

PERSONAL INFORMATION

SURNAME: LABRAKAKIS

NAME: CHARALAMPOS

DATE OF BIRTH: 22.07.1970

PLACE OF RESIDENCE: IOANNINA

e-mail: clabrak@uoi.gr

TEL. 2651007395

CURRENT POSITION

01.2016 – present **Assistant Professor of Neurophysiology of the CNS**
Department of Biological Applications & Technology, University of Ioannina,
Greece

PREVIOUS POSITIONS

01.2011 - 12.2015 **Lecturer of Neurophysiology of the CNS**
Department of Biological Applications & Technology, University of Ioannina,
Greece

06.2003 - 12.2010 **Postdoctoral Scientist**
Cellular Neurosciences, Centre de recherche Université Laval (CRULRG), Canada

05.2001 - 05.2003 **Associate Research Scientist**
Dept. Physiology & Cell. Biophysics, Columbia University, USA

04.1998 - 04.2001 **Postdoctoral Fellow**
Dept. Physiology & Cell. Biophysics, Columbia University, USA

EDUCATION

10.1993- 07.1997 Dept. of Biology, Humboldt Universität zu Berlin/ Max-Delbrück-Center for
Molecular Medicine, Germany, “Physiological properties of human glioma cells”,
PhD in Neurobiology (Dr. rer. nat.)

10.1988 - 06.1993 Dept. of Biology, Aristotle University of Thessaloniki, Greece, “The calcium
paradox in the isolated perfused pigeon heart”, Diploma in Biology

RESEARCH INTERESTS

Neurobiology of Pain: Brain and spinal cord Neural circuits involved in pain sensation, cellular and molecular mechanisms in neuropathic and chronic pain, mechanisms pain comorbidities

Cellular Neurosciences: Inhibitory neurotransmitters and GABAergic neurons in neurological disorders. GABA Receptors. Cellular mechanisms of pain disorders, anxiety and schizophrenia.

PUBLICATIONS

in Peer Reviewed Journals

1. Ferrini F., Goldstein P.A., ***Labrakakis C.** (2022). Editorial: CNS pain circuits in health and disease. *Front. Neural. Circuits.* 16:977404,. doi: 10.3389/fncir.2022.977404.
2. Perez-Sanchez J., Lorenzo L.E., Lecker I., Zurek A.A., **Labrakakis C.**, Bridgwater E.M., Orser B.A., De Koninck Y., Bonin R.P. (2017). $\alpha 5$ GABAA receptors mediate tonic inhibition in the spinal cord dorsal horn and contribute to the resolution of hyperalgesia, *J. Neurosci. Res.* 95:1307-1318,
3. **Labrakakis C.**, Rudolph U. and De Koninck Y. (2014) The heterogeneity in GABAA receptor-mediated IPSC kinetics reflects heterogeneity of subunit composition among inhibitory and excitatory interneurons in spinal lamina II. *Front. Cell. Neurosci.* 8:424
4. Bonin, R., **Labrakakis, C.**, Eng, D.G., Whissell, P.D., De Koninck, Y. and Orser, B.A. (2011) Pharmacological enhancement of δ -subunit-containing GABAA receptors that generate a tonic inhibitory conductance in spinal neurons attenuates acute nociception in mice. *Pain* 152:1317-1326
5. **Labrakakis, C.**, Lorenzo, L.E., Ribeiro-da-Silva, A. and De Koninck, Y. (2009) Inhibitory coupling between inhibitory interneurons in the spinal cord dorsal horn. *Molecular Pain*, 5:24
6. Lee C.J., **Labrakakis C.**, Joseph D.J. and MacDermott A.B. (2004) Functional similarities and differences of AMPA and kainate receptors expressed by cultured rat sensory neurons. *Neuroscience*, 129: 35-48
7. Gaitanaki C., **Labrakakis C.**, Papazafiri P., Beis I. (2004) Various divalent cations protect the isolated perfused pigeon heart against a calcium paradox. *J Comp Physiol [B]* 174(5): 371-82

8. ***Labrakakis, C.** and MacDermott, A.B. (2003) Neurokinin receptor 1-expressing spinal cord neurons in lamina I and III/IV of postnatal rats receive inputs from capsaicin sensitive fibers. *Neurosci Lett.* 352: 121-124,
9. ***Labrakakis C.,** Tong, C.K., Weissman T., Torsney, C. and MacDermott, A.B, (2003) Localization and function of ATP and GABAA receptors expressed by nociceptors and other postnatal sensory neurons in rat. *J. Physiol (London)* 549: 131-142.
10. ***Labrakakis, C.,** Gerstner, E. and MacDermott A.B. (2000) Adenosine triphosphate-evoked currents in cultured dorsal root ganglion neurons obtained from rat embryos: Desensitization kinetics and modulation of glutamate release. *Neuroscience* 101: (4) 1117-1126.
11. **Labrakakis, C.,** Patt, S., Hartmann, J. and Kettenmann, H. (1998b) Glutamate receptor activation can trigger electrical activity in human glioma cells. *Eur. J. Neurosci.*, 10: 2153-2162
12. **Labrakakis, C.,** Patt, S., Hartmann, J. and Kettenmann, H. (1998a) Functional GABAA receptors on human glioma cells. *Eur. J. Neurosci.*, 10: 231-238.
13. **Labrakakis, C.,** Müller, T., Schmidt, K. and Kettenmann, H. (1997). GABAA receptor activation triggers a Cl⁻ conductance increase and a K⁺ channel blockade in cerebellar granule cells. *Neuroscience*, 79: 177-189
14. Schmidt, C., Ohlemeyer, C., **Labrakakis, C.,** Walter, T. and Schnitzer J. (1997). Analysis of motile oligodendrocyte precursor cells in vitro and in brain slices. *Glia*, 20: 284-298.
15. Weydt, P., Moller, T., **Labrakakis, C.,** Patt, S., and Kettenmann, H. (1997) Neuroligand-triggered calcium signaling in cultured human glioma cells. *Neurosci. Lett.*, 228: 91-94.
16. **Labrakakis C.,** Patt, S., Weydt, P., Cervos-Navarro, J., Meyer, R. and Kettenmann, H. (1997) Action potential-generating cells in human glioblastomas. *J. Neuropath. Exp. Neurol.*, 56: 243-254
17. Patt S., **Labrakakis C.,** Bernstein M., Weydt P., Cervos-Navarro J., Nisch G. and Kettenmann H. (1996) Neuron-like physiological properties of cells from human oligodendroglial tumors *Neuroscience* 71: (2) 601-611
18. Patt, S., Schmidt, H., **Labrakakis, C.,** Weydt, P., Fritsch, M., Cervos-Navarro, J. and Kettenmann, H. (1996) Human central neurocytoma cells show neuronal physiological properties in vitro. *Acta Neuropathol.* 91: 209-214

in Book Chapters

1. * **Labrakakis C.**, Ferrini F. and De Koninck Y. Mechanisms of plasticity of inhibition in chronic pain conditions. In "Inhibitory Synaptic Plasticity", Woodin M.A. and Maffei A. (Eds). Springer-Verlag, New York, 2011.

***Corresponding author**

Publication statistics (Google Scholar): Total: 21, H-index: 16, Citations: 821

CONFERENCES (last five years)

1. Mellios T., Natsi A. and **Labrakakis C.** (2019). Synchronized activity of different cortical areas in vitro and its modulation by endogenous serotonin during neuropathic pain. *28th Meeting of the Hellenic Neuroscience Society*, Heraklion, Greece
2. Karali K., Fiaska S., Gerou M. and **Labrakakis C.** (2017) Transient receptor potential ankyrin 1 (TRPA1) channels on the sciatic nerve contribute to the development of neuropathic pain. *27th Meeting of the Hellenic Neuroscience Society*, Athens, Greece
3. Fiaska S. and **Labrakakis C.** (2015). Activation of TRPA1 channels, localized on rat sciatic nerves, influences nerve metabolic activity. *Federation of European Neuroscience Societies - Featured Regional Meeting*, Thessaloniki, Greece

CONFERENCES AND PRESENTATIONS

22 Conference abstracts

12 Scientific presentations in Universities/Research Institutes in Greece, Germany, USA and Canada.

RESEARCH GRANTS (last 5 years)

2020 ESPA2014-2020 - Establishment of "capacity building" infrastructures in Biomedical Research (BIOMED-20). (Collaborator, 3.000.000 €)

MEMBERSHIPS & REVIEWING ACTIVITIES

Member: Hellenic Society for Neuroscience

Reviewer *Frontiers in Molecular Neurosciences* (Review Editor), *Frontiers in Pain Research* (Review Editor, Guest Associate Editor), *Frontiers in Neural Circuits* (Guest Associate Editor), *Journal of Physiology*, *Journal of Neuroscience Methods*, *Molecular Pain*, *Neuroscience*, *Neuroscience Letters*.

Other Evaluator, Management and Implementation Authority for Research, Technological Development and Innovation Actions /General Secretariat for Research and Technology, Greece

FELLOWSHIPS and AWARDS

2004 - 2006 Postdoctoral Fellowship Canadian Institutes of Health Research, Cellular Neurosciences, Centre de recherche Université Laval (CRULRG), Canada

2008 Travel Scholarship, International Association for the Study of Pain, Cellular Neurosciences, Centre de recherche Université Laval (CRULRG), Canada

TEACHING ACTIVITIES

Undergraduate

- 2011 – present** Animal Physiology I, University of Ioannina, Greece
- 2011 – present** Animal Physiology II, University of Ioannina, Greece
- 2011 – present** Membrane Biophysics, University of Ioannina, Greece
- 2011 – present** Neurotransmitters and Behavior, University of Ioannina, Greece

Masters

- 2017 – present** Molecular and Cellular Neuroscience: GABA Receptors, Athens International Master's Programme in Neurosciences, Greece
- 2015 – 2019** Physiology & Pharmacology, MSc Basic Biomedical Sciences, University of Ioannina, Greece
- 2015 – 2019** Molecular and Cellular Physiology of Chronic Diseases, MSc Medical Chemistry, University of Ioannina, Greece

STUDENT SUPERVISION

- 2011-present** University of Ioannina, Greece
1 PhD Student, 3 PhD Committees, 1 Msc Thesis, 13 Diploma Thesis, >25 Diploma Thesis Committees, >25 student placement/internships
- 1998-2003** Columbia University, USA
1 Rotation Student, 4 Summer Students

ADMINISTRATIVE ACTIVITIES

Member of Department General Assembly, Member of the Internal Evaluation Committee, Member of the Election Committee Department/School