

# BIOGRAPHY

Dr. Photios Anninos received his BS in Physics from the University of Athens (1960), Greece, his MSC in high energy physics from Syracuse University (1966)

and a PhD in Medical Physics from Syracuse University, USA (1969).

Dr. Anninos then undertook Post Doctoral training in Anatomy and brain Research Institute at the University of California, LA, USA.

He then became Assistant Professor of Biomathematics and Research Anatomist in the School of Medicine, University of California, LA, USA.

Dr. Anninos then became Assistant Professor of Physics in Concordia University of Montreal, P.Q. Canada and Associate Professor of Physics at the same University in Canada. He then moved to Greece and became Associate Professor of Neurology and Full professor of medical physics in Democritus University of Thrace Alexandroupolis, Greece.

Finally he is now Emeritus Professor in the School of Medicine Democritus University of Thrace, Alexandroupolis, Greece.

He has published more than 200 original research articles in journals including research for epilepsy, Parkinson, multiple sclerosis, autism, neural net models and in chaos theory.

## **Research Activities**

a] Nuclear Physics [High Energy Physics]  $\text{Pd} \rightarrow \text{KK} \delta$  [P] at rest in Bubble chamber. From 1960-1968

b] Theoretical Biophysics [from 1968-present]

Theoretical neural models to understand the structure and function of the Central Nervous System [CNS], models for memory, models for the abnormal function of CNS, models for the topology of the connections in CNS and finally, models for the electromagnetic radiation from the brain.

The above models were established using theoretical and computer simulation techniques.

c] Experimental Neuroelectrophysiology [1969-1980].

i] Intracellular recordings from the optic center of the cat's brain as well as Electroencephalographic [EEG] measurements in order to determine the topology of neuronal connections and also to correlate our theoretical and experimental results.

ii] Measurements with my Ph.D student J.A. Tetenes of the electromagnetic intensities using the medical linear electron accelerator in the Albert Einstein Institute [Department of Radiology] for patients with artificial cardiac pacemakers.

iii] Measurements of Magnetoencephalogram [MEG] 3 mm from the skull of the patients using electronic devices known as SQUIDS [Super-Conducting-Quantum -Interference-Devices]. The MEG measurements that we get with the SQUID we can correlate with the theoretical studies [Internat. Journal of Theor. Phys. Vol. 12, no. 1, pp. 9, 1975] in order to determine a new coordinate system which is going to inform us about the physiological state of CNS of a particular individual. Measurements of this kind have been performed [1975-1980] in the Laboratory of Biophysics in the Department of Physics of Concordia University, Montreal, Canada, in which I was the principal investigator and director of it. The continuation of the above experimental research started also in July, 1984 in the University of Munster, Munster, FRG, from a grant which was given to me from the Greek and German Ministries' of Research and Technology agreement. In this program, we succeeded to localize epileptic foci in patients suffering from epilepsy and we published the results in International Journal of Neuro-science, vol. 38, p. 149.

Since then, and specifically from May 1987 until now, we continue this kind of measurements with the SQUID in the Laboratory of Medical Physics of the Democritus University of Thrace.

In addition, we invented a method of applying weak varying external magnetic field in patients suffering from epilepsy and other neurological disorders with similar characteristics to those which are emitted from the brain of the patients.

Using this method, we were able to attenuate brain disorders (epilepsy, Parkinson, MS...) in more than a 1000 of patients.

## **Publications**

### **Neural Networks and Chaos**

E. Fournou, P. Argyrakis, P. A. Anninos [2005]

#### **Refractoriness in Poison and Gaussian First-order Neural Nets with Chemical Markers**

Neural Processing Letters (2005) 22:57-68

A. Anastasiadis, A. Kotini [2005]

#### **A Gaussian Approach to Noisy-isolated Neural Nets with Chemical Markers**

WSEAS TRANSACTIONS on BIOLOGY and BIOMEDICINE

Issue 4, Vol. 2, October 2005 p. 412

P.A. Anninos, A. Kotini, A. Papastergiou [2000]

A Neural Modeling approach to determine Structure and Function in Brain Center.  
Hadronic Journal Supplement 15, 154-184 (2000)

P.A. Anninos, P. Anastasiadis, A. Kotini [1999]

Nonlinear analysis of biomagnetic signals recorded from the umbilical artery in normal and pre-eclamptic pregnancies.

European Journal of Obstetrics and Gynecology and Reproductive Biology 85 (1999)  
159-165

P.A. Anninos, A. Kotini, P. Anastasiadis [1999]

The Chaos theory for differentiating fetal biomagnetic brain activity in normal and pre-eclamptic pregnancies.

Journal of Obstetrics and Gynaecology (1999) Vol. 19, No. 4, 365-369.

A. I. Papastergiou, P. A. Anninos, N. Tsagas, I. K. Yakinthos

A neural computer simulation model for investigating the role played by the pineal gland in C.N.S. function.

Hadronic Journal Supplement 14, 117-135 (1999)

P.A. Anninos, N. Tsagas, A. Kotini and A. Adamopoulos [1999]

The use of non-linear analysis for differentiating brain biomagnetic activity in epileptic patients before and after magnetic stimulation.

Hadronic Journal Supplement 14, 1-26 (1999)

P.A. Anninos, N. Tsagas, A. Kotini and P. Konstantinopoulos [1999]

The use of non-linear analysis for differentiating brain biomagnetic activity in normal Meniere syndrome patients before and after magnetic stimulation.

Hadronic Journal Supplement 14, 153-170 (1999)

P.A. Anninos, N. Tsagas, A. Kotini and A. Adamopoulos [1999]

The chaos theory for differentiating brain biomagnetic activity in normal and multiple sclerosis before and after magnetic stimulation.

Hadronic Journal Supplement 14, 137-151 (1999)

Adamopoulos, A , Anninos, P , Likothanassis, S, Georgopoulos, E , [1998]

Low dimensional chaotic dynamics in the magnetoencephalogram of epileptic patients.

Biosignal 1998. Brno, Czech Republic June 23-25 1998.

Adamopoulos, A , Georgopoulos, E , Anninos, P , Likothanassis, S [1998]

On the predictability of the EMG of epileptic patients using RBF networks evolved with genetic algorithms.

Biosignal 1998. Brno, Czech Republic June 23-25 1998.

Adamopoulos, A , Anninos, P , Likothanassis, S , Georgopoulos, E [1998]

Genetic algorithm methods to analyse human magnetocardiogram.

Biosignal 1998. Brno, Czech Republic June 23-25 1998.

Kotini A. & Anninos P.A. [1997]

Dynamics of Noisy Neural Nets with Chemical Markers and Gaussian-distributed Connectivities

Connection Science, No 4, 1997,381-403

- Fournou E., Argyrakis P., Kargas B. and Anninos P.A [1997]  
Hybrid Neural Nets with Poisson and Gaussian Connectivities  
Journal of Statistical Physics, Vol. 89, Nos 3-4,847-867
- Fournou,E., Argyrakis,P., Kargas,B and Anninos,P.A. [1995]  
A Gaussian approach to Neural Nets with multiple memory domains.  
Connection science, vol 7, No. 3, pp.31-33
- Fournou,E., Argyrakis,P.and Anninos,P.A. [1993]  
Neural nets with Markers and Gaussian-distributed connectivities.  
Connection science, vol 55, No. 1, pp.77-94
- Adamopoulos,A., Anninos,P.A. [1991]  
Computer simulation of epileptic behavior  
IMACS '91 Vol.3, pp. 1467-1468  
R. Vichnevetsky, J.J.H. Miller (eds.), Criterion Press, Dublin, 1991.
- Fournou,E., Argyrakis,P., Kargas,B., Anninos, P.A. [1991]  
Neural nets with chemical markers and firing threshold fluctuations.  
Trends in Biological Cybernetics, 2, 123-131
- Adamopoulos,A., Anninos,P.A. [1990]  
Dynamic behavior of neuronal networks with chemical markers  
Connection Science, vol.1, No.4, pp.393-402
- Adamopoulos,A., Anninos,P.A. [1990]  
Computer simulation of neural networks with chemical markers. Parallel processing in  
neural systems and computers.  
R.Eckmiller, G.Hartmann and G.Hauske [Eds.]  
Elsevier science publishers,Amsterdam,pp.49-52
- Anninos,P.A., Adamopoulos,A. [1989]  
Noisy neural networks with multiple memory domains Biomedical Modeling and  
simulation , J.Eisenfeld and D.S. Levine [Eds.], J.C.Baltzer AG,  
Scientific publishing Co., IMACS, pp.113-117
- Anninos,P.A., Tsagas,N., Adamopoulos,A. [1989]  
A brain model theory for epilepsy and its treatment: experimental verification using  
SQUID measurements.  
In Models of Brain Function, R.M.J.Cotterill, [Ed.],  
Cambridge University, p.405-421
- Anninos,P.A. [1988]  
Multiple memory domains with Noisy neural nets.  
12th IMACS World Congress on scientific computation, Paris, July 18-22

- Anninos,P.A. [1988]  
A neural model with multiple memory domains  
Proceedings in Neural computers, Rolf Eckmiller and Christoph.V.D.Malsburg [Eds.],  
NATO ASI Series, Springer-Verlag publ., pp. 208
- Anninos,P.A., Anogianakis,G. [1988]  
Computer simulation studies to deduce structure and function of human brain.  
In:Computer simulation in Brain Science, R.M.J.Cotterill [Ed.], Cambridge University  
Press, pp.303-315, Cambridge
- Anninos,P.A., Anogianakis,G., Apostolakis,M. [1988]  
The use of neural models exhibiting memory domains can account for complex brain  
phenomena. Workshop on "System with learning and memory abilities"  
J.Delacour and J.C.J.Levy[Eds.], Elsevier Science Publishers, B.V., North-Holland,  
313-340
- Anninos,P.A., Anogianakis,G., Apostolakis,M., Efstratiadis,S [1988]  
Simulation of the prolactin level fluctuations during pseudopregnancy in rats.  
In:Computer simulation in Brain Science, R.M.J.Cotterill [Ed.],  
Cambridge University Press, Cambridge, p.504
- Anninos,P.A., Cook,N.D. [1988]  
Neural net simulation of the Corpus Callosum  
International Journal of Neuroscience, 38, 381
- Anninos,P.A. [1987]  
A neural model theory leading to kindling effect of epilepsy  
International Journal of Neuroscience, vol.36,177
- Anninos,P.A., Anogianakis,G., Apostolakis,M., Thomas,G. [1987]  
A neural net model for the release of prolactin during pseudopregnancy in the rat  
Journal of Theoretical Biology, 129, 359
- Anninos,P.A., Kokkinidis,M. [1987]  
A mathematical formalism for the finite difference equation in neural nets with  
chemical markers.  
Journ.Theoret.Neurobiology, vol.5, page 107
- Anninos,P.A., & Anogianakis, G. [1986]  
Identification and localization of epileptic foci with the use of MEG measurements.  
Proceedings of the North-Greek Medical Conference, Thessalonica, Greece, Volume  
B.
- Kokkinidis,M., Anninos,P.A. [1985]

- Noisy neural nets exhibiting epileptic features.  
Journal of Theoret.Biology, 113, 559
- Anninos,P.A., Argyrakis,P., Skouras,A. [1984]  
A computer model for learning processes and the role of the cerebral commissures  
Biol. Cybern. 50, 5, 329
- Anninos,P.A., Kokkinidis,M. [1984]  
A neural net model for multiple memory domains  
Journal of Theoretical Biology, 109, 95-110
- Anninos,P.A., Kokkinidis,M. [1984]  
Neuronal systems with multiple memory domains  
In G.Karoutas [Ed.],  
Proceedings III International Society of Greek Neuroscientists Symposium, pp.9-14,  
Thessaloniki, 6-7 September
- Anninos,P.A., Kokkinidis,M., Skouras,A. [1984]  
Noisy Neural Nets exhibiting memory domains.  
Journal of Theoretical Biology, 109, 581
- Kokkinidis,M., Anninos,P.A. [1984]  
A neural net model for epileptic disturbances.  
Proceedings , Intern.AMSE Confer.in: Modeling of simulation, Athens, vol.4.2, page  
1-15
- Anninos,P.A., Argyrakis,P. [1983]  
A mathematical model for the decay of short-term memory with age  
Journal of Theoretical Biology, 102, 191
- Anninos,P.A., Zenone,S., Elul,R. [1983]  
Artificial neural nets:Dependence of the EEG amplitude's probability distribution on  
statistical parameters.  
Journal of Theoretical Biology, 103, 339
- Anninos,P.A., Zenone,S., Cyrulnik,R.A., Elul,R. [1982]  
Encoding of visual information:Correlation of EEG responses to intracellular  
responses.  
Brain Research,244, pp.182-185
- Anninos,P.A., Zenone,S. [1980]  
A neural net model for a-rhythm  
Journal of Biolog., Cybernetik.36, pp.187-191
- Papadopoulos,M., Anninos,P.A., Zenone,S. [1979]  
Memory Topology of Neural Nets.

Journal of Theoret.Biology, vol.80, pp.505-535

Anninos,P.A., Cyrulnik,R. [1977]

A neural net model for epilepsy

Journal of Theoretical Biology, 66, 695-709

Anninos,P.A., Murthy,V.K. [1977]

Statistical Analysis of Brain Waves from Randomly Interconnected Neural Nets.

Applied mathematics and Computation 3, 85-94

Leake,B., Anninos,P.A. [1976]

Effect of Connectivity of Neural Net Models.

Journal of Theoret.Biology, vol.58, pp.337-363

Anninos,P.A. [1975]

The usefulness of artificial neural nets as models for the normal and abnormal functioning of the mammalian CNS.

Progress in Neurobiology,vol.4, part 2, pp.57-58

Anninos,P.A., Raman,S. [1975]

Derivation of a mathematical equation for the EEG and the General solution within the brain and the space.

International Journal of Theoretical Physics, vol.12, no 1, pp.1-9

Anninos,P.A., Elul,R. [1974]

Effect of Structure on Function in Model Nerve Nets

Biophys.Journal, 14, 8

Cyrulnik,R.A., Anninos,P.A., Marsch,R. [1974]

Complex Symptomatology by Unstructured Neural Nets

Canadian Journal of Neurological Science 1,17-22

Anninos,P.A. [1973]

Electromagnetic fields generated from Neuronal Activity

T.I.T.Journal of Life Sciences, 3, 15-18

Anninos,P.A. [1973]

Evoked potentials in artificial neural nets

Kybernetik, 13:24-29

Anninos,P.A. [1972]

Mathematical Model of Memory Trace and Forgetfulness

Kybernetik, 10:165-167

Anninos,P.A. [1972]

Cyclic modes in probabilistic neural nets  
Kybernetik,11:5-14

Peronnet,E.,Anninos,P.A.,Elul,R. [1971]  
Mapping for Nerve Cell Populations with Disc-Type EEG Electrodes.  
In:Biophysics of Cells and Organs  
Proceedings,1st European Biophys.Congress, vol.5, p.231-235

Anninos,P.A., Beek,B., Csermely,T.J., Harth,E.M., Pertile,G. [1970]  
Dynamics of Neural Structures  
Journal of Theoretical Biology, 26, 121-148

Anninos,P.A. [1969]  
Dynamic and function of Neural Structures.Doctoral Dissertation  
Syracuse University,Syracuse, N.Y.University  
Microfilms, Ann Arbor, Mich.

### **Biomagnetism in patients with CNS disorders**

Photios Anninos, ,Nicolia Anninou ,Adam Adamopoulos,Nicolaos Tsagas  
Transcranial magnetic stimulation in a male brain and his genitals for the influence of his genital system with problems related to his spermatozoa mobility and density.Obstet Gynecol Int.j 2021;12(2):103-105

Photios Anninos,Adam Adamopoulos,Nicolia Anninou,Nicolaos Tsagas  
The pineal and thymus gland interaction on the immune system stimulation, Through th melatonin hormone effect. Pharm Pharmacol Int J.2021:9(2):30-32.

Pico-Tesla TMS on Head Injury Patients with a Double Blind Experimental Design.A MEG study

P.Anninos,A.Adamopoulos,A.Kotini and N.Tsagas  
EC Neurology 10.7(2018)

### **The Effect of pT-TMS on Beta Rhythm in Children with Autism Disorder. A MEG Study**

Photios ANNINOS, Athanasios CHATZIMICHAEL, Nicolia ANNINO, Athanasia KOTINI, Adam ADAMOPOULOS, Triandafillos GEMOUSAKAKIS, Nicolaos TSAGAS

Maedica (Buchar) 2019 Dec; 14(4): 332–342. doi: 10.26574/maedica.2019.14.4.332

We used a double Blind Experiment to investigate Weak pT-TMS in epilepsy Patients  
Photios Anninos,Nikolia Anninou,Adam Adamopoulos,Athanasia Kotini,Triantafillos Gemousakakis,Nicolaos Tsagas  
Medica A journal of Clinical Medicine,Vol 15,No.1,2020

The proper Function of Pineal and Thymus Glands to control Foreign Organisms Acting On Human Brain Subjects

Photios Anninos,Adam Adamopoulos,Nicolia Anninou,Ioannis Tsagas nd Nicolaos Tsagas

EC Neurology 12.6(2020):59-63

Select item 27875942  1.

[A combined study of MEG and pico-Tesla TMS on children with autism disorder.](#)

**Anninos P**, Chatzimichael A, Adamopoulos A, Kotini A, Tsagas N.

J Integr Neurosci. 2016 Dec;15(4):497-513. doi: 10.1142/S0219635216500278. Epub 2016 Nov 23.

PMID:

27875942

[Similar articles](#)

Select item 27456873  2.

[MEG evaluation of pico-Tesla external TMS on multiple sclerosis patients.](#)

**Anninos P**, Adamopoulos A, Kotini A, Tsagas N.

Mult Scler Relat Disord. 2016 Jul;8:45-53. doi: 10.1016/j.msard.2016.04.008. Epub 2016 Apr 26.

PMID:

27456873

[Similar articles](#)

Select item 27328501  3.

[Biomagnetic activity and non linear analysis in obstetrics and gynecology in a Greek population.](#)

**Anninos P**, Anastasiadis P, Adamopoulos A, Kotini A.

Clin Exp Obstet Gynecol. 2016;43(3):406-8. Review.

PMID:

27328501

[Similar articles](#)

Select item 27198581  4.

[Combined MEG and pT-TMS study in Parkinson's disease.](#)

**Anninos P**, Adamopoulos A, Kotini A, Tsagas N.

J Integr Neurosci. 2016 Jun;15(2):145-62. doi: 10.1142/S0219635216500102. Epub 2016 May 20.

PMID:

27198581

[Similar articles](#)

Select item 26686946  5.

[MEG as a Medical Diagnostic Tool in the Greek Population.](#)

**Anninos P**, Adamopoulos A, Kotini A.

Acta Medica (Hradec Kralove). 2015;58(3):71-8. doi: 10.14712/18059694.2015.100. Review.

PMID:

26686946

**Free Article**

[Similar articles](#)

Select item 26484893  6.

[Alpha, delta and theta rhythms in a neural net model. Comparison with MEG data.](#)

Kotini A, **Anninos P**.

J Theor Biol. 2016 Jan 7;388:11-4. doi: 10.1016/j.jtbi.2015.10.005. Epub 2015 Oct 17.

PMID:

26484893

[Similar articles](#)

Select item 26246387  7.

[Neuromagnetic effects of pico-Tesla stimulation.](#)

Troebling L, **Anninos P**, Barnes G.

Physiol Meas. 2015 Sep;36(9):1901-12. doi: 10.1088/0967-3334/36/9/1901. Epub 2015 Aug 6.

PMID:

26246387

[Similar articles](#)

Select item 25164355  8.

[MEG localization of spike sources in human patients with brain tumors.](#)

Birbilis T, **Anninos P**, Seimenis I, Adamopoulos A, Kotini A.

J Integr Neurosci. 2014 Sep;13(3):519-28. doi: 10.1142/S0219635214500150. Epub 2014 Jun 2.

PMID:

25164355

[Similar articles](#)

Select item 24372063  9.

[A study on the age dependency of gustatory states: low-frequency spectral component in the resting-state MEG.](#)

Gemousakakis T, **Anninos P**, Zissimopoulos A, Seimenis I, Adamopoulos A, Pagonopoulou O, Prassopoulos P, Kotini A.

J Integr Neurosci. 2013 Dec;12(4):427-39. doi: 10.1142/S0219635213500258. Epub 2013 Sep 17.

PMID:

24372063

[Similar articles](#)

Select item 22262540  10.

[MEG evaluation of taste by gender difference.](#)

Gemousakakis T, Kotini A, **Anninos P**, Zissimopoulos A, Prassopoulos P.

J Integr Neurosci. 2011 Dec;10(4):537-45.

PMID:

22262540

[Similar articles](#)

Select item 19787446  11.

[Magnetoencephalographic findings in two cases of juvenile myoclonus epilepsy.](#)

Kotini A, Mavraki E, **Anninos P**, Piperidou H, Prassopoulos P.

Brain Topogr. 2010 Mar;23(1):41-5. doi: 10.1007/s10548-009-0114-5. Epub 2009 Sep 29.

PMID:

19787446

[Similar articles](#)

Select item 19482839  12.

[Magnetoencephalography evaluation of febrile seizures in young children.](#)

**Anninos P**, Kotini A, Tsalkidis A, Dipla V, Chatzimichael A.

J Child Neurol. 2010 Jan;25(1):61-6. doi: 10.1177/0883073809336123. Epub 2009 May 28.

PMID:

19482839

[Similar articles](#)

Select item 19412977  13.

[Multi-channel magnetoencephalogram on Alzheimer disease patients.](#)

Abatzoglou I, **Anninos P**, Tsalafoutas I, Koukourakis M.

J Integr Neurosci. 2009 Mar;8(1):13-22.

PMID:

19412977

[Similar articles](#)

Select item 19132796  14.

[Meg evaluation of epileptic activity in the time and frequency domain.](#)

Kotini A, Mavraki E, **Anninos P**, Piperidou H, Prassopoulos P.

J Integr Neurosci. 2008 Dec;7(4):463-80.

PMID:

19132796

[Similar articles](#)

Select item 18581689  15.

[Biomagnetic activity in prostate cancer and BPH.](#)

**Anninos P**, Papadopoulos I, Kotini A.

Arch Esp Urol. 2008 Apr;61(3):459-63.

PMID:

18581689

[Similar articles](#)

Select item 18431816  16.

[Meg recordings of patients with CNS disorders before and after external magnetic stimulation.](#)

**Anninos P**, Kotini A, Anninou N, Adamopoulos A, Papastergiou A, Tsagas N.

J Integr Neurosci. 2008 Mar;7(1):17-27.

PMID:

18431816

[Similar articles](#)

Select item 18023327  17.

[The process of learning in neural net models with Poisson and Gauss connectivities.](#)

Sivridis L, Kotini A, **Anninos P**.

Neural Netw. 2008 Jan;21(1):28-35. Epub 2007 Oct 16.

PMID:

18023327

[Similar articles](#)

Select item 17710838  18.

[Nonlinear analysis of brain magnetoencephalographic activity in Alzheimer disease patients.](#)

Abatzoglou I, **Anninos P**, Adamopoulos A, Koukourakis M.

Acta Neurol Belg. 2007 Jun;107(2):34-9.

PMID:

17710838

[Similar articles](#)

Select item 17622980  19.

[Differentiation of MEG activity in multiple sclerosis patients with the use of nonlinear analysis.](#)

Kotini A, **Anninos P**, Tamiolakis D, Prassopoulos P.

J Integr Neurosci. 2007 Jun;6(2):233-40.

PMID:

17622980

[Similar articles](#)

Select item 17622979  20.

[Evaluation of an intracranial arachnoid cyst with MEG after magnetic stimulation.](#)

**Anninos P**, Kotini A, Tamiolakis D, Prassopoulos P.

J Integr Neurosci. 2007 Jun;6(2):227-32.

PMID:

17622979

[Similar articles](#)

[MEG localization of spike sources in human patients with brain tumors.](#)

Birbilis T, **Anninos P**, Seimenis I, Adamopoulos A, Kotini A.

J Integr Neurosci. 2014 Sep;13(3):519-28. doi: 10.1142/S0219635214500150. Epub 2014

[A study on the age dependency of gustatory states: low-frequency spectral component in the resting-state MEG.](#)

Gemousakakis T, **Anninos P**, Zissimopoulos A, Seimenis I, Adamopoulos A, Pagonopoulou O, Prassopoulos P, Kotini A.

J Integr Neurosci. 2013 Dec;12(4):427-39. doi: 10.1142/S0219635213500258. Epub 2013

[MEG evaluation of taste by gender difference.](#)

Gemousakakis T, Kotini A, **Anninos P**, Zissimopoulos A, Prassopoulos P.

J Integr Neurosci. 2011 Dec;10(4):537-45.

[Magnetoencephalographic findings in two cases of juvenile myoclonus epilepsy.](#)

Kotini A, Mavraki E, **Anninos P**, Piperidou H, Prassopoulos P.

Brain Topogr. 2010 Mar;23(1):41-5. doi: 10.1007/s10548-009-0114-5. Epub 2009 Sep 29.

[Multi-channel magnetoencephalogram on Alzheimer disease patients.](#)

Abatzoglou I, **Anninos P**, Tsalafoutas I, Koukourakis M.

J Integr Neurosci. 2009 Mar;8(1):13-22.

[Meg evaluation of epileptic activity in the time and frequency domain.](#)

Kotini A, Mavraki E, **Anninos P**, Piperidou H, Prassopoulos P.

J Integr Neurosci. 2008 Dec;7(4):463-80.

[Biomagnetic activity in prostate cancer and BPH.](#)

**Anninos P**, Papadopoulos I, Kotini A.

Arch Esp Urol. 2008 Apr;61(3):459-63.

[Meg recordings of patients with CNS disorders before and after external magnetic stimulation.](#)

**Anninos P**, Kotini A, Anninou N, Adamopoulos A, Papastergiou A, Tsagas N.

J Integr Neurosci. 2008 Mar;7(1):17-27.

[The process of learning in neural net models with Poisson and Gauss connectivities.](#)

Sivridis L, Kotini A, **Anninos P**.

Neural Netw. 2008 Jan;21(1):28-35. Epub 2007 Oct 16

[Nonlinear analysis of brain magnetoencephalographic activity in Alzheimer disease patients.](#)

Abatzoglou I, **Anninos P**, Adamopoulos A, Koukourakis M.

Acta Neurol Belg. 2007 Jun;107(2):34-9.

[Differentiation of MEG activity in multiple sclerosis patients with the use of nonlinear analysis.](#)

Kotini A, **Anninos P**, Tamiolakis D, Prassopoulos P.

J Integr Neurosci. 2007 Jun;6(2):233-40.

[Evaluation of an intracranial arachnoid cyst with MEG after magnetic stimulation.](#)

**Anninos P**, Kotini A, Tamiolakis D, Prassopoulos P.

J Integr Neurosci. 2007 Jun;6(2):227-32.

[MEG evaluation of Parkinson's diseased patients after external magnetic stimulation.](#)

**Anninos P**, Adamopoulos A, Kotini A, Tsagas N, Tamiolakis D, Prassopoulos P.

Acta Neurol Belg. 2007 Mar;107(1):5-10.

[Magnetic field profiles in normal human breast during the menstrual cycle.](#)

Anninos PA, Giatromanolaki A, Kotini A, Sivridis L, Koutlaki N, Anastasiadis P.

Clin Exp Obstet Gynecol. 2007;34(1):47-9

[Biomagnetism in perinatal medicine. Our experience in Greece.](#)

Kotini A, Anastasiadis AN, Koutlaki N, Tamiolakis D, **Anninos P**, Anastasiadis P.

Clin Exp Obstet Gynecol. 2007;34(1):42-6.

[MEG mapping in multiple sclerosis patients.](#)

Kotini A, **Anninos P**, Tamiolakis D.

Eura Medicophys. 2007 Sep;43(3):345-8. Epub 2007 Mar 25.

P. Anninos, A. Adamopoulos, A. Kotini, N. Tsagas [2006]

**The Use of the Biomagnetometer SQUID to evaluate the pTMS in Patients with CNS Disorders**

WSEAS TRANSACTIONS on BIOLOGY and BIOMEDICINE

Issue 1, Vol. 3, January 2006 p.43

P. Anninos, A. Kotini, A. Adamopoulos, G. Nicolaou, N. Tsagas [2006]

**The application of TMS for the Treatment of Parkinson's Disease**

WSEAS TRANSACTIONS on BIOLOGY and BIOMEDICINE

Issue 1, Vol. 3, January 2006 p.52

I. Abatzoglou, P. Anninos, Adamopoulos, A. Kotini, A. N. Tsagas [2005]  
**Magnetoencephalogram and Linear Analysis Before and After  
Magnetic Stimulation**

WSEAS TRANSACTIONS on BIOLOGY and BIOMEDICINE  
Issue 4, Vol. 2, October 2005 p. 401

P. Antoniou, P. Anninos [2005]  
**Non-linear Analysis of SQUID signals in Patients with malignant  
brain lesions. Can Chaos Detect Cancer?**

WSEAS TRANSACTIONS on BIOLOGY and BIOMEDICINE  
Issue 4, Vol. 2, October 2005 p. 405

P. Anninos, A. Kotini, G. Kekes, P. Pavlidis [2005]  
**Objective evaluation of taste with 122-channel Biomagnetometer  
SQUID**

WSEAS TRANSACTIONS on BIOLOGY and BIOMEDICINE  
Issue 4, Vol. 2, October 2005 p. 409

P. Anninos, A. Kotini, A. Adamopoulos, G. Nicolaou, N. Tsagas [2006]  
**The Biological effects of TMS in the Modulation of Seizures in  
Epileptic Patients**

WSEAS TRANSACTIONS on BIOLOGY and BIOMEDICINE  
Issue 1, Vol. 3, January 2006 p.57

A. Kotini, P. Anninos, A. Anastasiadis, D. Tamiolakis [2005]  
**A Comparative Study of a Theoretical Neural Net Model with MEG  
Data from Epileptic Patients and Normal Individuals**

Theor. Biol. Med. Model 2005 Sep (7);2(1):37

A. Kotini, P. Anninos, A. Adamopoulos, P. Prassopoulos [2005]  
**Low Frequency MEG Activity and MRI Evaluation in Parkinson's  
Disease**

Brain Topography, Vol 18 N. 1, 59-63, 2005

P. Antoniou, P. Anninos, H. Piperidou, A. Adamopoulos, A. Kotini, M.  
Koukourakis and E. Sivridis [2004]  
**Treatment evaluation of brain tumors using non-linear analysis of  
Magnetoencephalographic data. A novel technique.**

Gazzetta Medica Italiana - Archivio per le Scienze Mediche (2004); 163:pp

285-290

P. Anninos, A. Karpouzis, A. Kotini, C. Kouskoukis [2004]

**Exogenous magnetic stimulation in therapeutic Management of universalis alopecia areata.**

Gazzetta Medica Italiana - Archivio per le Scienze Mediche (2004); 163:pp 281-284

I. Abatzoglou, P. Anninos, A. Adamopoulos, N. Tsagas, K. Chourdakis [2004]

**Magnetoencephalographic analysis and magnetic stimulation in patients with Alzheimer disease**

Gazzetta Medica Italiana - Archivio per le Scienze Mediche (2004); 163:pp 165:171

P. Antoniou, P. Anninos, H. Piperidou, A. Adamopoulos, A. Kotini, M. Koukourakis and E. Sivridis [2004]

**Non Linear Analysis of Magnetoencephalographic Signals as a Tool for Assesing Malignat Lesions of the Brain: First Results**

Brain Topography, Vol 17 N 2, pp 117-123, Winter 2004

P. Anninos, A. Kotini, A. Adamopoulos, N. Tsagas [2003]

**Magnetic stimulation can modulate seizures in epileptic patients**

Brain Topography 2003; 16:57-64

Anninos, N. Tsagas , J.Jacobson, A. Kotini [2001]

The biological effects of magnetic stimulation in epileptic patients.

Review Series Neurology vol.2, 15-17.

Ph.A. Anninos, Adam V. Adamopoulos, Athanasia Kotini and Nicholaos Tsagas [2000]

Nonlinear Analysis of Brain Activity in Magnetic Influenced Parkinson Patients

Brain Topography, Vol 13, Number 2, pages 135-144, Winter 2000.

Ph. Anninos, A. Kotini, A. Adamopoulos, N. Tsagas and J. Jacobson [2000]

Nonlinear Analysis of EMG Activity Recorded In Alzheimer Patients

In Hardronic Journal Supplement 15, 1-16 (2000)

M. G. Manolas, Th. D. Stamoulos, P.A. Anninos [1999]

Differences in human visual evoked potential during the perception of colour as revealed by bootstrap to compare cortical activity. A prospective study.  
Neuroscience Letters 269 (1999) 1-4

P..A. Anninos, N. Tsagas and A. Kotini [1998]

Magnetic stimulation to patients with CNS dysfunctions.  
Honorary volume for Prof. D.D. Raftopoulos  
E.E. Gdoutos (Ed).  
Research Committee. School of Engineering  
Demokritus University of Thrace. Xanthi, Greece.

Anninos, N. Tsagas , J.Jacobson, A. Kotini [1999]

The biological effects of magnetic stimulation in epileptic patients.  
Panminerva Medica vol.41, 207-215.

Anninos P.A., Jacobson J., Tsagas N., AdamopoulosA. [1997]

Spatiotemporal stationarity of epileptic focal activity evaluated by analyzing magnetoencephalographic (MEG) data and the theoretical implications.  
Panminerva med , 39, 189-201

Anninos,P.A., Tsagas, N. [1993]

Behavior of epileptic patients after magnetic stimulation  
The Neurobehavioral treatment of epilepsy.  
D. Mostofsky and Y. Loyning (Eds). Laurence Erlbaun assoc., publishers pp. 197-217.

Anninos,P.A., Adamopoulos,A., Razis, N., Derpapas,K. [1992]

MEG measurements using SQUID to localize epileptic foci.  
Normal Matrix and Pathological Conditions, pp. 129- 136.  
Proceedings of Second International Congress of the Society for Matrix Research,  
Alexandroupolis, Greece, 1990.  
Heine, H. & Anastasiadis, P., (eds.), Gustav Fischer Stuttgart, 1992.

Sandyk, R., Anninos, P.A. [1992]

Attenuation of epilepsy with application of external magnetic fields.  
Intern. J. Neurosci., 66, (1-2), 75-85

Sandyk,R., Anninos,P.A., Tsagas,N. [1992]

Magnetic fields alter the circadian periodicity of seizures.  
International Journal of Neuroscience, 63, (3-4), 265-274

Sandyk,R., Anninos,P.A., Tsagas,N., Derpapas,K. [1992]

Magnetic fields in the treatment of Parkinson's disease : A case report.  
International Journal of Neuroscience vol.63, 141-150.

Sandyk,R., Tsagas,N., Anninos,P.A. [1992]

Melatonin as a proconvulsive hormone in humans.

International Journal of Neuroscience vol63, 125-135.

Sandyk,R., Tsagas,N., Anninos,P.A., Derpapas,K. [1992]  
Magnetic fields mimic the behavioral effects of REM sleep deprivation in humans.  
International Journal of Neuroscience 65(1-4), 61-68.

Thodis, E., Anninos, P.A., Pasadakis, P., Adamopoulos, A., Panagoutsos,S., Vargemezis, V. [1992]  
Evaluation of CNS- fuction in CAPD patients using Magnetoencephalography (MEG).  
Comparison with Hemodialysis Patients.  
Advances in Peritoneal Dialysis, pp.181-184

Anninos,P.A., Tsagas,N, Sandyk,R and Derpapas,K.[1991]  
Magnetic stimulation in the treatment of partial seizures.  
Inter.J.Neuroscience, Vol 60, pp.141-171

Sandyk R, Anninos PA, Tsagas N, Derpapas K  
Pineal calcification and anticonvulsant responsiveness to artificial magnetic stimulation in epileptic patients  
Inter.J.Neuroscience, Vol 60, pp.173-175

Sandyk,R., Anninos,P.A., Tsagas,N. [1991]  
Magnetic fields and seasonality of affective illness: implications for therapy.  
International Journal of Neuroscience, vol.58, 261-267

Sandyk,R., Anninos,P.A., Tsagas,N. [1991]  
Age-related disruption of circadian rhythms : possible relationship to memory impairment and implications for therapy with magnetic fields.  
International Journal of Neuroscience, vol.59, 259-262

Sandyk,R., Anninos,P.A., Tsagas,N. [1991]  
Magnetic fields and the habenular complex.  
International Journal of Neuroscience, vol.59, 263-266

Anninos,P.A., Tsagas,N., Adamopoulos,A., Piperidou,X. [1990]  
Magnetic treatment of epileptic patients by the use of MEG measurements.  
Normal Matrix and Pathological Conditions, pp. 119- 128.  
Proceedings of Second International Congress of the Society for Matrix Research,  
Alexandroupolis, Greece, 1990.  
Heine, H. & Anastasiadis, P., (eds.), Gustav Fischer Stuttgart, 1992.

Anninos,P.A., Anastasiadis,P., Tsagas,N. [1989]  
Biomagnetic measurements using the biomagnetometer SQUID.  
Proceedings of the Internationaler Kongress der Gesellschaft fur Matrixforschung,  
October 13-16, in Wittmund, Germany, Gustav Fischer Verlag,pp. 137-149

- Anninos,P.A., Razis-Alexandratos, N., Androulakis, I., Vartzopoulos, I., & Adamopoulos, A., [1989]  
The MEG superiority with respect to the EEG in epilepsy studies in children.  
Medical Communication, Volume 1, part 1, pp. 42-45.
- Anninos,P.A., Tsagas,N. [1989]  
Localization and cure of epileptic foci with the use of MEG measurements.  
International Journal of Neuroscience, 46, p.p.235-242
- Anninos,P.A., Vartzopoulos,J., Razis-Alexandratos,N., Anogianakis,G.[1989]  
Evaluation of epileptic patients with the use of Magnetoencephalogram.  
International Journal of Neuroscience, 45[3-4], 283- 289
- Lehnertz,K., Elger,C.E., Hoke,M., Pantev,C., Lutkenhoner,B., Anninos,P.A.,  
Anogianakis,G. [1989]  
Two-Dimensional spectral analysis of MEG data in epileptic patients.  
Advances in epileptology, Vol.17,pages 58-62
- Razis-Alexandratos, N., Anninos, P.A., & Adamopoulos, A. [1989]  
MEG studies in posttraumatic epilepsies.  
Medical Communication, vol. 1, part 2, pp.168-171
- Razis-Alexandratos, N., Anninos, P.A., Adamopoulos, A., & Androulakis, I. [1989]  
The differentiation of posttraumatic generalized epilepsies using MEG measurements.  
Medical communication, vol. 1, part 4, pp.344-350
- Anogianakis,G., Anninos,P.A. [1988]  
Localization of epileptiform foci by means of MEG measurements.  
International Journal of Neuroscience, 38,141
- Elger,C.E., Lehnertz,K., Hoke,M., Pantev,C., Lutkenhoner,B., Anninos,P.A.,  
Anogianakis,G. [1988]  
Mapping of the amplitude spectra:Its significance for the diagnosis of focal epilepsy.  
In:K.Maurer [Ed.],Topographic Brain Mapping of EEG and Evoked Potentials,  
Springer-Verlag, Berlin, Heidelberg, pp.565-570
- Anninos,P.A., Anogianakis,G., Lehnertz,K., Pantev,C., Hoke,M. [1987]  
Biomagnetic measurements using SQUID.  
International Journal of Neuroscience, Vol.37, pp.149
- Hoke,M., Elger,C.E., Lehnertz,K., Pantev,C., Lutkenhoner,B., Anogianakis,G.,  
Anninos,P.A. [1987]  
Epileptic activity analyzed by two dimensional spectral analysis of MEG data.  
In Atsumi,K., Kotani,M., Veno,S., Katila,T., Williamson,S.J. [Eds.],Biomagnetism  
'87,Denki University Press, Tokyo, p.210-213

Anninos,P.A.,Kokkinidis,M. [1986]

MEG measurements with SQUID as a diagnostic tool for epileptic patients  
Brain Research Bulletin,vol.16,pp.549-551

Anninos,P.A., & Anogianakis, G. [1986]

Identification and localization of epileptic foci with the use of MEG measurements.  
Proceedings of the North-Greek Medical Conference, Thessalonica, Greece, Volume  
B.

Anninos,P.A., Kokkinidis,M., Hoke,M., Pantev,C., Lehnertz, K., and Lutkenhoner, B.  
[1986]

MEG measurements with SQUID as a diagnostic tool for epileptic patients.  
Brain Research Bulletin, vol.16, pp.549-551

Anninos,P.A. [1985]

Brain biomagnetic field measurements using the SQUID device.  
Greek Neuroscience Conference in Patras, Greece, 25 - 27 October, 1985.

Tetenes,P.J., Anninos,P.A. [1977]

Filling of Microelectrodes:an expedient solution Brain Research Bulletin 2, 55-56

## **Biomagnetism in Obstetrics and Gynaecology**

P. Anninos, A. Kotini, D. Tamiolakis and N. Tsagas.

Transcranial magnetic stimulation. A case report and review of the

Literature. Acta Neurol. Belg. 106, 26-30 (2006).

E. Sivridis, Ph. A. Anninos, A. Giatromanolaki, A. Kotini, A. Adamopoulos and P. Anastasiadis [2001]

Bioamgnetic activity in the female breast at various physiological states.

Clin. Exp. Obst & Gyn ISSN: 0390-6663 XXVIII, n. 3, 2001

A. Kotini, Ph. A. Anninos, A. Adamopoulos, N. Koutlaki, G. Galazios and P. Anastasiadis [2001]

Fetal magnetocardiogram recordings and power spectra analysis in biomagnetic arrhythmic signals.

Journal of Obstetrics and Gynaecology (2001) Vol. 21, No. 4, 368-372

A. Kotini, Ph. A. Anninos, A. Adamopoulos, K. Avgidou, G. Galazios and P. Anastasiadis [2001]

Linear analysis of fetal magnetocardiogram recordings in normal pregnancies at various gestional ages.

Journal of Obstetrics and Gynaecology (2001) Vol. 21, No. 2, 154-157

Ph. A. Anninos, A. Kotini, N. Koutlaki, A. Adamopoulos, G. Galazios, P. Anastasiadis [2000]

Differential Diagnosis of Breast Lesions by use of Biomagnetic Activity and Non-Linear Analysis.

Eur. Journal Gynaecology Oncol, ISSN: 0392-2936, XXI, n. 6, pp 591-595, 2000

P. Anastasiadis, P.A. Anninos, M.V. Ludinghausen, A. Kotini, G. Galazios and B. Limberis [1999]

Fetal magnetocardiogram recordings and Fourier spectral analysis

Journal of Obstetrics and Gynaecology (1999) Vol. 19, No. 4, 390-393.

Photios A. Anninos, Panagiotis Anastasiadis and Athanasia Kotini. [1999]

The use of non-linear analysis for differentiating the biomagnetic activity in ovarian lesions

Journal of Obstetrics and Gynaecology (1999) Vol. 19, No. 3, 280-285.

Anastasiadis P, P.A. Anninos, A. Kotini, B. Limberis and G. Galazios [1999]

Fetal magnetoencephalogram recordings and Fourier spectral analysis.

Journal of Obstetrics and Gynaecology (1999) Vol. 19, No. 2, 125-129.

Photios A. Anninos, Panagiotis Anastasiadis and Athanasia Kotini [1998]

Non-linear Analysis of Biomagnetic Signals Recorded from Uterine Arteries  
Journal of Maternal-Fetal Investigation. Springer-Verlag. NY Inc. 1998

Anastasiadis,P., Anninos,Ph., Adamopoulos, A.and Sivridis,E.[1997]  
The hemodynamics of the umbilical artery in normal and pre-eclamptic pregnancies.  
A new application of SQUID biomagnetometry.  
Journal of Perinatal Medicine 25(1997) 35-42.

Anastasiadis,P., Anninos,Ph., Diamantopoulos P. and Sivridis,E.[1997].  
Fetal magnetoencephalographic mapping in normal and pre-eclamptic pregnancies.  
Journal of Obstetrics and Gynaecology (1997) Vol. 17, No. 2,123-126.

Anastasiadis,P., Anninos,Ph., Sivridis,E.[1994]  
Biomagnetic activity in breast lesions.  
The Breast 3, 177-180

Anastasiadis, P., Anninos, P.A., Diamantopoulos, P., Liberis, B. [1992]  
Magnetoencephalographic mapping in normal and preeclamptic pregnancies.  
Normal Matrix and Pathological Conditions, pp. 137- 141.  
Proceedings of Second International Congress of the Society for Matrix Research,  
Alexandroupolis, Greece, 1990.  
Heine, H. & Anastasiadis, P., (eds.), Gustav Fischer, Stuttgart, 1992.

Sandyk,R., Anastasiadis,P.G., Anninos,P.A., Tsagas,N. [1992]  
Is the pineal gland involved in the pathogenesis of endometrial carcinoma?  
International Journal of Neuroscience, 62, (1-2), 89-96

Sandyk,R., Anastasiadis,P.G., Anninos,P.A., Tsagas,N. [1992]  
The pineal gland and spontaneous abortions : Implications for therapy with melatonin  
and magnetic field  
International Journal of Neuroscience, vol. 62, 243-250

Sandyk,R., Anastasiadis,P.G., Anninos,P.A., Tsagas,N. [1992]  
Is postmenopausal osteoporosis related to pineal gland functions?  
International Journal of Neuroscience, vol. 62, 215-225

Anninos,P.A., Anastasiadis,P., Sivridis,E. [1990]  
Magnetocardiographic patterns in complicated and uncomplicated pregnancies.  
International Journal of Gynaecology and Obstetrics, 31, 329-333

Anastasiadis,P.,Anninos,P.A. [1989]  
Biomagnetic measurements in malignant breast disease using a Superconducting  
Quantum Interference Device [SQUID].  
Proceedings of the Internationaler Kongress der Gesellschaft fur Matrixforschung,  
October 13-16, in Wittmund, Germany, Gustav Fischer Verlag,pp.117-122

- Anastasiadis P, Anninos, Ph., Limberis, B., Koutzougeras, G., Galazios, G. (1989)  
Biomagnetismus der Zerebralfunktion bei EPH-Gestose.  
Archives of Gynecology and Obstetrics Vol. 245, No 1-4,1989
- Anastasiadis,P.G., Anninos,P.A., Koutsougeras,G.Ch., Liberis ,V.A., Galazios,G.Ch.,  
Sivridis,E.L. [1989]  
Biomagnetic measurements in uterine Leiomyomas using a Superconducting Quantum  
Interference Device [SQUID].  
International Journal of Gynaecology and Obstetrics,vol.29/1 47-49
- Anastasiadis,P.,Anninos,P.A.,Sivridis,E.[1989]  
Biomagnetic measurements in benign and malignant ovarian tumours using SQUID.  
Proceedings of the Internationaler Kongress der Gesellschaft fur Matrixforschung,  
October 13-16, in Wittmund, Germany, Gustav Fischer Verlag,pp. 123-128
- Anastasiadis,P.,Anninos,P.A.,Sivridis,E. [1989]  
Biomagnetic measurements of fetal brain activity.  
In Models of Brain function, R.M.J.Cotterill, [Ed.], Cambridge University Press,  
p.397-403
- Anastasiadis, P., Anninos, Ph., Limperis, B., Koutzougeras, G., Galazios, G. [1989]  
Biomagnetismus der fetalen Zerebralfunktion bei EPH-Gestose.  
Archives of Gynecology and Obstetrics Vol. 245, No 1-4, pp. 234-236
- Anninos,P.A., Anastasiadis,P., Liberis,V.,Galazios,G., Kouts ougeras, G.,[1989]  
Biomagnetic measurements of the brain activity of proeclamptic pregnant woman  
using SQUID.  
International Journal of Gynaecology and Obstetrics, vol.30/4, 325-328
- Sivridis,E., Anastasiadis,P., Anninos,P.A. [1989]  
Basement membrane discontinuities in preinvasive and invasive endometrial lesions  
detected by lectins.  
Proceedings of the Internationaler Kongress der Gesellschaft fur Matrixforschung,  
October 13-16, in Wittmund, Germany, Gustav Fischer Verlag,pp.129-135
- Anastasiadis,P., Anninos, P.A.,Galazios, G.,Liberis, V.,Kouts ougeras, G.,Anogianakis,  
G.,Sivridis,E. [1988]  
Biomagnetic investigations in the fetal heart function [provisional results].  
XI European Congress of Perinatal Medicine, Rome, Italy, p.21
- Anastasiadis,P.G., Anninos,P.A., Koutsougeras,G.Ch., Liberis V.A., Galazios,G.Ch.,  
Anogianakis,G., Sivridis,E.L. [1988]  
Biomagnetic findings of the hemodynamics of the umbilical vessels [provisional  
results].  
XI European Congress of perinatal medicine, Rome, Italy, p.25

Sivridis,E., Anastasiadis,P., Anninos,P.A. [1987]

New observations on the nature and distribution of argyrophil cells, in the human endometrium.

Anticancer Research 7, Number 5A, page 924

Sivridis,E., Anninos,P.A., Anastasiadis,P. [1987]

Changes in the chemical structure of Carbohydrate chains in malignant endometrial cells.

Anticancer Research 7, Number 5 page 92

# Societies

1. Biophysical Society
2. Neuroscience Society
3. New York Academy of Science
4. International Brain Research Organization
5. International Kongress der Gesellschaft
6. Greek Neuroscience Society
7. Board of Directors in the American Biographical Institute
8. Editorial Board member in various journals.