



Eugen GHEORGHIU

International Centre of Biodynamics www.biodyn.ro

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Education: PhD in Theoretical Physics, 1994, Institute for Atomic Physics - Bucharest, Romania

Professional Experience

2000–present Director, International Centre of Biodynamics, Bucharest

1997 - 2000 Director, National Institute for Research and Development for Biotechnologies– UNESCO Centre for Biodynamics, Bucharest, Romania

1996-1997 Visiting Professor, Institute for Chemical Research (under JSPS), Kyoto University, Japan

1995-1996 Scientific Director National Institute for Research and Development for Biotechnologies (NIBT), Bucharest, Romania

1993– present Senior Researcher 1st degree

1991–1996 Head of Biophysics Laboratory -since 1993, Centre of Biotechnologies – BIOTEHNOS

1990–1994 Associate Professor, University of Bucharest, Faculty of Physics, Bucharest, Romania

1989–1991 Scientific Researcher, I.C.P.E.A.R. – Biophysics Laboratory, Bucharest, Romania

1984–1989 Biophysicist & Scientific Researcher (since 1988), the Institute of Oncology Bucharest

Research Interests include:

- Modeling & non-invasive analysis of dynamics of living cells and biointerfaces using (coupled) electrical impedance spectroscopy, magnetic & optical e.g. optical waveguides (including SPR) microscopy and bio-affinity assays. The goal is to assess gentle (non-lethal) bioeffects of various stimuli, including environmental ones using time based electro/magneto/optical assays
- Fast point-of-care: (A) sensitive identification & quantitation of microbes (bacteria, fungi & viruses) and (B) Antibacterial & Antifungal Susceptibility Testing based on immune-magnetic capture, magneto-phoresis and electrical impedance fingerprinting
- Assessment of fish dynamics in relation to the quality of their aquatic environment

Professional Honors: “Stefan Procopiu” Award for Physics of the Romanian Academy, 1995

Teaching: University of Bucharest, *Coordinator of the Master Program in Biodynamics*, Faculty of Biology; Courses: „Introduction in (non)linear data analysis” and „ (Bio)Impedance Spectroscopy and related electrical methods to investigate bio-systems”; Other Courses: “Thermodynamics of Irreversible Process and Applications of Nonlinear Phenomena to Biophysics”;

2004– present: PhD Adviser, University of Bucharest

Promoter of 16 International Research Grants most representative: **3 FP7: DYNANO** (Contract People ITN 2011- 289033); “**PROARGUS**” (**coordinator**) (Contract-PIRG08-GA-2010-277126), **NanoMagma** (Contract - NMP3-SL-2008-214107), **2 FP6: ROBIOs** (**coordinator**) Contract- INCO-2004-ACC-RSTP, **CHARPAN**, (Contract - NMP2-CT-2005-515803) and **1FP5: Aframilk-** (Contract-GRD1-2000-25801), Co-Director: **TUMORANALYZER** 7/RO-CH/RSRP/2013,2013-15

Director of 14 National Research Grants (during the last 10 years) including Director of the Complex Research Project BIOSCOPE, Contract No. 11/ 2012, PN-II-ID-PCCE-2011-2-0075

Ongoing Projects: Co-Director, **NATO-SPS 985042 & UEFISCDI-PN3-329/42/2017: Cell Biosensors for Detection of Chemical and Biological Threats**, 2016-19

Synergistic Activities

- Co-founder Euroscience and member of Euroscience Governing Board (elected for three mandates)
- Expert of European Commission- Evaluator of Proposals on (nano)biosensing (1995-present), 2016-2019: H2020-FET OPEN
- 2016-2019 Member of ESF College of Expert Reviewers
- Review Panel member- European Science Foundation – EuroBioSAS (2010-2015)
- Member of Selection Committee for European Young Researchers’ Award (2010-2016)
- Member of Editorial Board of: *Physics in Medicine* (Elsevier), *Journal of Electrical BioImpedance*, *Romanian Journal of Biophysics*
- Member of Evaluation Commissions of PhD thesis of: Swinburne University of Technology, Melbourne & University of New South Wales, Sydney, National University of Singapore, Université Catholique de Louvain, Belgium Babes-Bolyai University, Cluj-Napoca & Polytechnic University of Bucharest.

Patents, Patent Applications & Selected publications at <http://www.biodyn.ro/staff/cv-eugen.pdf>