

## **Panagiotis Simos, Ph.D.**

### **Education**

University of Crete, Department of Social Studies	B. A.-Major in Psychology (1990)
Southern Illinois University	M.A. in Psychology (1993)
Southern Illinois University	Ph.D. in Experimental Psychology-Biopsychology (1995)

### **ACADEMIC APPOINTMENTS**

1995-1996	Post-doctoral Fellow, Department of Neurosurgery, University of Texas-Houston.
1996-2001	Assistant Professor, Department of Neurosurgery, The University of Texas-Houston, Medical School,
2001-2003	Associate Professor, Department of Neurosurgery, The University of Texas-Houston, Medical School.
2003-2008	Associate Professor, Department of Psychology, University of Crete, Greece.
2008-2012	Professor, Department of Psychology, University of Crete, Greece.
2012-2016	Adjunct Professor, Department of Pediatrics, University of Tennessee Health Science Center
2013-	Professor of Developmental Neuropsychology, School of Medicine, University of Crete, Greece.
2014-	Researcher, Institute of Computer Science, Computational Medicine Laboratory, FORTH

### **CLINICAL APPOINTMENTS**

1995-1996	Electrophysiology specialist, Intraoperative Electrophysiological Monitoring & Microelectrode-assisted Pallidotomy, University of Texas-Houston/ Herman Memorial Hospital.
1997-2003	Presurgical mapping of language-specific cortex using Magnetic Source Imaging (MSI) & Presurgical localization of epileptic foci using MSI, University of Texas-Houston/ Herman Memorial Hospital.
2013-present	Neuropsychology Service (Adult and Child), Psychiatry Clinic, Herakleion University Hospital, Head.

### **SELECTED RESEARCH AND OTHER EXTERNAL SUPPORT (since 2013)**

- Co- Investigator - *Sleep Apnea (OSA) and poor sleep as Risk Factors for decreased cognitive performance in patients with Mild Cognitive Impairment: the Cretan Aging Cohort (CAC)*. Faculty Research Support Grant (2019-2022; Total budget [UoC]: €199,000).
- Co-Principal Investigator - *Assigning Meaning to the Actions of Other Subjects: Neural Correlates - AMAOS*. Hellenic Foundation for Research and Innovation, Faculty Research Support Grant (2019-2022; Total budget [FORTH]: €95,000).
- Principal Investigator – *Novel approaches for community-based diagnosis and psychosocial interventions of elders with mild cognitive impairment*. Municipality of Herakleion (2019-2020; Total budget [FORTH]: €100,000).
- Co-Principal Investigator – *Predicting effective adaptation to breast cancer to help women BOUNCE back* (project ID 777167), Horizon 2020-Personalized Medicine. Total budget: €5,000,000 (FORTH budget: €760,000).
- Post-doctoral fellowship supervisor/co-PI - *Cognitive, psychoemotional and neuroimaging predictors of disease progression in the early stages of Multiple Sclerosis*. Hellenic Foundation for Research and Innovation, Post-Doctoral Fellowship Grant (Total budget [UoC]: €150,000).
- Co-Principal Investigator – Parallel algorithms for very large tensor processing (PARTENSOR; Operational Programme Competitiveness, Entrepreneurship and Innovation 2014-2020 (EPAnEK), Total budget: 589,500; UoC budget €82,000).
- Co-Principal Investigator – Predicting effective adaptation to breast cancer to help women BOUNCE back (project ID 777167), Horizon 2020-Personalized Medicine. Total budget: €5,000,000 (FORTH budget: €760,000).
- Co-investigator – Mental Simulation of Action (MESI). Aristeia II Program, Operational Programme for Education and Lifelong Learning 2007-2013 (E.P.E.D.V.M.) of the NSRF (2007 - 2013), 2014-Fall 2015.
- Principal Investigator – Advanced Age: Designing a protocol for the Evaluation of Cognitive Functions and Quality of Life and Evidence-Based Interventions. Cross-border Cooperation Programme “Greece-Cyprus 2007-2013”, co-funded by European Union and National Funds Total budget: €150,000.
- Principal Investigator - Cognitive, psychosocial, and physiological aspects of patient adaptation and well-being in autoimmune chronic diseases: A longitudinal study of multiple sclerosis and rheumatoid arthritis. Aristeia I Program, Operational Programme for Education and Lifelong Learning 2007-2013 (E.P.E.D.V.M.) of the NSRF (2007 - 2013), Fall 2012-Fall 2015, Total budget: €291,000.

## **SELECTED PEER-REVIEWED JOURNAL ARTICLES**

(total N=203, 4.450 citations in Scopus, h index = 35; 9.960 citations in Google Scholar, h index = 54)

### ***Functional Brain Imaging***

- Panou T, Kavroulakis E, Mastorodemos V, Pouli S, Kalaitzakis G, Spyridaki E, Maris TG, Simos P, Papadaki E. (2021). Myelin content changes in Clinically Isolated Syndrome and Relapsing- Remitting Multiple Sclerosis: associations with lesion type and severity of visuomotor impairment. *Multiple Sclerosis and Related Disorders*, in press.
- Pentari A, Tzagkarakis G, Tsakalides P, Simos P, Bertsias G, Kavroulakis E, Marias K, Simos NJ, Papadaki E. Changes in resting-state functional connectivity in neuropsychiatric Lupus: A dynamic approach based on recurrence quantification analysis. *Biomedical Signal Processing and Control*, in press.
- Papadaki E, Mastorodemos V, Panou T, Pouli S, Spyridaki E, Kavroulakis E, Kalaitzakis G, Maris TG, Simos P. (2021). T2 Relaxometry Evidence of Microstructural Changes in Diffusely Abnormal White Matter in Relapsing-Remitting Multiple Sclerosis and Clinically Isolated Syndrome: Impact on Visuomotor Performance. *J Magn Reson Imaging*, 54(4):1077-1087.
- Papadaki, E., Kavroulakis, E., Bertsias, G., Fanouriakis, A., Karageorgou, D., Sidiropoulos, P., Papastefanakis, E., Boumpas, D., Simos, P. (2019). Regional cerebral perfusion correlates with anxiety in neuropsychiatric SLE: Evidence for a primary mechanism distinct from depression. *Lupus*, 28, 1678-1689.
- Papadaki, E., Kavroulakis, E., Kalaitzakis, G., Karageorgou, D., Makrakis, D., Maris, T., Simos, P. (2019). Age-related deep white matter changes in myelin and water content: a T2 relaxometry study. *Journal of Magnetic Resonance Imaging*, 50, 1393-1404.
- Savaki HE, Kavroulakis E, Papadaki E, Maris T, Simos PG. (2021). Action observation responses are influenced by movement kinematics and target identity. *Cerebral Cortex*, Jul 14:bhab225.
- Simos PG, Kavroulakis E, Maris T, Papadaki E, Boursianis T, Kalaitzakis G, Savaki HE. (2017). Neural foundations of overt and covert actions. *Neuroimage*, 152, 482-496.
- Papadaki, E., Kavroulakis, E., Manolitsi, K., Makrakis, D., Papastefanakis, E., Tsagaraki, P., Papadopoulou, S., Zampetakis, A., Malliou, M., Vakis, A., & Simos, P. (2020). Cerebral perfusion disturbances in chronic mild traumatic brain injury correlate with psychoemotional outcomes. *Brain Imaging and Behavior*, Jul 30. doi: 10.1007/s11682-020-00343-1.
- Daboudi, M., Papadaki, E., Vakis, A., Chlouverakis, G., Makrakis, D., Karageorgou, D., Simos, P., Koukouraki, S. (2019). Brain SPECT imaging and perfusion MRI: do they provide complementary information about the tumor lesion and its grading? *Clinical Radiology*, 74(8):652.e1-652.e9.
- Papadaki, E., Fanouriakis, A., Kavroulakis, E., Karageorgou, D., Sidiropoulos, P., Bertsias, G., Simos, P., Boumpas, D. (2018). Neuropsychiatric lupus or not? Cerebral hypoperfusion by perfusion-weighted MRI in normal appearing white matter in primary neuropsychiatric lupus erythematosus. *Annals of Rheumatic Diseases*, 77, 441-448.
- Kavroulakis, E., Simos, P., Kalaitzakis, G., Maris, T., Zaganas, I., Panagiotakis, S., Basta, M., Vgontzas, A., Papadaki, E. (2018). Myelin content changes in probable Alzheimer's disease and mild cognitive impairment: associations with age and severity of neuropsychiatric impairment. *Journal of Magnetic Resonance Imaging*, 47, 1359-1372.
- Papadaki, E., Simos, P.G., Panou, T., Mastorodemos, V., Maris, T.G., Karantanas, A.H., & Plaitakis, A. (2014). Hemodynamic Evidence Linking Cognitive Deficits in Clinically Isolated Syndrome to Regional Brain Inflammation. *European Journal of Neurology*, 21, 499-505.
- Simos, P.G., Rezaie, R., Fletcher, J.M., & Papanicolaou, A.C. (2013). Time-constrained functional connectivity analysis of cortical networks underlying phonological decoding in typically developing school-aged children: A magnetoencephalography study. *Brain & Language*, 125, 156-164.
- Simos, P.G., Rezaie, R., Fletcher, J.M., Juranek, J., Passaro, A.D., Li, Z., Cirino, P., & Papanicolaou, A.C. (2011). Functional disruption of the brain mechanism for reading: Effects of comorbidity and task difficulty among children with developmental learning problems. *Neuropsychology*, 24, 520-534.
- Dimitriadis, S.I., Laskaris, N.A., Simos P.G., Micheloyannis, I., Fletcher, J.M., Rezaie, R., & Papanicolaou, A.C. (2013). Altered temporal correlations in resting-state connectivity fluctuations in children with reading difficulties detected via MEG. *Neuroimage*, 83, 307-17.
- Simos, P.G., Fletcher, J.M., Bergman, E., Breier, J.I., Foorman, B.R., Castillo, E.M., Davis, R.N., Fitzgerald, M., & Papanicolaou, A.C. (2002). Dyslexia-specific brain activation profile become normal following successful remedial training. *Neurology*, 58, 1203-13.

## **Neuropsychology: Adult**

- Antypa, D, Kagialis, A, Tsirlis, K, Tsepeneka, S, Simos, P. (2021). Changing memories by interference: The effect of emotional dimensions in reconsolidation of episodic memories. *Cognition and Emotion*, 35(7):1400-1406.
- Papastefanakis, E, Dimitraki G, Ktistaki, G, Fanouriakis A, Karamaouna P, Bardos AN, Kalitsakis I, Adamichou C, Gergianaki I, Repa A, Bertsias G, Sidiropoulos P, Karademas EC, Simos P. Screening for Cognitive Impairment in Systemic Lupus Erythematosus: Application of the Montreal Cognitive Assessment (MoCA) in a Greek patient sample. *Lupus*, in press.
- Makanikas, K., Andreou, G., Simos, P., Chartomatsidou, E. (2021). Effects of Obstructive Sleep Apnea Syndrome (OSAS) and medical comorbidities on language abilities. *Frontiers in Neurology*, 12:721334.
- Kasselimis, D., Angelopoulou, G., Simos, P., Petrides, M., Peppas, C., Velonakis, G., Tavernarakis, A., Evdokimidis, I., Potagas, C. (2018). Working memory impairment in aphasia: The issue of stimulus modality. *Journal of Neurolinguistics*, 48, 104-116.
- Zaganas IV, Simos P, Basta M, Kapetanaki S, Panagiotakis S, Koutentaki I, Fountoulakis N, Bertsias A, Duijker G, Tziraki C, Scarmeas N, Plaitakis A, Boumpas D, Lionis C, Vgontzas AN. (2018). The Cretan Aging Cohort: Cohort Description and Burden of Dementia and Mild Cognitive Impairment. *American Journal of Alzheimers Disease and Other Dementias*, 34, 23-33.
- Kasselimis DS, Simos PG, Peppas C, Evdokimidis I, Potagas C. (2017). The unbridged gap between clinical diagnosis and contemporary research on aphasia: A short discussion on the validity and clinical utility of taxonomic categories. *Brain & Language*, 164, 63-67.
- Simos P., Ktistaki G, Dimitraki G, Papastefanakis E, Kougkas N, Fanouriakis A, Gergianaki I, Bertsias G, Sidiropoulos P, & Karademas E.C. (2016). Cognitive deficits early in the course of rheumatoid arthritis. *Journal of Clinical and Experimental Neuropsychology*, 38, 820-829.
- Nidos A., Kasselimis D., Simos A., Rentzos M., Alexakis T., Zalonis I., Zouvelou V., Potagas C., Evdokimidis I., and Woolley S.C. (2016). Frontotemporal dysfunction in Amyotrophic Lateral Sclerosis: A discriminant function analysis. *Neurodegenerative Diseases*, 16, 140-146.
- Constantinidou, G., Zaganas, I., Papastefanakis, E., Kasselimis, D., Nidos, A., & Simos, P.G. (2014). Age-related decline in verbal learning is moderated by demographic factors, working memory capacity and presence of amnestic Mild Cognitive Impairment. *Journal of the International Neuropsychological Society*, 20, 822-35.
- Simos P.G., Kasselimis D., Potagas C., & Evdokimidis I. (2014). Verbal comprehension ability in aphasia: demographic and lexical knowledge effects. *Behavioural Neurology*, i2014:258303.
- Kasselimis D., Potagas C., Simos P.G., Economou, A., & Evdokimidis I. (2013). Are memory deficits dependent on the presence of aphasia in left brain damaged patients? *Neuropsychologia*, 51, 1773-6.
- Simos, P.G., Kasselimis, D., & Mouzaki, A. (2011). Age, gender, and education effects on vocabulary measures in Greek. *Aphasiology*, 25, 492-504.

## **Neuropsychology: Learning Disabilities**

- Papaioannou, S., Mouzaki, A., Sideridis, G.D., Antoniou, F., Padeliadu, S., Simos, P.G. (2016). Cognitive and academic abilities associated with symptoms of attention-deficit/hyperactivity disorder: a comparison between subtypes in a Greek non-clinical sample. *Educational Psychology*, 36, 138-158.
- Protopapas, A., Simos, P.G., Parilla, R. (2016). In search of Matthew effects in reading. *Journal of Learning Disabilities*, 49, 499-514.
- Protopapas, A., Mouzaki, A., Sideridis, G., Kotsolakou, A., & Simos, P.G. (2013). The role of vocabulary in the context of the simple view of reading. *Reading and Writing Quarterly*, 29, 168-202.
- Protopapas, A., Simos, P.G., Sideridis, G., & Mouzaki, A. (2012). The components of the simple view of reading: A confirmatory factor analysis. *Reading Psychology*, 33, 217-240.
- Protopapas, A., Sideridis, G., & Mouzaki, A. Simos, P.G., & Morgan, P. (2011). Matthew Effects in Reading Comprehension: Myth or Reality? *Journal of Learning Disabilities*, 44, 402-20.
- Simos, P., Sideridis, G.D., Protopapas, A., & Mouzaki, A. (2011). Psychometric Evaluation of a Receptive Vocabulary Test for Greek Elementary Students. *Assessment for Effective Intervention*, 37, 34-49.

## **Mental Health / Health Psychology**

- Karademas, EC, Simos P, Pat-Horenczyk, R, Roziner, I, Mazzocco, K, Sousa, B, Stamatakos, G, Cardoso, F, Frasquilho, D, Kolokotroni, E, Marzorati, C, Mattson, J, Oliveira-Maia, A.J, Perakis, K, Pettini, G, Tsakou, G, & Poikonen-

- Saksela, P. The Interplay Between Trait Resilience and Coping Self-efficacy in Patients with Breast Cancer: An international Study. *Journal of Clinical Psychology in Medical Settings*, in press.
- Flouri, M., Karadimas, E., Simos, P. The relationship between dissociation and acute pain: The impact of prior and reactive dissociation. *Current Psychology*, In press
- Karademas, EC, Simos P, Pat-Horenczyk, R, Roziner, I, Mazzocco, K, Sousa, B, Oliveira-Maia, A.J, Stamatakos, G, Cardoso, F, Frasquilho, D, Kolokotroni, E, Marzorati, C, Mattson, J, Pettini, G, & Poikonen-Saksela, P. (2021). Cognitive, Emotional, and Behavioral Mediators of the Impact of Coping Self-efficacy on Adaptation to Breast Cancer: An International Prospective Study. *Psycho-Oncology*, 30(9):1555-1562.
- Basta, M., Micheli, K., Simos, P., Koutentaki, E., Zaganas, I., Panagiotakis S, Koutra, K., Lionis, C., Vgontzas, A. Frequency and risk factors associated with depression in elderly visiting Primary Health Care (PHC) settings: Findings from the Cretan Aging Cohort. *Journal of Affective Disorders Reports*, in press.
- Kourou, K., Manikis, G., Poikonen-Saksela, P., Mazzocco, K., Pat-Horenczyk, R., Souza, B., Oliveira-Maia, A., Pettini, G., Kondylakis, H., Marias, K., Karademas, E., Simos, P., Fotiadis, D. (2021). A machine learning-based pipeline for modeling medical, socio-demographic, lifestyle and self-reported psychological traits as predictors of mental health outcomes after breast cancer diagnosis: An initial effort to define resilience effects. *Computers in Biology and Medicine*, Apr;131:104266.
- Lemonaki, P., Xanthopoulou, Δ., Bardos, A.N., Karademas, E.C., & Simos, P.G. Burnout and Job Performance: A Two-Wave Study on the Mediating Role of Employee Cognitive Functioning. *European Journal of Work and Organizational Psychology*, in press.
- Basta, M., Micheli, K., Karakonstantis, S., Koutra, K., Dafermos, V., Drakaki, M., Soumaki, E., Simos, P., Anagnostopoulos, D., Vgontzas, AN., Papadakis, N. (2021). Suicidal ideation in adolescents and young adults in Greece: prevalence and association with sociodemographic variables, mental health and substance use. *European Child & Adolescent Psychiatry*, 30(7):1129-1136.
- Koutentaki, E., Basta, M., Simos, P., Koutra, K., Stefanakis, Z., Vgontzas, A. (2020). Physical and mental health burden of caregivers of patients with psychiatric disorders. *Psychiatry Research*, 293, 113431.
- Pampouchidou, A, Sfakianakis, S, Kazantzaki, E., Apostolaki, I., Argyraki, K., Meriaudeau, F., Marias, K., Yang, F., Tsiknakis, M., Basta, M., Vgontzas, A.N., & Simos, P. (2020). Automated Facial Video-Based Recognition of Anxiety and Depression Levels: Cross-Corpus Validation. *Machine Vision and Applications*, 32, 30.
- Pampouchidou, A, Simantiraki, O, Fazlollahi, A, Pediaditis, M., Manousos, D., Roniotis, A., Giannakakis, G., Meriaudeau, F., Simos, P., Marias, K., Yang, F., Tsiknakis, M. (2019). Automatic Assessment of Depression Based on Visual Cues: A Systematic Review. *Transactions on Affective Computing*, 4, 445-470.
- Karademas EC, Dimitraki G, Papastefanakis E, Ktistaki G, Repa, A., Gergianaki I, Bertsias G, Sidiropoulos P, Mastorodimos, V., Simos P. Emotion Regulation Contributes to the Well-being of Patients with Autoimmune Diseases Through Illness-related Emotions: A Prospective Study. *Journal of Health Psychology*, in press.
- Karademas EC, Dimitraki G, Papastefanakis E, Ktistaki G, Gergianaki I, Bertsias G, Sidiropoulos P, Simos P. (2018). Adaptation to an Inflammatory Rheumatic Disease: Do Illness Representations Predict Patients' Physical Functioning Over Time? A Complex Relationship. *Journal of Behavioral Medicine*, 41, 232-242.
- Koutra, K., Triliva, S., Roumeliotaki, T., Basta, M., Simos, P., Lionis, C., Vgontzas, A.N. (2015) Impaired family functioning in psychosis and its relevance to relapse: a two-year follow-up study. *Comprehensive Psychiatry*, 62, art. no. 51534, pp. 1-12.
- Mitsopoulou, E., Kafetsios, K., Karademas, E., Papastefanakis, E., & Simos, P.G. (2013). The Greek Version of the Difficulties in Emotion Regulation Scale: Testing the Factor Structure, Reliability and Validity in an adult Community Sample. *Journal of Psychopathology and Behavioral Assessment*, 35, 123-131.