

Styliadis Charis

Neuroscience of Cognition and Affection group, Medical Physics Laboratory, School of Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki (AUTH), PO Box 376, 54124, Thessaloniki, Greece, Tel: +306942618582, email: styliadis@hotmail.com, skype: styliadis

Narrative report

I am a biomedical engineer, and a postdoctoral researcher at the Medical Physics Laboratory of the Aristotle University of Thessaloniki (AUTH) in charge of a clinical trial concerning cortical plasticity (MS-NEUROPLAST) in Multiple Sclerosis. I completed my BEng in Electronic Engineering with Medical Electronics at the University of Kent, UK, and my MSc in Telecommunications and Computer Network Engineering at South Bank University, UK. Following, I completed my Ph.D. at the Medical School of AUTH with a specialization in emotional and cognitive neuroscience and magneto-/electroencephalography (MEG/EEG). I have received training in MEG technology at the laboratory for Human Brain Dynamics, RIKEN, BSI, in Japan. In 2020, I received a post-doctoral research fellowship from the Hellenic Foundation for Research and Innovation (HFRI). My research interests focus on emotional processing, cognitive aging, developmental and degenerative disorders, and training-induced cortical plasticity, while I use MEG and EEG as my main research tools. I have a demonstrated record of accomplished and productive research projects in affective and cognitive neuroscience, funded by the European Union and the General Secretariat for Research & Technology, leading to 20 peer-reviewed articles in scientific journals, such as NeuroImage, Human Brain Mapping and Network Neuroscience. I have also published 2 book chapters and more than 35 contributions in international conferences with posters and oral presentations, while a figure of my work has been selected as the cover for a high impact scientific journal.

Education

- 2011-2015** **Ph.D.** in Medicine
School of Medicine, Faculty of Health Sciences, AUTH, Greece
Thesis: Spatiotemporal analysis of the emotional processing in healthy and pathologic elderly individuals who have undergone cognitive and physical training
[ND 37043](#)
Supervisor: Panagiotis Bamidis
- 2000-2002** **MSc** in Telecommunications & Computer Network Engineering
School of Electrical, Electronic & Information Engineering, South Bank University, UK
MSc Project: Investigations into bandwidth restriction and data transfer rates of Asymmetric Digital Subscriber Lines (ADSL)
- 1997-2000** **BEng** in Electronic Engineering with Medical Electronics
School of Electrical & Electronic Engineering, University of Kent, UK
BEng Project: Nasal Anemometer. Development of a clinical instrument for use in speech therapy

Research experience

- 2016-today** **Postdoctoral Research Associate**
Medical Physics Laboratory, School of Medicine, Faculty of Health Sciences, AUTH
Main activities and responsibilities:
- **Basic/Applied Neuroscience**
 - Training-induced plasticity (cortical reorganization) in Developmental (Down's Syndrome) and Degenerative (Parkinson's Disease/Multiple Sclerosis) disorders
 - Member of the Human Affectome Project team aiming to develop an integrated, holistic model for human emotion
 - Emotional face processing of adolescents with Autism Spectrum Disorder (ASD) in collaboration with Boston's Children's Hospital, USA and Hospital for Sick Children, Canada

- **Clinical Neuroscience**

- High-Frequency Oscillations (HFOs) in epilepsy patients in experimental (sleep deprivation) and clinical (operating room before surgery and during anesthesia) settings
- Validating reward-related biomarkers to facilitate the development of new treatments for anhedonia and reward processing deficits in schizophrenia and major depressive disorder

2012-2015 **Research Associate/Co-Investigator**

Medical Physics Laboratory, School of Medicine, Faculty of Health Sciences, AUTH

Main activities and responsibilities:

- Emotional processing in healthy aging and MCI patients
- Indices of training-induced plasticity in MCI patients following combined computerized physical and cognitive training

2008-2012 **Research Associate/Investigator**

Lab of Medical Informatics, School of Medicine, Faculty of Health Sciences, AUTH

Main activities and responsibilities:

- Emotional processing in healthy adults
- Spatiotemporal MEG analysis

2007-2008 **Visiting Technician**

Laboratory for Human Brain Dynamics, Brain Science Institute (BSI), Institute of Chemical and Physical Research (RIKEN), Saitama, Japan

Main activities and responsibilities:

- Education in MEG methods and applications using a 151-channel CTF whole-head MEG system (VSM MedTech Ltd.)
- Use of 3D Head and Electrode Digitizer (Fastrack Polemic) for registration
- MEG data collection

2006-2007 **Research Associate**

Lab of Medical Informatics, School of Medicine, Faculty of Health Sciences, AUTH

Main activities and responsibilities:

- Education in EEG methods and applications

Teaching experience

2017-2018 **Fellow, Lecturer**

Introduction to Biomedical Technology (IAO263), School of Medicine, Faculty of Health Sciences, AUTH

Lectures: Biomedical technology and the role of the biomedical engineer; Neurophysiology and encephalography; Brain-computer interfaces; Neurofeedback; Affective computing; Physiology of the heart and electrocardiography; Biomedical signal processing; Medical imaging; Biomedical Technologies for Elderly Care; Multidisciplinary tools for smoking cessation; Neuroimaging and Nanoscience

Level: Undergraduate

Duration: 1 semester

2020- today **Guest Lecturing**

Learning Technologies - Education Sciences, Inter-Faculty, AUTH

Lecture: Affective Neuroimaging

Level: Post-Graduate

Duration: 2 hours

Supervisor: Panagiotis Bamidis

2017- today **Guest Lecturing**

Medical Informatics, Biomedical signal processing, Inter-Faculty, AUTH

Lecture: Spatiotemporal M/EEG analysis

Level: Post-Graduate

Duration: 2 hours

Supervisor: Anthony Aletras

2014-today

Guest Lecturing

Complex Systems and Networks, Inter-Faculty, AUTH

Lecture: Spatiotemporal M/EEG analysis

Level: Post-Graduate

Duration: 2 hours

Supervisor: Panagiotis Bamidis

Guest Lecturing

Nanosciences and Nanotechnologies, Inter-Faculty, AUTH

Lecture: Neuroimaging and Nanoscience

Level: Post-Graduate

Duration: 2 hours

Supervisor: Panagiotis Bamidis

Professional experience in the private sector

2004-2005

Engineer of biomedical technology

N. Papapostolou LTD, Medical Equipment Center, Thessaloniki, Greece

Military service

2003-2004

Sergeant of Supply and Transportation Directorate

Hellenic army

Funding

2020-2023

Hellenic Foundation for Research and Innovation (HFRI), 2nd Call for H.F.R.I. Research Projects to Support Post-Doctoral Researchers

3rd in ranking for Engineering Sciences & Technology scientific area ([Proposal #314](#))

Acronym: **MS-NEUROPLAST**

Project Description: Cognitive decline prognosis in multiple sclerosis: effectiveness of a computerized cognitive training treatment on cortical reorganization

Project's objectives:

- (i) The in-depth understanding of the neural indices of cognitive impairment in PwMS (i.e., identify decline transition points along the continuum of cognitive capacity).
- (ii) To dissociate the cortical mechanisms related to training-induced plasticity from those related to maladaptive reorganization due to MS (namely separate good from the bad), by examining whether the correlation of the neurophysiological and cognitive indices with longitudinal ecologically valid measures of daily activities can capture the underlying pathology.
- (iii) To evaluate the efficacy of a computerized cognitive training treatment for MS-associated cognitive deficits via the dissociation of the cortical mechanisms related to training-induced plasticity from those related to maladaptive reorganization due to MS.

Role: PI

2019-2022

European Commission, Information Society and Media Directorate General, HORIZON 2020

Acronym: **HOPE**

Project Description: Automatic detection and localization of High-Frequency Oscillation (HFOs) in Paediatric Epilepsy

Project's objective: HOPE aims to optimize the detection and quantification of high frequency (>80Hz) brain electromagnetic activity using non-invasive techniques (MEG and EEG) for the pre-surgical diagnosis of epilepsy and in particular for the best possible detection of the epileptogenic zone of medically refractory epilepsy

Role: Deputy Principal Investigator - Responsible for the collection of the EEG data recorded from epilepsy patients in experimental (sleep deprivation) and clinical (operating room before surgery and during anesthesia) settings and detection and localization of HFOs (PIs: Klados Manousos, Panagiotis Bamidis)

2019-2021

Private funding

Acronym: **RTOC**

Project Description: Validating reward-related biomarkers to facilitate development of new treatments for anhedonia and reward processing deficits in schizophrenia and major depressive disorder

Project's objective: The project aims to qualify a battery of tasks measuring different reward processing domains to support drug development. By conducting early-stage development and validation of reward processing tasks, the ultimate goal is to develop paradigms that are used in experimental medicine and/or larger clinical trials. This is a multi-center European software deployment trial study, which focuses on major Depression and Schizophrenia populations. It is supported by members of the **ECNP** Experimental Medicines Network

Role: Co-Investigator - Responsible for the lab's accreditation as an EEG center and the collection of the EEG data (PIs: Anja Hayen, Amy Bilderbeck, Georgios Papazisis)

2016-today

Neuroqualia

Acronym: **Human Affectome Project**

Project Description: A global multidisciplinary collaboration in affective neuroscience to advance our understanding of human feelings, motivations, and related behaviors

Project's objective: This project aims to develop an integrated, holistic model for human emotion

Role: Co-Investigator - Member of the 'Happiness' taskforce (PIs: Rebecca Levin Silton, Leroy Lowe)

2015-2018

European Commission, Information Society and Media Directorate General, HORIZON 2020

Acronym: **SmokeFreeBrain**

Project Description: Multidisciplinary tools for improving the efficacy of public prevention measures against smoking

Project's objective: SmokeFreeBrain aimed to address the effectiveness of a multi-level variety of interventions for smoking cessation in high-risk target groups

Role: Coordinator of pharmacological intervention (PI: Panagiotis Bamidis)

2012-2015

General Secretariat for Research & Technology, Reinforcement of the interdisciplinary and/or inter-institutional research and innovation THALES

Acronym: **STHENOS**

Project Description: Interdisciplinary research in affective computing for biological activity recognition in assistive environments

Project's objective: This project aimed in the development of pervasive human-centered systems with the ability to understand the human state in assistive environments using audiovisual and biological signals to enable an interaction mainly based on synthetic audiovisual information

Role: Co-Investigator - Responsible for the analysis and interpretation of the EEG data for the neuroscientific approach to affective computing (PI: Ilias Maglogiannis)

2009-2012

European Commission, Information Society and Media Directorate General

Acronym: **LLM** (Long Lasting Memories)

Project Description: Develop and evaluate a unified solution for cognitive and physical health and the independent living of elder people

Project's objective: This project aimed in investigating the training-induced plasticity in healthy and pathological (mild cognitive impairment) aging as a result of physical exercise occurring in the context of cognitive challenges and correlating the cortical activations to indices of wellbeing (i.e. emotion)

Role: Co-Investigator - Responsible for the analysis and interpretation of the EEG data recorded from cognitively healthy and cognitively impaired elderlies (PI: Panagiotis Bamidis)

2006-2008

General Secretariat for Research & Technology, Transnational collaboration between Greece and Japan

Acronym: **AFFECTION**

Project's description: Multichannel physiological measurements for the adaptation of human-computer interface using emotions-induced experimental paradigms

Project's objective: This project aimed in the spatiotemporal investigation with MEG and EEG of emotional processing in human healthy adults while passively viewing affective pictorial stimuli

Role: Investigator - Responsible for the collection, analysis and interpretation of the MEG data (PI: Panagiotis Bamidis)

Co-authoring of other funded projects

INADVANCE: Patient-centred pathways of early palliative care, supportive ecosystems and appraisal standard. H2020-EU.3.1.3. - Treating and managing disease

Relief: Recovering life Wellbeing through Pain self-management Techniques involving ICT. H2020-EU.3.1.4. - Active ageing and self-management of health

Captain: Coach Assistant via Projected and Tangible Interface. H2020-EU.3.1.4. - Active ageing and self-management of health

Currently unfunded projects

2016-present Affective Cerebellum - Personal collaboration

Project's description: Research on emotional face processing of adolescents with Autism Spectrum Disorder (ASD) in collaboration with Boston's Children's Hospital, USA and Hospital for Sick Children, Canada

Project's objective: This project aims in the investigation of the role of cerebellar abnormalities in emotional dysfunction in ASD

Role: Co-Investigator - Responsible for the analysis and interpretation of the MEG data recorded from the ASD adolescents (PIs: Christos Papadelis, Margot Taylor)

2016-present LifeSpanNeuroPlasticity

Project's description: The evolution of neuroplasticity in Developmental (Down's Syndrome) and Degenerative (Parkinson's Disease) disorders and its relation to cognitive capacity

Project's objective: This project aims at training-induced (cognitive and/or physical) plasticity for patients with Developmental (Down Syndrome) and Degenerative (Parkinson's disease) disorders

Role: Co-Investigator - Responsible for the collection, analysis, and interpretation of the EEG data recorded from the pathological populations (PI: Panagiotis Bamidis)

Publications in peer-reviewed journals

Google Scholar citation count (07/01/2021): 797 ; h-index: 12

Scopus citation count (07/01/2021): 479; h-index: 8

Total impact factor (IF): 73.096

2021

1. **Styliadis, C.**, Leung, R., Özcan, S., Moulton, E.A., Pang E., Taylor, M.J., Papadelis, C. Atypical spatiotemporal activation of cerebellar lobules during emotional face processing in adolescents with autism. *Human Brain Mapping*. <https://doi.org/10.1002/hbm.25349> IF: 4.554
2. Anagnostopoulou, A.*, **Styliadis, C.***, Kartsidis, P., Romanopoulou, E., Zilidou, V., Karali, C., Karagianni, M., Klados, M., Paraskevopoulos, E., Bamidis, P. D. (2021). Computerized physical and cognitive training improves the functional architecture of the brain in adults with Down

Syndrome: a network science EEG study. *Network Neuroscience*, 5(1), 274-294.
https://doi.org/10.1162/netn_a_00177 *joint first authorship. Presubmitted at medRxiv.
<https://doi.org/10.1101/2020.05.28.20115709>

3. Paraskevopoulos, E., Chalas, N., Karagiorgis, A., Karagianni, M., **Styliadis, C.**, Papadelis, G., & Bamidis, P. (2021). Aging Effects on the Neuroplastic Attributes of Multisensory Cortical Networks as Triggered by a Computerized Music Reading Training Intervention. *Cerebral Cortex*, 31(1), 123-137. <https://doi.org/10.1093/cercor/bhaa213> IF: 5.043
4. Xeferis, V. R., **Styliadis, C.**, Anagnostopoulou, A., Kartsidis, P., Paraskevopoulos, E., Klados, M., ... & Bamidis, P. (2020). Computerized physical exercise improves the functional architecture of the brain in patients with Parkinson's Disease: a network science resting-state EEG study. (under review) Presubmitted at medRxiv. <https://doi.org/10.1101/2020.10.21.20209502>
5. Pandria, N., Athanasiou, A., **Styliadis, C.**, Terzopoulos, N., Mitsopoulos, K., Paraskevopoulos, E., Karagianni, M., Pataka, A., Kourtidou-Papadeli, C., Makedou, K., Iliadis, S., Lymperaki, E., Bamidis, P. Does combined training of biofeedback and neurofeedback affect smoking status, behavior and longitudinal brain plasticity? (under review).
6. Pataka, A., Frantzidis, C., Nday, C., Nigdelis, V., Konstantara, L., Chriskos, P., ... **Styliadis, C.**, Paraskevopoulos, E., Kourtidou-Papadeli, C., Bamidis, P. Varenicline administration for Smoking Cessation may reduce apnea hypopnea index in sleep apnea. *ERJ*. (under review)

2020

7. Alexander, R., Aragón, O. R., Bookwala, J., Cherbuin, N., Gatt, J. M., Kahrilas, I. J., ... & Styliadis, C. (2020). The Neuroscience of Positive Emotions and Affect: Implications for Cultivating Happiness and Wellbeing. *Neuroscience & Biobehavioral Reviews*. 121, 220-249. <https://doi.org/10.1016/j.neubiorev.2020.12.002> IF: 8.330

2019

8. Luna-Perejon, F., Malwade, S., **Styliadis, C.**, Civit, J., Cascado-Caballero, D., Konstantinidis, E., ... & Li, Y. C. (2019). Evaluation of user satisfaction and usability of a mobile app for smoking cessation. *Computer Methods and Programs in Biomedicine*, 105042. <https://doi.org/10.1016/j.cmpb.2019.105042> IF: 3.632
9. Pataka, A., Frantzidis, C., Nday, C., Nigdelis, V., Konstantara, L., Chriskos, P., ... **Styliadis, C.**, Paraskevopoulos, E., Kourtidou-Papadeli, C., Bamidis, P. (2019). Polysomnographic changes after varenicline administration for smoking cessation. *ERJ Open Research* 2019 5: P156. <https://doi.org/10.1183/23120541.sleepandbreathing-2019.P156>

2018

10. **Styliadis, C.**, Ioannides, A. A., Bamidis, P. D., Papadelis, C. (2018). Mapping the Spatiotemporal Evolution of Emotional Processing: An MEG Study Across Arousal and Valence Dimensions. *Frontiers in human neuroscience*, 12, 322. <https://doi.org/10.3389/fnhum.2018.00322>. IF: 2.871
11. Athanasiou, A., Klados, M. A., **Styliadis, C.**, Foroglou, N., Polyzoidis, K., Bamidis, P. D. (2018). Investigating the role of alpha and beta rhythms in functional motor networks. *Neuroscience*, 378, 54-70. <https://doi.org/10.1016/j.neuroscience.2016.05.044> IF: 3.382
12. Pandria, N., Athanasiou, A., Terzopoulos, N., Paraskevopoulos, E., Karagianni, M., **Styliadis, C.**, Kourtidou-Papadeli, C., Pataka, A., Lymperaki, A., Bamidis, P. D. (2018). Exploring the neuroplastic effects of biofeedback training on smokers. *Behavioural neurology*. <https://doi.org/10.1155/2018/4876287>. IF: 1.311

2017

13. Adamaszek, M., D'Agata, F., Ferrucci, R., Habas, C., Keulen, S., Kirkby, K. C., ... & **Styliadis, C.**, Verhoeven, J. (2017). Consensus Paper: Cerebellum and Emotion. *The Cerebellum*, 1-25. <https://doi.org/10.1007/s12311-016-0815-8> IF: 3.199

2016

14. Klados, M.A.*, **Styliadis, C.***, Frantzidis C.A., Paraskevopoulos, E., Bamidis, P. D. (2016). Beta – band functional connectivity is re-organized in MCI after combined computerized physical and cognitive training. *Frontiers in Neuroscience*, 10, 55. <https://doi.org/10.3389/fnins.2016.00055>. *joint first authorship. IF: 3.568

2015

15. **Styliadis, C.**, Ioannides, A. A., Bamidis, P. D., Papadelis, C. (2015). Distinct cerebellar lobules process arousal, valence and their interaction in parallel following a temporal hierarchy. *NeuroImage*. 110, 149-161. <https://doi.org/10.1016/j.neuroimage.2015.02.006>. *IF: 5.463*
16. **Styliadis, C.***, Kartsidis, P.*, Paraskevopoulos, E., Ioannides, A., Bamidis, P. D. (2015). Neuroplastic Effects of Combined Computerized Physical and Cognitive Training in Elderly Individuals at Risk for Dementia: An eLORETA Controlled Study on Resting States. *Neural Plasticity*, <http://dx.doi.org/10.1155/2015/172192>. *joint first authorship. *IF: 3.566*

2014

17. **Styliadis, C.**, Ioannides, A. A., Bamidis, P. D., Papadelis, C. (2014). Amygdala responses to valence and its interaction by arousal revealed by MEG. *International Journal of Psychophysiology*, 93(1), 121-33. <https://doi.org/10.1016/j.ijpsycho.2013.05.006>. *IF: 2.882*
18. Bamidis, P. D., Vivas, A. B., **Styliadis, C.**, Frantzidis, C., Klados, M., Schlee, W., Siountas, A., Papageorgiou, S. G. (2014). A review of physical and cognitive interventions in aging. *Neuroscience & Biobehavioral Reviews*, 44, 206-20. <https://doi.org/10.1016/j.neubiorev.2014.03.019>. *IF: 8.802*

2013

19. **Styliadis, C.**, Papadelis, C., Konstantinidis, E., Ioannides, A. A., Bamidis, P. (2013). An MEG compatible system for measuring skin conductance responses. *Journal of neuroscience methods*, 212(1), 114-123. <https://doi.org/10.1016/j.jneumeth.2012.09.026>. *IF: 2.025*

2011

20. Vassilikos, V., Dakos, G., Chatzizisis, Y. S., Chouvarda, I., Karvounis, C., Maynard, C., Maglaveras, N., Paraskevaidis, S., Stavropoulos, G., **Styliadis, C. I.**, Mochlas, S., Styliadis, I. (2011). Novel non-invasive P wave analysis for the prediction of paroxysmal atrial fibrillation recurrences in patients without structural heart disease: a prospective pilot study. *International Journal of Cardiology*, 153(2), 165-172. <https://doi.org/10.1016/j.ijcard.2010.08.029>. *IF: 7.078*
21. Pechlivanidis, G., Mantziari, L., Giannakoulas, G., Dimitroula, H., **Styliadis, H.**, Karvounis, H., Styliadis, I. H., Parharidis, G. (2011). Effects of renin-angiotensin system inhibition on right ventricular function in patients with mild essential hypertension. *Journal of Renin-Angiotensin-Aldosterone System*, 12(3), 358-364. <https://doi.org/10.1177/1470320310391334>. *IF: 2.439*
22. Soulis, J. V., Fytanidis, D. K., Papaioannou, V. C., **Styliadis, H.**, Giannoglou, G. D. (2011). Oscillating LDL accumulation in normal human aortic arch-shear dependent endothelium. *Hippokratia*, 15(1), 22. PMID: [21607031](https://pubmed.ncbi.nlm.nih.gov/21607031/). *IF: 0.525*

2010

23. Vassilikos, V. P., Vogas, V., Giannakoulas, G., Mantziari, L., Lekka, I., Dimitrakopoulos, K., Paraskevaidis, S., Konias, S., Maglaveras, N., Chouvarda, I., **Styliadis, H.**, Styliadis, I. H. (2010). The use of transtelephonic loop recorders for the assessment of symptoms and arrhythmia recurrence after radiofrequency catheter ablation. *Telemedicine and e-Health*, 16(7), 792-798. <https://doi.org/10.1089/tmj.2010.0018>. *IF: 1.297*
24. Dimitroula, H., Damvopoulou, E., Giannakoulas, G., Dalamanga, E., Dimitroulas, T., Sarafidis, P. A., **Styliadis H.**, Hatzitolios, A., Karvounis, H., Parcharidis, G. (2010). Effects of Renin-Angiotensin System Inhibition on Left Atrial Function of Hypertensive Patients: An Echocardiographic Tissue Deformation Imaging Study. *American journal of hypertension*, 23(5), 556-561. <https://doi.org/10.1038/ajh.2010.4>. *IF: 3.129*

2008

25. Bamidis, P. D., Konstantinidis, S., Papadelis, C. L., Perantoni, E., **Styliadis, C.**, Kourtidou-Papadeli, C., Kourtidou-Papadeli, C., Pappas, C. (2008). An e-learning platform for Aerospace Medicine. *Hippokratia*, 12(Suppl 1), 15. PMID: [19048088](https://pubmed.ncbi.nlm.nih.gov/19048088/)
26. Mantziari, L., **Styliadis, C.**, Kourtidou-Papadeli, C., Styliadis, I. (2008). Arrhythmias, Sudden Cardiac Death and incapacitation of pilots. *Hippokratia*. *Hippokratia*, 12(Suppl 1), 53. PMID: [19050752](https://pubmed.ncbi.nlm.nih.gov/19050752/)

27. Kourtidou-Papadeli, C., Papadelis, C., Koutsonikolas, D., Boutzioukas, S., **Styliadis, C.**, Guiba-Tziampiri, O. (2008). High altitude cognitive performance and COPD interaction. *Hippokratia*, 12(Suppl 1), 84. *PMID: 19048098*

Book chapters

2020

1. Xeferis, S., Konstantinidis, E., Billis, A. S., Antoniou, P. E., **Styliadis, C.**, Paraskevopoulos, E., Kartsidis, P. E., Frantzidis, C. A., Bamidis, P. D. (2017). Early Detection of Dementia: Advances, Challenges, and Future Prospects. In J. Wu (Ed.), *Improving the Quality of Life for Dementia Patients through Progressive Detection, Treatment, and Care* (pp. 74-106). Hershey, PA: IGI Global. doi:[10.4018/978-1-5225-0925-7.ch004](https://doi.org/10.4018/978-1-5225-0925-7.ch004), ISBN13: 9781522509257

2015

2. **Styliadis, C.**, Kartsidis, P., Paraskevopoulos, E. (2015). Neuroimaging approaches for elderly studies. In Bamidis, P. D., Tarnanas, I., Hadjileontiadis, L., Tsolaki, M. (2015). *Handbook of Research on Innovations in the Diagnosis and Treatment of Dementia* (pp. 1-439). Hershey, PA: IGI Global. <http://dx.doi.org/10.4018/978-1-4666-8234-4>.

Conference contributions

2019

1. Xeferis V.R., **Styliadis C.**, Kartsidis P., Anagnostopoulou A., Paraskevopoulos E., Zilidou V. and Bamidis P.D. (2019). Neuroplastic effects of physical training in Parkinson's Disease patients: An EEG resting state connectivity study. 8th Panhellenic Conference on Biomedical Technologies, 9-10 May 2019, Athens, Greece
2. Kartsidis P., Karali C., **Styliadis C.**, Anagnostopoulou A., Paraskevopoulos E., Zilidou V., Karagianni M., Romanopoulou E. and Bamidis P.D. (2019). Brain connectivity of MMN in Down Syndrome changes due to cognitive and physical training. 8th Panhellenic Conference on Biomedical Technologies, 9-10 May 2019, Athens, Greece
3. Anagnostopoulou A., Karali C., **Styliadis C.**, Kartsidis P., Paraskevopoulos E., Zilidou V., Karagianni M., Romanopoulou E. and Bamidis P.D. (2019). Cortical reorganization in Down Syndrome adults due to computerized physical and cognitive training: A functional connectivity resting state EEG study. 8th Panhellenic Conference on Biomedical Technologies, 9-10 May 2019, Athens, Greece

2018

4. **Styliadis C.**, Frantzidis, C. (2018). [Sleep macro-architectures during pharmacological smoking cessation interventions](#). 3rd International Conference of the European Network for Smoking and Tobacco Prevention. 14-16 June 2018, Madrid, Spain (**Invited Talk**)
5. Frantzidis C., Gkivogkli P., Plomariti C., Chriskos P., **Styliadis C.**, Karagianni M., Kostakis E., Nday C., Paraskevopoulos E., Pataka A., Kourtidou-Papadeli C., Bamidis P.D. (2018). [How varenicline affects sleep quality and functional connectivity? A polysomnographic evaluation](#). *Tob. Prev. Cessation* 2018;4 (Supplement): A35. <https://doi.org/10.18332/tpc/91859>
6. Pandria N., Athanasiou A., Terzopoulos N., Paraskevopoulos E., Karagianni M., **Styliadis C.**, Kourtidou-Papadeli C., Pataka A., Lymperaki E., Bamidis P.D. (2018). [Does biofeedback training promote neuroplastic changes in smokers? A preliminary study](#). 1st Scientific Summit "Tobacco Harm Reduction: Novel products, Research & Policy". June 8, 2018. Kalithea, Greece.
7. Chalas N., Paraskevopoulos E., Kartsidis P., **Styliadis C.**, Bamidis P. (2018). [An M/EEG analysis pipeline for event related source connectivity estimation](#). World Congress on Medical Physics & Biomedical Engineering IUPESM 2018, 3-8 June 2018, Prague, Czech Republic
8. Frantzidis C., Gkivogkli P., **Styliadis C.**, Paraskevopoulos E., Chriskos P., Gilou S., Plomariti C., Pandria N., Karagianni M., Fotopoulos D., Ntakakis G., Bamidis P.D., Kourtidou-Papadeli C. (2018). [Recent advances in sleep neuroscience for extreme environments and its terrestrial](#)

[applications](#). World Congress on Medical Physics & Biomedical Engineering IUPESM 2018, 3-8 June 2018, Prague, Czech Republic

9. **Styliadis, C.**, Ioannides, A. A., Bamidis, P. D., Papadelis, C. (2018). [Mapping the spatiotemporal evolution of emotional processing](#). The International and European Societies of Magnetoencephalography: 50 Years of MEG. 20-21 April 2018, Poros, Greece

2017

10. Frantzidis C., **Styliadis C.**, Paraskevopoulos E., Gkivogkli P., Chriskos P., Pandrias D., Pandria N., Spachos D., Kartsidis P., Karagianni M., Athanasiou A. Kalamaras G., Panera A, Sidiropoulos S., Kovatsi L.K., Kapoukranidou D., Lyberaki E., Iliadis S., Makedou K., Kourtidou-Papadeli C., Siountas A., Pataka A., Argyropoulou-Pataka P., Bamidis P.D. (2017). [Contemporary methods for smoking cessation, based on neurosciences: The SmokeFreeBrain project](#) (Originally in Greek). 26th Panhellenic Pulmonary Congress. November 9-12, Athens, Greece.
11. Kartsidis, P., **Styliadis, C.**, Karagianni, M., Zilidou, V., Konstantinidis, E., Katsarou, Z., Bostantjopoulou, S., Hadjileontiadis, L. J., Bamidis, P.D. (2017). [Neuroprotective effects of physical activity in Parkinson's disease: a resting state EEG study on the WebFitForAll efficacy](#). 7th Panhellenic Conference on Biomedical Technologies, 7 April 2017, Athens, Greece

2016

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15. Chasiotou, V., **Styliadis, C.**, Romanopoulou, E., Bratsas, C., Bamidis, P.D. (2016). [Statistical evaluation of intentions of adults towards smoking advertisements](#). Front. Hum. Neurosci. Conference Abstract: SAN2016 Meeting. doi: 10.3389/conf.fnhum.2016.220.00098
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2015

18. **Styliadis, C.**, Paraskevopoulos, E., Bamidis, P. D. (2015). [Cortical connectivity of emotional processing among young and older adults](#). FENS Featured Regional Meeting (FFRM), 7-10th October, Thessaloniki, Greece
19. Bamidis, P. D., **Styliadis, C.**, Paraskevopoulos, E., Frantzidis C. (2015). Analysing data from affective neuroscience protocols. FENS Featured Regional Meeting (FFRM), 7-10th October, Thessaloniki, Greece

2014

20. **Styliadis, C.**, Ioannides, A. A., Bamidis, P. D., Papadelis, C. (2014). [Arousal and valence influence on spatiotemporal patterns of brain activity elicited by visual affective stimuli](#). 19th International Conference on Biomagnetism, BIOMAG, 24-28 August 2014, Halifax, Canada
21. **Styliadis, C.**, Ioannides, A. A., Bamidis, P. D., Papadelis, C. (2014). [Distinct cerebellar lobules encode arousal and valence in specific time windows: an MEG study](#). Organization for Human Brain Mapping, OHBM, 8-12 June 2014, Hamburg, Germany (**Invited Talk**)

22. **Styliadis, C.**, Ioannides, A. A., Bamidis, P. D., Papadelis, C. (2014). [Segregation of Emotional Function in Subcortical Structures: MEG Evidence](#). In XIII Mediterranean Conference on Medical and Biological Engineering and Computing 2013 (pp. 403-406). Springer International Publishing. doi: 10.1007/978-3-319-00846-2_100
23. Klados, M. A., **Styliadis, C.**, Bamidis, P. D. (2014). [A Short Review on Emotional Recognition Based on Biosignal Pattern Analysis](#). In XIII Mediterranean Conference on Medical and Biological Engineering and Computing 2013 (pp. 787-790). Springer International Publishing. doi: 10.1007/978-3-319-00846-2_195
24. **Styliadis, C.**, Konstantinidis, E., Billis, A., Bamidis, P. (2014). [Employing affection in elderly healthcare serious games interventions](#). In Proceedings of the 7th International Conference on Pervasive Technologies Related to Assistive Environments (p. 32). ACM. doi: 10.1145/2674396.2674456
25. **Styliadis, C.**, Ioannides, A. A., Bamidis, P. D., Papadelis, C. (2014). Sub-regional functional specificity of sub-cortical structures underlying emotional valence and arousal: MEG evidence. SAN Meeting 30 January-2 February 2014, Utrecht, Netherlands

2013

26. **Styliadis, C.**, Klados, M. A., Konstantinidis, E.I., Billis, A., Bamidis, P. D. (2013). [Spatiotemporal activity in affection and its disorders: The STHENOS approach](#). 5th Panhellenic Conference on Biomedical Technologies, 4-6 April 2013, Athens, Greece
27. Klados, M. A., **Styliadis, C.**, Frantzidis, C., Konstantidis, E., Mpillias A., Bamidis, P.D. (2013). [Neurofeedback and Affective Disorders](#). 5th Panhellenic Conference on Biomedical Technologies, 4-6 April 2013, Athens, Greece
28. Billis, A., Papageorgiou, E.I., Frantzidis, C., Konstantinidis, E. I., Astaras, A., Klados, M.A., **Styliadis, C.**, Bamidis, P.D. (2013). [Towards unobtrusive sensor based decision support system for independent living: The case of the USEFIL project](#). 5th Panhellenic Conference on Biomedical Technologies, 4-6 April 2013, Athens, Greece

2012

29. **Styliadis, C.**, Ioannides, A. A., Bamidis, P. D., Papadelis, C. (2012). [The role of cerebellum in the temporal regulation of emotional processing](#). 18th International Conference on Biomagnetism, BIOMAG, 26-30 August 2012, Paris, France
30. Lithari, C., Bamidis, P., Fragou, D., **Styliadis, H.**, Braun, C., Papadelis, C. (2012). [Acute alcohol intake affects the emotional responses in human brain](#). 18th International Conference on Biomagnetism, BIOMAG, 26-30 August 2012, Paris, France
31. **Styliadis, C.**, Papadelis, C., Bamidis, P. D., Ioannides, A. A. (2012). Emotion and cognitive and physical training, 1st Conference on Neuropsychology for the "THIRD AGE", 18-21 October 2012, Thessaloniki, Greece (**Invited Talk**)

2011

32. **Styliadis, C.**, Papadelis, C., Bamidis, P. D., Ioannides, A. A. (2011). Gender differences across valence and arousal. SAN Meeting 5-8 May 2011, Thessaloniki, Greece (**Invited Talk**)
33. **Styliadis, C.**, Papadelis, C., Bamidis, P. D., Ioannides, A. A. (2011). Neuroimaging of emotion on healthy participants. 7th Panhellenic Conference on Alzheimer's Disease and Related Disorders, 16-20 February 2011, Thessaloniki, Greece (**Invited Talk**)

2010

34. **Styliadis, C.**, Papadelis, C., Bamidis, P. D. (2010, January). [Neuroimaging of emotional activation: Issues on Experimental Methodology, Analysis and Statistics](#). In XII Mediterranean Conference on Medical and Biological Engineering and Computing 2010 (pp. 434-437). Springer Berlin Heidelberg. doi: 10.1007/978-3-642-13039-7_109

2008

35. Kourtidou-Papadeli, C., Papadelis, C., Bamidis, P.D., Vlachogiannis, E., **Styliadis, C.**, Perantoni E. (2007). [Cognitive performance of pilots with mild obstructive pulmonary disease under mental stress and hypoxia](#). 5th International Meeting of Aerospace Medicine & 6th Workshop of Clinical Aviation, 29th August - 2nd September 2007, Skiathos, Greece

Distinctions/Awards

Hellenic Foundation for Research and Innovation (HFRI), 2nd Call for H.F.R.I. Research Projects to Support Post-Doctoral Researchers

3rd in ranking for Engineering Sciences & Technology scientific area ([Proposal #314](#))

Cover in a journal: a figure of the paper 'Distinct cerebellar lobules process arousal, valence and their interaction in parallel following a temporal hierarchy' was selected by the editorial board of NeuroImage as a cover of the journal issue [110](#)

Other scientific activity

Member of scientific organizations and societies

Human Affectome Project, Neuroqualia, Nova Scotia, Canada

Hellenic Society of Biomedical Technology (ELEVIT), Athens, Greece

Neuroscience of Cognition and Affection group (NCA), Thessaloniki, Greece

Group of Applied and Affective Neuroscience (GAAN), Thessaloniki, Greece

Member of conference organizing committee

30th International Symposium on Computer-Based Medical Systems - CBMS 2017, Thessaloniki, Greece

Society for Applied Neuroscience conference 2016, 6-9 October 2016, Corfu, Greece

Society for Applied Neuroscience conference 2011, 5-8 May 2011, Thessaloniki, Greece

Reviewer in scientific journals

PLOS One, Frontiers in Aging Neuroscience, Frontiers in Human Neuroscience, Frontiers in Digital Health-Connected Health, Neuroscience, International Journal of Psychophysiology, Psychiatry Research: Neuroimaging

Mentoring

Informal supervision (Supervisor: Panagiotis Bamidis)

Ph.D. students: Panagiotis Kartsidis, Niki Pandria

MSc student: Chrysa Karali

Graduate student: Alexandra Anagnostopoulou, Vasileios Xefteris, Christonikos Zacharopoulos

Research interests

MEG/EEG, Affective and Cognitive Neuroscience, Emotional Processing and Emotional Wellbeing, Cognitive Aging, Developmental and Degenerative Disorders, Training-Induced Plasticity

Computer skills

BESA (Research, MRI, Statistics), Brainstorm, CTF Software Suite, EEGLAB, SPM (Anatomy, SwE, SnPM), Brain Connectivity Toolbox, Network based Statistics Toolbox, Matlab, SPSS, Neurobs Presentation, Linux, Windows, Microsoft Office, Corel Draw Suite, Photoshop

Languages

Native language: **Greek**

Other language: **English (Certificate of Lower in English)**

Self-assessment European level (*)	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	

English

| Excellent Excellent Excellent Excellent Excellent

(*) *Common European Framework of Reference for Languages*

References

Panagiotis Bamidis, Ph.D., Professor of Medical Education Informatics, Medical Physics Laboratory, Medical School, Faculty of Health Sciences, AUTH, PO Box 376, 54124, Thessaloniki, GREECE.
bamidis@med.auth.gr

Andreas Ioannides, Ph.D., Laboratory for Human Brain Dynamics, AAI Scientific Cultural Services Ltd., Office 501, Galaxias Building Block A, 33 Arch. Makarios III Avenue, 1065, Nicosia, CYPRUS.
a.ioannides@aaiscs.com

Christos Papadelis, Ph.D., Director of Research at the Jane and John Justin Neurosciences Center of Cook Children's Health Care System, Fort Worth, TX, USA.
christos.papadelis@cookchildrens.org

Evangelos Paraskevopoulos, Ph.D., Lecturer of Psychology, University of Cyprus, 1 Panepistimiou Avenue, 2109 Aglantzia, Nicosia, P.O. Box 20537, 1678 Nicosia, CYPRUS. parasvag@gmail.com