

GEORGE LAGOUMINTZIS

B.Sc., Ph.D.


Assistant Professor of Biochemistry - Molecular Biology

University of Patras, School of Health Sciences

Department of Pharmacy

Section of Pharmacology – Biosciences

University Campus, GR26504, Greece

+30 6977 713751  glagoumintzis

 glagoum@upatras.gr, lagoumintzis.giorgos@ac.eap.gr

EDUCATION

- ❖ **1993-1997: B.Sc. (Hons) Applied Biochemistry.** University of Liverpool, School of Biological Sciences, Department of Biochemistry.
- ❖ **1998-2004: Ph.D. in Biochemistry and Immunobiology.** University of Patras, School of Medicine, Department of Microbiology, Greece. *Thesis: "Study of the signal transduction mechanisms of Pseudomonas aeruginosa infection in human macrophages"*.
- ❖ **2010: M.Sc. in Health Care Management.** Open University of Greece, Faculty of Social Sciences.

WORK EXPERIENCE

- ❖ **2022-Today:** Assistant Professor of Biochemistry – Molecular Biology, University of Patras, School of Health Sciences, Department of Pharmacy.
- ❖ **2022:** Research Associate, GR-ESPA Research Program: "Development of high-density microarrays SNPs (SNPbb-chip) for *Sparus aurata* and *Dicentrarchus labrax*, School of Agricultural Sciences, Department of Fisheries and Aquaculture, University of Patras.
- ❖ **2019 – Today:** Research Associate - Teaching Staff, School of Sciences and Technology, Department of Natural Sciences, Open University of Greece, Laboratory of Biology and Genetics.
- ❖ **2004 - 2016:** Research Fellow, Department of Pharmacy, University of Patras, Lab of Molecular Biology and Immunology.
- ❖ **2004 -2008:** Post-doctoral Fellow, Department of Biochemistry, Hellenic Pasteur Institute, Laboratory of Molecular Neurobiology and Immunology.

RESEARCH INTERESTS

• Biochemistry • Molecular Biology • Immunobiology (Cell signaling, Protein expression and purification, Cell lines, Host-pathogen interactions, Autoantigens, Metagenomics)

TEACHING ACTIVITY

- ❖ **2022 - Today: Assistant Professor, Department of Pharmacy, University of Patras** (Subjects: **1**) Biochemistry I [PHA-A22-NEW], **2**) Biochemistry II [PHA-B11-NEW], **3**) Applied Biotechnology and Bioinformatics [DPHA_C02].
- ❖ **2019 - 2022: Appointed Teaching Staff at the University of Patras**, School of Agricultural Sciences, **a**) Department of Biosystems and Agricultural Engineering (Biology), and **b**) Department of Food Sciences and Technology (Subjects: **1**) Biochemistry, **2**) Molecular Biology-Biotechnology).
- ❖ **2019 - 2022: Appointed Teaching Staff at the Open University of Greece**, School of Sciences and Technology, Department of Natural Sciences, Laboratory of Biology and Genetics (Subjects: **a**) Biology and **b**) Molecular Biology).

- ❖ **2004 - 2016: Appointed Teaching Staff at the University of Patras**, School of Health Sciences, Department of Pharmacy (Subjects: a) Biochemistry, **b**) Immunology, **c**) Microbiology).
- ❖ **2004 - 2018: Appointed Teaching Staff at (former) Technological University of Western Greece/Patras**, School of Health Sciences (Subjects: a) Microbiology, **b**) Immunology, **c**) Research Methodology).

PUBLICATIONS

1. Pseudomonas aeruginosa Slime glycolipoprotein is a potent stimulant of TNF- α gene transcription and activation of transcription activators nuclear factor κ B and activator protein 1 in human monocytes. **G. Lagoumintzis**, M. Christofidou, G. Dimitracopoulos, F. Paliogianni. *Infection & Immunity* 2003, 71; (8): 4614-4622.
2. Muscle and Neuronal Nicotinic Acetylcholine Receptors: structure, function, and pathogenicity. D. Kalamida, K. Poulas, V. Avramopoulou, F. Fostieri, **G. Lagoumintzis**, K. Lazaridis, A. Sideri, M. Zouridakis, S.J. Tzartos. *FEBS Journal*, 2007, 274; (15): 3799-3845.
3. Isolation and functional characterization of anti-acetylcholine receptor subunit-specific autoantibodies from myasthenic patients: receptor loss in cell culture. S. Sideris, **G. Lagoumintzis**, K. Poulas, K. Kostelidou, G. Kordas, A. Sotiriadis, S.J. Tzartos *Journal of Neuroimmunology* 2007, 189; (1-2): 111-117.
4. TNF- α induction by P. aeruginosa LPS or Slime-glycolipoprotein in human monocytes is regulated at the level of Mitogen Activated Protein kinase activity: A distinct role of TLR2 and TLR4. **G. Lagoumintzis**, P. Xaplanteri, G. Dimitracopoulos, F. Paliogianni. *Scand. Journal of Immunology* 2008, 67; (2): 193-203.
5. Antigen-specific apheresis of pathogenic autoantibodies from myasthenia gravis sera. S. J. Tzartos, K. Bitzopoulou, I. Gavra, G. Kordas, L. Jacobson, K. Kostelidou, **G. Lagoumintzis**, O. Lazos, K. Poulas, S. Sideris, A. Sotiriadis, N. Trakas, P. Zisimopoulou. *Annals of New York Academy of Sciences* 2008, 1132; (1): 291-299.
6. Antigen-specific apheresis of human anti-acetylcholine receptor autoantibodies from myasthenia gravis patients' sera using *Escherichia coli*-expressed receptor domains. P. Zisimopoulou*, **G. Lagoumintzis***, K. Poulas, S.J. Tzartos. *Journal of Neuroimmunology* 2008, 200: 133-141. ***equal contribution**
7. Towards antigen-specific apheresis of pathogenic autoantibodies from myasthenic patients as a further step to plasmapheresis treatment. P. Zisimopoulou, **G. Lagoumintzis**, K. Kostelidou, K. Bitzopoulou, G. Kordas, N. Trakas, K. Poulas, S.J. Tzartos. *Journal of Neuroimmunology* 2008, 201-202: 95-103.
8. Antigen-specific apheresis of autoantibodies in myasthenia gravis. Lazaridis, K., Zisimopoulou, P., **Lagoumintzis, G.**, Skriapa, L., Trakas, N., Evangelakou, P., Kanelopoulos, I., Grapsa, E., Poulas, K., S. Tzartos. *Annals of New York Academy of Sciences* 2008, 1275; (1): 7-12.
9. Synergistic regulation of Pseudomonas aeruginosa-induced cytokine production in human monocytes by mannose receptor and TLR2. P. Xaplanteri, **G. Lagoumintzis**, G. Dimitracopoulos, F. Paliogianni. *European Journal of Immunology* 2009, 39: 1-11.
10. Transcutaneous Delivery of a Nanoencapsulated Antigen: Induction of Immune Responses. G. Mattheolabakis, **G. Lagoumintzis**, Z. Panagi, E. Papadimitriou, C. D. Partidos, K. Avgoustakis. *International Journal of Pharmaceutics* 2010, 385: 187-193.
11. Recent approaches to the development of antigen-specific immunotherapies for myasthenia gravis. **G. Lagoumintzis**, P. Zisimopoulou, G. Kordas, K. Poulas, S.J. Tzartos. *Autoimmunity* 2010, 43(5): 1-10.
12. Genetic databases and their potential in pharmacogenomics. **G. Lagoumintzis**, K. Poulas, G. Patrinos. *Current Pharmaceutical Design*, 2010, 16(20): 2224-31.
13. ETHNOS: A versatile electronic tool for the development and curation of National Genetic databases. S. Van Baal, J. Zlotogora, **G. Lagoumintzis**, V. Gkantouna, I. Tzimas, K. Poulas, A. Tsakalidis, G. Romeo, G.P. Patrinos. *Human Genomics*, 2010, 4(5):361-68.

14. A critical view of the general public's awareness and physicians' opinion of the trends and pitfalls of genetic testing in Greece. Y. Mai, T. Koromila, A. Sagia, D.N. Cooper, G. Vlahopoulos, **G. Lagoumintzis**, K. Mitropoulos, P. Kollia, K. Poulas, V. Stathakopoulos, G.P. Patrinos. *Personalized Medicine*, 2011, 8(5):551-61.
15. Scale up of antigen specific apheresis of human anti-acetylcholine receptor antibodies from myasthenia patients sera as an alternative potential to plasmapheresis. **G. Lagoumintzis***, P. Zisimopoulou*, N. Trakas, K. Poulas, S.J. Tzartos. *J. Neuroimmunology*, 2013, 267:1-6. ***equal contribution**
16. From therapeutic Electrotherapy to Electroceuticals: Formats, Applications and Prospects of Electrostimulation. M.E. Kambouris, Z. Zagoriti, **G. Lagoumintzis**, K. Poulas. *Annual Research & Review in Biology*, 2014, 4(20): 3054-3070.
17. Non-contact current transfer induces the formation and improves the X-ray diffraction quality of protein crystals. Ilias Boltsis*, **G. Lagoumintzis***, D. S.M. Chatzileontiadou, P. Giastas, S.J. Tzartos, D.D. Leonidas, K. Poulas. *Journal of Crystal Growth and Design*, 2014, 14(9): 4347-4354. ***equal contribution**
18. Direct proof of the in vivo pathogenic role of the AChR autoantibodies from myasthenia gravis patients. G. Kordas, **G. Lagoumintzis**, S. Sideris, K. Poulas, S.J. Tzartos. *PLOS ONE*, 2014, 9(9): e108327.
19. Introducing dAUTObase: a first step towards the global scale geoepidemiology of autoimmune syndromes and diseases. V.A Gkantouna, M.E. Kambouris, E.S Viennas, Z.M. Ioannou, **G. Lagoumintzis**, Z. Zagoriti, G.P. Patrinos, G. E. Tzimas, K. Poulas. *Bioinformatics*, 2015, 15;31(4):581-6.
20. Reduced muscle mitochondrial enzyme activity in MuSK-immunized mice. E. Özkök, H. Durmus, B. Yetimler, H. Tasli, N. Trakas, C. Ulusoy, **G. Lagoumintzis**, S. Tzartos, E. Tüzün. *Clinical Neuropathology*, 34(6):359-63, 2015.
21. Utilizing the virus-induced blocking of apoptosis in an easy baculovirus titration method. A. Niarchos, **G. Lagoumintzis**, K. Poulas. *Scientific Reports*, 22(5):15487, 2015.
22. Hepatic Fgf21 Expression Is Repressed after Simvastatin Treatment in Mice. P. Ziros, Z. Zagoriti, **G. Lagoumintzis**, V. Kyriazopoulou, R. Iskrenova, E. Habeos, G. Sykiotis, D. Chartoumpekis, I. Habeos. *PLOS ONE*, 2016 Sep 1;11(9):e0162024.
23. FGF21 physiological roles and prospects for clinical applications. A. Niarchos, D. Chartoumpekis, A. Siora, E. Konstantinou, **G. Lagoumintzis**, I. Habeos. *British Journal of Medicine & Medical Research*, 18(9): 1-7, 2016.
24. TA-GC cloning: a new simple and versatile technique for the directional cloning of PCR products for recombinant protein expression. A. Niarchos, A. Siora, E. Konstantinou, **G. Lagoumintzis**, K. Poulas. *PLOS ONE*, 2017, 12(11): e0186568.
25. Evidence for association of STAT4 and IL12RB2 variants with MG susceptibility: what is the effect on gene expression in thymus? Z. Zagoriti, **G. Lagoumintzis**, G. Perroni, G. Papathanasiou, A. Papadakis, V. Ambrogi, J.S. Tzartos, K. Poulas. *Journal of Neuroimmunology*, 319:93-99, 2018.
26. Tobacco specific nitrosamines: a review of literature. E. Konstantinou, F. Fotopoulou, A. Drosos, Z. Zagoriti, A. Niarchos, D. Makrynioti, K. Farsalinos, **G. Lagoumintzis**, K. Poulas. *Food and Chemical Toxicology*, 118:198-203, 2018. **co-corresponding author**.
27. Microwave diathermy induces mitogen-activated protein kinases and tumor necrosis factor- α in cultured human monocytes. **G. Lagoumintzis**, A. Andrikopoulos, A. Adamopoulos, I. Seimenis, C. Koutsojannis. *Electromagnetic Biology and Medicine*, 2019, 11:1-12. **corresponding author**.
28. Toxicity classification of e-cigarette flavoring compounds based on European Union regulation: analysis of findings from a recent study. K. Farsalinos and **G. Lagoumintzis**. *Harm Reduction Journal*, 16, 48 (2019).
29. Real-time assessment of e-cigarettes and conventional cigarettes emissions: Aerosol size distributions, mass and number concentrations. S. Lampos, E. Kostenidou, K. Farsalinos, Z. Zagoriti, A. Ntoukas, K. Dalamarinis, P. Savranakis, **G. Lagoumintzis**, K. Poulas. *Toxics*, 2019 30;7(3). **co-corresponding author**.

30. Wireless Direct Microampere Current in Wound Healing: Clinical and Immunohistological Data from two single case reports. **G. Lagoumintzis**, Z. Zagoriti, M.S. Jensen, T. Argyrakos, C. Koutsojannis, K. Poulas. *Biosensors*, 2019, 9(3), 107. **co-corresponding author**.
31. Ocular conditions and dry eye due to traditional and new forms of smoking: A review. D. Makrynioti, Z. Zagoriti, C. Koutsojannis, P.B. Morgan, **G. Lagoumintzis**. *Contact Lens and Anterior Eye*, 2020, 43(3): 277-284. **corresponding author**.
32. Assessing the direct binding of E3 RING ligases to ubiquitin and its theoretical implication on E3's protein interaction network by integrated bioinformatics. Dimitris G. Mintis, Anastasia Chasapi, Konstantinos Poulas, **George Lagoumintzis**, and Christos T. Chasapis. *Molecules*. 2020;25(20):4787. **co-corresponding author**.
33. Nicotinic cholinergic system and COVID-19: In silico evaluation of nicotinic acetylcholine receptor agonists as potential therapeutic interventions. N. Alexandris, **G. Lagoumintzis**, C.T. Chasapis, D.D. Leonidas, G.E. Papadopoulos, S.J. Tzartos, A. Tsatsakis, E. Eliopoulos, K. Poulas, K. Farsalinos. *Toxicology Reports*, 2021 (8): 73-83. **equal contribution**
34. Nicotinic Cholinergic System and COVID-19: In Silico Identification of Interactions Between $\alpha 7$ Nicotinic Acetylcholine Receptor and the Cryptic Epitopes of SARS-Co-V and SARS-CoV-2 Spike Glycoproteins. **G. Lagoumintzis**, C.T. Chasapis, N. Alexandris, D. Kouretas, S. Tzartos, E. Eliopoulos, K. Farsalinos, K. Poulas. *Food Chem Toxicol*. 2021;149:112009. **equal contribution**
35. A Myasthenia Gravis Genome-Wide Association Studies Meta-Analysis identifies Agrin as a Novel Risk Locus. A. Topaloudi, Z. Zagoriti, A.C. Flint, M.B. Martinez, Z. Yang, F. Tsetsos, Y.P. Christou, **G. Lagoumintzis**, E. Yannaki, E. Papanicolaou-Zamba, K. Poulas, K. Kotsa, E. Maltezos, S. Panagoutsos, N. Papanas, D. Papazoglou, Pl. Passadakis, A. Roumeliotis, M. Theodoridis, E. Thodis, X. Tsekmekidou, J. Yovos, J.A. Stamatoyannopoulos, K.A. Kleopa, S. Tzartos, M. Georgitsi, P. Paschou. *J Med Genet*. 2022;59(8):801-809.
36. Editorial: Microbiota and Mitochondria: Impact on Cell Signaling, Physiology and Disease. D. V. Chartoumpakis, A. Zaravinos, Y. Apidianakis, G. Lagoumintzis. *Front. Microbiol*. 2022 18;13:1056499. **corresponding author**
37. Maternal calorie restriction during pregnancy induces the transcriptional activation of a cytoprotective response in embryonic liver, at least partially, in an Nrf2-dependent manner. G. I. Habeos, F. Filippopoulou, E. E. Habeos, E. Kalaitzopoulou, M. Skipitari, P. Papadea, **G. Lagoumintzis**, A. Niarchos, C. D. Georgiou and D. V. Chartoumpakis. *Antioxidants*, 2022 (under review).

CONFERENCES & WORKSHOPS

Workshops, Summer Schools:

1. **Post-Doc Summer School:** International Training Course on Mass Spectrometry and High-Performance Liquid Chromatography of Proteins, funded by UNESCO, May 1-12, 2006, Florence, Italy. UNESCO Travel Fellowship.
2. **Post-Doc Training School:** Hellenic Society of Immunology (**Topic: Innate Immunity & Acquired Immunity**) Athens, November 21-23, 2002.
3. **Summer School:** 1st European Training Program in Micro-Separation Techniques-ECOSEP 1, University of Patras, May 14-17, 1998, (E.U.-Leonardo Da Vinci Program).

International Conferences (selected):

1. Random mutagenesis of protein-coding genes for optimization of their expression, A. Ntoukas, F. Fotopoulou, E. Konstantinou, A. Drosos, **G. Lagoumintzis**, A. Niarchos, G.A. Spyroulias, K. Poulas. 9th International Conference of the Hellenic Crystallographic Association, 5-7 October 2018.
2. Elevated High-Density Lipoprotein-Cholesterol levels in Type 2 Diabetes Mellitus patients may be attributed to genetic variants in ABCA1 or its post-transcriptional regulator miR-33. G. Gkoliou, S. Alexouda, F. Kantaridou, E. Stylianakis, **G. Lagoumintzis**, P. Paschou, I. Habeos, M. Georgitsi. 68th

Conference of the Hellenic Society of Biochemistry and Molecular Biology, Athens, Eugenides Foundation, November 10-12, 2017.

3. Apoptosis blocking assay: an accurate and quick assay for baculovirus titration. A. Niarchos, **G. Lagoumintzis**, K. Poulas. FP7-REGPOT-2011-15. SEE-DRUG Project. NMR Applications in Life Sciences: Exploring Peptides & Proteins, June 18-20, 2015, Patras, Greece.
4. Study of the effect of pulsed electromagnetic fields (PEMF) in classical swine fever virus polymerase (CSFVP) crystallization. A. Koinis, I. Boltsis, A. Niarchos, **Lagoumintzis G.**, N. Papageorgiou, Poulas K. FP7-REGPOT-2011-15. SEE-DRUG Project. NMR Applications in Life Sciences: Exploring Peptides & Proteins. 18-20 June 2015, Patras, Hellas.
5. Myasthenia gravis: recent developments on its laboratory diagnosis and antigen-specific therapy. S.J. Tzartos, M. Belimezi, A. Kokla, G. Kordas, **G. Lagoumintzis**, K. Lazaridis, K. Poulas, A. Sotiriadis, N. Trakas, and P. Zisimopoulou. 9th International Congress on current treatments and therapeutic perspective in Alzheimer's, Parkinson's disease, MS and Epilepsy, Athens, January 2011.
6. Direct observation of the pathogenic role of the anti-AChR autoantibodies in anti-AChR myasthenia gravis. G. Kordas, **G. Lagoumintzis**, K. Poulas, and S.J. Tzartos. International Conference on Myasthenia gravis, Paris, 1-2 December 2009.
7. Recombinant antigenic domains for the study, diagnosis and treatment of MG. S. J. Tzartos, K. Bitzopoulou, G. Kordas, **G. Lagoumintzis**, K. Lazaridis, A. Niarchos, K. Poulas, A. Sotiriadis, N. Trakas and P. Zisimopoulou. International Conference on Myasthenia gravis, Paris, 1-2 December 2009.
8. Human nicotinic acetylcholine receptors in muscles and neurons. S. Tzartos, K. Bitzopoulou, P. Giastas, G. Kordas, **G. Lagoumintzis**, K. Lazaridis, K. Poulas, C. Stergiou, P. Zisimopoulou and M. Zouridakis. 23rd Hellenic Society for Neuroscience Meeting, Rhodes, Greece, September 13-18, 2009.
9. Mannose Receptor Colocalizes with TLR2 in the P.aeruginosa Containing Endosome and Regulates Proinflammatory Cytokine Production in Human Macrophages. P. Xaplanteri, **G. Lagoumintzis**, P. Kotsantis, Z. Lygerou, G. Dimitracopoulos, F. Paliogianni. Proceedings of 109th General Meeting of the American Society for Microbiology, Pennsylvania, Philadelphia, May 17 - May 21, 2009.
10. Recombinant human acetylcholine receptor domains for understanding receptor structure and pathogenicity. S. Tzartos, K. Bitzopoulou, E. Eliopoulos, P. Giastas, G. Kordas, K. Kostelidou, **G. Lagoumintzis**, K. Lazaridis, K. Poulas, A. Sideris, A. Sotiriadis, A. Niarchos, C. Stergiou, P. Zisimopoulou, and M. Zouridakis. Nicotinic Acetylcholine Receptors 2008 (General Meeting), Welcome Trust Genome Campus (Conference centre), Hinxton, Cambridge, UK, April 23-26, 2008.
11. Recombinant acetylcholine receptor polypeptides as tools for the study and treatment of myasthenia gravis. S. Tzartos, K. Bitzopoulou, I. Gavra, G. Kordas, K. Kostelidou, **G. Lagoumintzis**, K. Poulas, S. Sideris, A. Sotiriadis, N. Trakas and P. Zisimopoulou. 13th International Congress of Immunology, Rio de Janeiro, Brazil, August 21-25, 2007.
12. Transcutaneous immunization with antigen-loaded PLA nanospheres. G. Mattheolabakis, **G. Lagoumintzis**, Z. Panagi, E. Papadimitriou, K. Avgoustakis. 34th Annual Meeting and Exposition of the Controlled Release Society, Long Beach, CA, USA, July 7-11, 2007.
13. Recombinant domains of acetylcholine receptor subunits as immunoabsorbents for the development of an antigen-specific myasthenia gravis therapy. P. Zisimopoulou, **G. Lagoumintzis**, K. Poulas & S. J. Tzartos. Proceedings of 11th International Conference on Myasthenia Gravis and Related Disorders, Chicago, IL, USA, May 13-16, 2007.
14. Isolation and characterization of acetylcholine receptor anti-subunit autoantibodies: in vitro and in vivo studies of their function in myasthenia gravis. **G. Lagoumintzis**, G. Kordas, S. Sideris, K. Kostelidou, A. Sotiriadis, I. Gavra, N. Trakas, K. Poulas and S. Tzartos. Proceedings of 11th International Conference on Myasthenia Gravis and Related Disorders, Chicago, IL, USA, May 13-16, 2007.
15. Progress in the production of the extracellular domain of human muscle acetylcholine receptor α subunit in the yeast *Pichia pastoris*. C. Stergiou, A. Sotiriadis, P. Katapodis, **G. Lagoumintzis**, K. Poulas, D. Kekos and S. J. Tzartos. 2nd International Greek Biotechnology Forum, DAIS Cultural Centre, Athens, Greece, July 1-3, 2005.

16. Pro-inflammatory cytokine production by human monocytes in response to *P. aeruginosa* infection mainly involves TLR2 and Mannose Receptor (MR). P. Xaplanteri, **G. Lagoumintzis**, G. Dimitracopoulos, F. Paliogianni. 12th International Congress of Immunology and 4th Annual Conference of Federation of Clinical Immunology Societies, Canada, Montreal, July 18-23, 2004.
17. *Pseudomonas aeruginosa* LPS and Slime Glycolipoprotein (GLP) differentially activate the same Mitogen activated protein kinase signaling Pathways for Tumor Necrosis Factor- α in fresh human monocytes. **G. Lagoumintzis**, P. Xaplanteri, G. Dimitracopoulos, F. Paliogianni. 14th European Congress of Clinical Microbiology and Infectious Diseases, Prague, May 1-4, 2004.
18. Differential activation of Mitogen-Activated Protein Kinases by *Pseudomonas aeruginosa* Slime-GLP and LPS in human monocytes. **G. Lagoumintzis**, P. Xaplanteri, G. Dimitracopoulos, F. Paliogianni: Proceedings of 15th European Immunology Congress, Rhodes, Greece, June 8-12, 2003.
19. Differential TNF- α expression from human monocytes in vitro, in response to different components of *P. aeruginosa*, through an NF- κ B dependent mechanism. **G. Lagoumintzis**, M. Christofidou, G. Dimitracopoulos, F. Paliogianni. 101st General Meeting of the American Society for Microbiology, Orlando, Florida, May 20-24, 2001.
20. Differential Tumor Necrosis Factor- α expression from human monocytes in vitro, in response to different components of *P. aeruginosa*, through an NF- κ B dependent mechanism. **G. Lagoumintzis**, M. Christofidou, G. Dimitracopoulos, F. Paliogianni. 11th European Congress of Clinical Microbiology and Infectious Diseases, Turkey, April 1-4, 2001.

MEMBERSHIPS AND REVIEWING ACTIVITIES

Reviewing Activities:

- ❖ **2021: Guest Editor: Frontiers in Microbiology (Systems Microbiology)** (*IF*= 6.06). I have been the Reviewer of >7 original manuscripts for the Frontiers in Microbiology journal (Section of Systems Biology) and a leading Guest-Editor in the Research Topic: "Microbiome and Mitochondria: Impact on Cell Signaling, Physiology and Diseases"
- ❖ **2019: Reviewer:** International Journal of Molecular Sciences (*IF*=5.92)
- ❖ **2019: Reviewer:** Food and Chemical Toxicology (*IF*=5.57)
- ❖ **2019: Reviewer:** Toxics (*IF*=4.47)
- ❖ **2018: Reviewer:** International Journal of Environmental Research and Public Health (*IF*=4.61)
- ❖ **2015: Review Editor:** Frontiers in Microbiology (*IF*=6.06)
- ❖ **2015: Reviewer:** American Journal of Infection Control (*IF*=4.3)
- ❖ **2015: Reviewer:** International Journal of Oncology Research
- ❖ **2008: Reviewer:** Scandinavian Journal of Immunology (*IF*=3.88)

Affiliated Memberships:

- ❖ Member of the Hellenic Society of Biochemistry and Molecular Biology (HSBMB)
- ❖ Member of the Hellenic Society of Immunology
- ❖ Member of the Certified Evaluators Registry of the General Secretary of Research and Technology (GSRT)

FELLOWSHIPS AND AWARDS

- ❖ Honorable mention of the "Nikos Oikonomakos" prize for the Research Conference Paper: "Random mutagenesis of protein-coding genes for optimization of their expression", presented at the 9th International Conference of the Hellenic Crystallographic Association, October 5-7, 2018.
- ❖ Award of best oral presentation, 2nd Conference of Pharmaceutical Sciences, Patras, October 9-11, 2014.
- ❖ Award of top three poster presentations, 39th Annual Panhellenic Medical Conference, Athens, May 22-25, 2013.
- ❖ Award of best poster presentation, 7th Panhellenic Congress of Immunology, Thessaloniki, December 11-15, 2007.

- ❖ Conference Fellowship (Full Travel) from the New York Academy of Sciences for participating with 2 research papers (oral and poster) in the "World Congress for Myasthenia Gravis and Related Disorders", Chicago (USA), May 2007.
- ❖ Award of best oral presentation, 3rd Panhellenic Conference of Medical Biopathology, Thessaloniki, April 31 - May 3, 2004.

PEER-REVIEWER IN SCIENTIFIC JOURNALS

- Frontiers in Microbiology (Systems Microbiology), ● International Journal of Molecular Sciences, ● Toxics, ● Food and Chemical Toxicology, ● Scandinavian Journal of Immunology, ● International Journal of Environmental Research and Public Health, ● American Journal of Infection Control.

GUEST-EDITOR IN SCIENTIFIC JOURNALS

- ❖ **Guest Editor in Frontiers in Microbiology (Systems Microbiology)** (IF=6.06). **Research Topic:** Microbiome and Mitochondria: Impact on Cell Signaling, Physiology and Diseases.
- ❖ **Guest Editor in the Special Issue of Toxics** (ISSN 2305-6304, MDPI MDPI AG, Basel, Switzerland), με θέμα: «Current Knowledge of E-cigarettes and Heated Tobacco Products». Θεματική ενότητα: "Toxicology and Public Health" (2019).

ACADEMIC GOALS

- ❖ Concentrate on Biochemical and Molecular Biology methods, focusing on cutting-edge OMIC technologies to get a more profound knowledge of chronic and life-threatening human diseases, laying the groundwork for developing innovative future therapeutic procedures and approaches.
- ❖ Support student-focused research to aid the transfer of young scientists from the undergraduate to graduate level and beyond with knowledge of biochemical and analytical methods, new OMIC technologies, and cellular or molecular immune-oriented treatment approaches.
- ❖ Collaborate with team members and academics to develop new scientific information, technologies, insights, and products for human diseases.
- ❖ Create and foster meaningful relationships with team members and research collaborators at all levels.

SKILLS AND INTERESTS

In the context of my doctoral and post-doctoral research, I have acquired extensive laboratory experience in numerous techniques and methods of basic research in the field of Biochemistry and Molecular Biology, particularly in the use of biochemical and molecular techniques/methods *in vitro* and *in vivo* in mammalian cells and organisms, as well as in the functional characterization of bioactive molecules (proteins, glycolipids, etc.). In brief, my recent research skills and interests include the following:

- ❖ The investigation of the influence of the human microbiome on human pathophysiology.
- ❖ Signal transduction mechanisms in human cells, focusing on the immune system - The role of innate immunity following microbial infection.
- ❖ Interactions of Pathogen Associated Molecular Patterns (PAMPs) with the host immune receptors.
- ❖ The role of fibroblast growth factor-21 in energy homeostasis and type II diabetes mellitus. Role of endogenous ROS signals.
- ❖ Pathophysiological mechanisms of autoimmune neuromuscular disorders. Myasthenia gravis antigen-specific therapy methods. Construction and application of immunosorbent columns containing recombinant proteins.
- ❖ Characterization of monoclonal antibodies and their fragments and investigating their interaction with the cholinergic receptor.

- ❖ Cloning, expression, synthesis, and biochemical characterization of protein molecules in prokaryotic and eukaryotic microorganisms.

WET LAB EXPERIENCE

I have gained experience in several Biochemical and Molecular Biology techniques such as DNA, RNA, and protein isolation, recombinant DNA methods, Southern, Northern, and Western hybridization, PCR, isolation of organelles and nuclei, analysis of nucleic acid and protein interactions, protein immunoprecipitation, immunohistochemical detection of proteins, qualitative and quantitative biochemical characterization of biomolecules and mainly proteins (*i.e.*, electrophoresis, EMSA, FPLC filtration - affinity - ion exchange chromatography), cultures of eukaryotic and prokaryotic organisms (*i.e.*, *P. pastoris*, *E. coli*) for the cloning-expression and production of recombinant proteins, transformation of prokaryotic organisms with plasmids encoding recombinant proteins, tissue culture cells (B, T lymphocytes, monocytes-macrophages, etc.), transfection of eukaryotic organisms by electroporation for the *in vivo* control of the action of transcription factors, characterization and interaction of transcription factors with DNA to regulate gene expression, immunobiological methods of antigen-antibody analysis and quantification (RIA, ELISA, etc.), culture and typing of microbes.

PATENTS

- ❖ "Control of cell cultures by wireless electrostimulation". Hellenic Industrial Property Organization (OBI), 2015.

SCIENTIFIC APPOINTMENTS IN DIAGNOSTICS AND CLINICAL BIOCHEMISTRY

- ❖ **2013-2016:** Scientific Responsible Biochemist analyst for the laboratory diagnosis of Myasthenia at the Laboratory of Molecular Biology and Immunology, Department of Pharmacy, University of Patras.

SPOKEN LANGUAGES

- ❖ Greek, English

SUMMARY OF PROFESSIONAL AND RESEARCH ACHIEVEMENTS

Research and Academic (Professional) Experience (years)	18
Teaching Experience (years)	17
Peer-reviewed papers in International Journals	36
Books (National-International)	3
Chapters in Books (International)	5
Scientific Conferences (National and International)	74
Topic Editor/Guest-Editor in International Journals	2
Patents	1
Participation in Research Programs (National and International)	>20
Awards/Fellowships	6
Citations	>750
<i>h</i> -index	15