUH). TMS studies in combination with advanced neurophysiology and neuroimaging (EEG, MEG, DTI). Consultant for Nexstim Ltd (Helsinki, Finland) and for Elekta Ltd (Helsinki, Finland).
- **2014-2015:** Postdoctoral Fellow, Neuroscience Centre, Palva Group, University of Helsinki, Theta burst stimulations and MEG during attention behavioural tasks.

# 5. Research output

- 35 publications, 4 proceedings papers and 2 book chapters.
- https://pubmed.ncbi.nlm.nih.gov/?term=lioumis+p&sort=date
- <u>https://scholar.google.com/citations?user=vbQry7EAAAAJ&hl=el&oi=ao</u>
- The work on motor and speech cortical mapping has been applied as a clinical procedure in HUH and resulted in a product with FDA approval (https://nexstim.com/about-nexstim/history/)

## **6.** Research supervision and leadership experience

- 2020–2024 1, Postdoc, 3 PhD, 1 MSc, and 2 Bachelor students
- Neurophysiological responsible scientist in NIMH sponsored multi-centre project in Toronto (CAMH) and Dallas (University Texas Southewestern). I had the leading role in setting up the laboratories and design the TMS-EEG part of the study, educate and train, technicians, and supervise PhD students and Post-docs (2018-2019).

• **Main consultant/instructor** for basic research and clinical studies of TMS at BioMag Laboratory, HUH (**2007-2014**). Teaching and consulting clinical neurophysiologists on the clinical examinations of motor and speech presurgical mapping and on the clinical research on post-stroke neuropathic pain (**2013-2015**).

## 7. Teaching merits

- 2019 Teacher at Helsinki Summer School of Cognition, Communication and the Brain, University of Helsinki and Teaching in VI International school for young scientists. «Active and passive methods of brain research», Higher School of Economics, Moscow, Russia.
- 2019, 2015, 2014, 2013 Speaker and coach in Hands-on TMS-EEG course for the Science factory for TMS-EEG, Aalto University
- 2015 Hands-on training of clinical neurophysiologists on presurgical speech mapping, at Karolinska Institute (Sweden), Linköping University Hospital (Sweden) and Tampere University Hospital (Finland)
- 2010 Hands-on TMS-course: Theory and practice, measurements and analysis of data (course for post-graduate students of Cognitive Brain Research Unit, University of Helsinki)-2009 Lecture for a TMS course in Department of Biomedical Engineering and Computational Science, Aalto University

## **8.** Other key academic merits, such as:

- **Symposium Chair**: New Technology for Transcranial Magnetic Stimulation: Advancements in Targeting, and Paradigms in 13th International Conference on Complex Medical Engineering (CME 2019), 23<sup>rd</sup> of October, 2019, Dortmund, Germany.
- **Pre-examiner** and **member of the opponents committee** of Nele De Geeter Doctoral Thesis, supervised by Prof. L. Dupre and Prof. G. Crevecoeur, University of Gent, 2015
- **Reviewer** for The French National Research Agency (ANR, 2015), and for Clinical Neurophysiology, Frontiers in Human Neuroscience, Frontiers in Neurology, BMC Neurology, PLOS One, Brain and Language, Journal of Neuroscience Methods, Medical and Biological Engineering and Computing, and Scientific Reports (2008-ongoing)
- **Keynote speaker** to the 12 International Congress in Neurorehabilitation 2020, Moscow, Russia and to the Finnish Clinical Neurophysiology Days, Oulu, December 2016
- Lectures on TMS and TMS–EEG at Moscow State University (MEG center) and St. Petersburg University, 2013 and Invited speaker in 1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup>,6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> International Symposium of Navigated Brain Stimulation: Neurosurgery and Neuromodulation, Charite Berlin