# CURRICULUM VITAE OF GEORGE KOSTOPOULOS

January 2020



Born : April 29, 1949, Athens, Greece
Citizenship : Greek and Canadian
Status : Married - two children
Languages : Greek and English (and only some German and French)
Degrees : M.D., October 1972, Medical School, National University of Athens, Greece
Ph.D., April 1977, Physiology, University of Saskatchewan, Canada
Current position: Emeritus Professorof of Physiology, Medical School, University of Patras, Greece

<u>Teaching</u>: Undergraduate courses: Medical Physiology and Neurophysiology, Graduate courses: Neuroscience, Neurophysiology for Engineers.Neuroinformatics, Bioethics Supervised 13 PhD Theses

**<u>Research Interests</u>**: My long term research interests concern cellular and system neuroscience and altough rather diverse, they relate mostly to the basic mechanisms underlying brain rhyhmical activities in both physiology (sleep) and disease (epilepsy). Methodologically, they have gradually developed from experimental studies at the neuronal and synaptic transmission level to that of several animal models and in the last 2 decades to the level of human EEG and MEG. The particular research topics include mechanisms of Hyperexcitability underlying Epilepsy, absence seizures, Adenosine as endogenous antiepileptic, Age-induced changes in hippocampal excitability, Neuronal Plasticity and memory mechanisms, Mathematical models of synaptic transmission and of epileptogenesis, differentiation within Hippocampus, Brain rhythmogenesis, EEG source localization, Sleep Physiology, Bioethics and Neuroethics and Theoretical Neuroscience

## Academic Appointments :

Currently Professor Emeritus and Director of Neurophysiology Unit in the Department of Physiology, Medical School, University of Patras, Greece

1991-2016, Professor

1984-1991: Associate Professor, 1982-1984 : Assistant Professor, (as above)

Sept. 87-Aug.88: Visiting Assoc. Prof., Deps of Physiology and of Neurology and Neurosurgery, McGill Univ, Canada Summer 1985: Visiting Professor, University of Zurich

Sept. 79-May 82: Associate teaching staff, Physiology, McGill University, Canada

Dec. 78 -May 82: Assistant Professor (full time), Neurol. and Neurosurgery, M.N.I., McGill University

### Academic Administration :

2013 - today: Member, Neurobiology Resource Mapping Task Force, International League Against Epilepsy.

2005 - 2016 Chairman, Dep. of Physiology, Medical School, University of Patras

2004 - today: Member, Education Editorial Board, International Brain Research Organization (IBRO)

2010- today: Coordinator, Intra-university "Neuroscientists Network"

2011-2012: Member, Scientific Advisory Committee for the 10th ECE - London 2012

2009-2010 Co-chair, International Organizing Committee, "9th European Congress on Epileptology", Rhodes, Greece,

2009 - 2012 Greek Delegate in EU COST-ACTION 0605: Consciousness: A transdisciplinary, Integrated Approach.

2003 -: Member, International Scientific advisory Board, IBRO

2002 - 2008: Scientific Director, U of Patras Graduate Studies Program: "Informatics for Life Sciences".

1995 - 1998: Member, Publications Committee, IBRO

1990 - 1997 : Member, Governing Council, International Brain Research Organization (IBRO).

1989 Sept -Sep.90: Member, U of Patras Committee for Research

1988 Sept -Aug.89: Director, 2nd Basic Medical Sciences Section, University of Patras

1988 Sept -Aug.89 and 2001-2002: Member, Medical School Executive Council

1988 Oct - Jan.90: member and first President, Hellenic Soc. for Neuroscience

1986 Sept -Aug.87: Member, University Senate, U. of Patras (representing the Medical School)

1984 Sept -Aug.85: Acting Chairman, Dep. of Physiology, Medical School, Univers. of Patras

## Supervision of PhDs:

C. Psarropoulou, 1990; G. Antoniades, 1995; C. Papatheodoropoulos, 1996; A. Badea, 2003; O. Zainea, 2005; P. Georgopoulos, 2008; T. Petrides, 2008; I. Nikita, 2009, V. Kokkinos, 2010 και 2016, A. Popescu 2014, Koupparis (2016), D. Sakellariou (2016).

### Work in the peer review system:

- 1980- today - **Evaluator of research grant applications** to: (a) European Commission: BIOMED; BIOTECHNOLOGY; ICT5th Framework; Neurosciences, 2004-2005\_NEST; 2004\_FP6\_IST\_BIO\_IIS; 2007\_ICT\_converge; 2007\_FP7\_ICT-2007-2; 2007\_ERC; 2009\_FP7\_ICT-C; 2011\_FP7\_ICT\_C-Young Researchers-9.3. 2011\_FP7\_ICT\_2011-7. (b) Foreighn National Programs: University Funding Program of the Italian Ministry of University and Scientific Research, Netherlands Organization for Scientific Research (NOW) Open Program and Serbian Ministry of Sciences; (c) Greek Programs: several programms of Greek Secretariat of Research and Technology, Greek Scholarships Foundation, Ministry of Health and Ministry of Education, Bodosakis Foundation Prizes.

**Member of Doctoral Thesis Examination Boards** in several Greek Universities as well as abroad: McGill University/Canada; University of Saskatchewan/Canada, Radboud University Nijmegen, Netherlands etc.

Associate Editor of "Journal of Epileptology" in the field of experimental research. 2010 - today -

Member, Editorial Board of: "Brain Research Bulletin", 1999-2012, "Dataset Papers in Neuroscience", 2012-today Reviewer for several scientific journals 1980- today -: "Brain Research", "Brain Research Bulletin", "Developmental Pharmacology and Therap.", "EEG J – Clinical Neurophysiology", "Epilepsia", "Epileptic Disorders", "Exper. Brain Res.", "J. Neuroscience Methods", "J. Pharmacology and Exp. Ther.", "Life Sciences", "Medical & Biol. Engin. & Computing", "Neurobiology of Disease", "Neuroimage", "Neuroscience", "Neuroscience Letters", "Progress in Brain Research", "Progress in Neurobiology", "The Behavioral and Brain Sciences",

### Research supported by Research Grants From:

- Medical Research Council of Canada: 79-82; while at the "Montreal Neurological Institute"

- European Science Foundation: 85-86, twining grant with Univ. of Zurich

- European Union: Human Capital and Mobility, Network grant ("Genelalized Epilepsy", 94-96 ERBCHRXCT930247, partner); Biotechnology #PL960177, 1996-1999, ECHBD (partner)

- NATO Linkage Grants with Armenia HTECH.LG #930981, CN 941358 for 1994-1996 and CRG.LG974199 for 1999-2001
- Hellenic Ministry of Education, 98-99, for establishing a "centre for tele-education in Neuroscience"
- Hellenic Ministry of Health: 90-92, 94-96

- Hellenic Secretariat of Research & Technology: several personal research grants since 1984 and grants for collaborations with Bulgaria 98-2001 and Armenia 2002-2004 (on neuronal modeling); PENED 2002-2005 (on epilepsy and on neurosteroids) - University of Patras: Program Karatheodori 2002-2004 (on epilepsy)

- European Union (STREP) FP7-ICT-2011-7, "Advanced multi-paRametric Monitoring and analysis for diagnosis and Optimal management of epilepsy and Related brain disorders". 2011-2014, agreement # 287720, ARMOR matching funds 2016-2017.

<u>Awards :</u> - Studentship, Greek State Studentship Foundation (IKY), 66-67;

- Fellowship, Medical Research Council of Canada (MRC), 75-79;
- Scholarship, MRC, 1979-1982;
- MICHAEL PRICE (International Price for Epilepsy Research), 1983;
- Visiting Scientist Award, MRC, Sept. 1987 Aug. 1988

#### **Involvement in Bioethics:**

- Member of the bioethics committees at McGill University/Canada (1979-1981) and at Univ.of Patras/Greece (>10 years).
- Organized and taught for 18 years a one semester course of bioethics for medical graduates at the University of Patras.
- Participated in the "Bioethics Advisory Board" of the Horizon 2020 Framework Program of the European Union "SmokeFreeBrain". (2015-2018). Similar contribution in the EU project "ARMOR" (2012-2016)
- One bioethics related publication (#90)

#### **Invited talks**

«Νευροβιολογία του Υπνου» 8° Πανελλήνιο Συνέδριο¨Οι διαταραχές του ύπνου στη καθημερινή πράξη., Αθήνα 5-6 Απριλίου 2019

 Οι επιληψίες ως διαταραχές νευρωνικών δικτύων ή και συστημάτων του εγκεφάλου: το παράδειγμα των κρίσεων αφαίρεσης" στο Πανελλήνιο Συνέδριο "Η Κλινική Νευροφυσιολογία στη πράξη" 23-25/10/2015, Καλαμάτα Μεσσηνίας

• "History of Neuroscience in Greece: From Alcmeon to Austerity" at the Federation of European Neuroscience Societies (FENS) Featured Regional Meeting, "Nourishing Neuroscience at the Cradle of Culture", Thessaloniki 7-10/10/2015

 "Υψηλής Συχνότητας Ταλαντώσεις ως Δείκτης Επιληπτογόνου Ζώνης", 15ο Μετεκπαιδευτικό Σεμινάριο, Πανελλήνιος Επιστημονικός Σύλλογος κατά της Επιληψίας", Αθήνα, 16/5/2015

"Στόχοι και προσδοκίες από τη Σύγχρονη Ερευνα της Επιληψίας", Εκδήλωση λαικ'ής ενημέρωσης "Η Επιληψία δεν είναι αυτό που νομίζεις", Πανελλήνιος Επιστημονικός Σύλλογος κατά της Επιληψίας", Ευγενίδιο Ιδρυμα, Αθήνα, 18/2/2015

• "Long term multimodal monitoring of epileptic patients at home: The experience of FP7-ICT project ARMOR (2011-2014)", MICHAEL FORUM, October 9th-12th, 2014, Bonn, Germany.

• "EEG and MEG Dynamics of Sound and Safe Sleep" 19th International Conference on Biomagnetism, August 24-28, 2014, Halifax, Canada.

• «Pierre Gloor: Epilepsy is a network disease". Special Symposium: The pioneers at the Montreal Neurological Institute: early concepts in today's practice. 30th International Epilepsy Congress, Montreal, 23-27 June 2013.

• "Neural correlates of losing consciousness in sleep and epilepsy" Albert Einstein College of Medicine, New York, 25 April 2013.

"EEG and MEG studies indicating cognitive processes during sleep", Universite de Montreal, Dep de Psychologie, 11 April 2013I

• "Glimpses into consciousness from the ways we lose it". Montreal Neurological Institute, Brain Imaging Center and Cognitive Neuroscience group, McGill University, Canada, 25 March 2013

• "Understanding sleep mechanisms contributes to a redefinition of the term "generalized" of absence seizures." Michael Stiftung for Epileptology, 50th Anniversary Berlin October 5-6, 2012

- "Challenges and prospects of Neuroinformatics" 2nd meeting of the IEEE student branch of the Technical University of Messolongi, 23/10/2011
- "Sleep's macro-, micro- and dynamic structure", "Society for Applied Neuroscience" meeting, Thessaloniki, Greece, May 2011
- "Recent Advances in Sleep Physiology of Interest to Psychoanalysis", International Fedration of Psychoanalytic Societies, Athens, October, 2010
- "Frontal lobe and epileptic seizures: Basic mechanisms". Teaching section, 9th European Congress of Epileptology, Rhodes June 2010.

• "Why do we sleep?" in the frame of "Searching for the Equation. Mind, Brain and Behavior" a 3-days public awareness event organized at the Pantion University, Athens by the Center of Society, Science and Art www.caid.gr, February 2010

#### Membership in Academic Societies :

1) American Physiological Society, 1982 - today. 2) American Neuroscience Society. 3) International Brain Research Organization. 4) Federation of European Neuroscience Societies, 5) Hellenic Society for Neuroscience, member, 1986 - \_\_\_ and founding president, 6) European Biomedical Research Association, founding member, 1994 - \_\_\_, 7) European Epilepsy Academy, 1999 -\_\_\_, 8) European DANA Alliance for the Brain, 2010 - \_\_\_.

### **Publications:**

**96 research papers published** in peer reviewed and CIF bearing journals and over 200 other contributions as scientific books (4), book chapters (27), editorial (1) and symposium proceedings. For the full list of publications see :

https://scholar.google.com/citations?hl=en&user=KFxgz5EAAAAJ&view\_op=list\_works&sortby=pubdate , number of citations= >4.500, h-index=37