

Anastasia Pyriochou

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Current Position

Special Teaching Staff (E.DI.P.)

Education

2018: Diploma in Advanced Pharmacology, British Pharmacological Society

2003: M.Sc. in Environmental Management, University of Patras, Greece

1999: Ph.D. in Biochemistry, University of London, Royal Holloway, UK

1994: BSc. Hons. Biochemistry (plus Training Diploma in Medical Biochemistry), University of Greenwich, UK

Professional training and academic appointments

1992-1993: Trainee in Medical Biochemistry, Tzaneio General Hospital of Piraeus, Greece

1999-2000: Postdoctoral Research Fellow, School of Biology, Laboratory of Human and Animal Physiology, University of Patras, Greece

1999-2000: Scientific assistant, Department of Hematology and Biochemistry, Laboratory of Immunocytochemistry, University General Hospital of Ioannina, Greece

2001-2002: Postdoctoral Research Fellow, School of Health Science, Department of Medicine, Laboratory of General Biology, University of Patras, Greece

2002-2003: Postdoctoral Research Fellow, School of Health Science, Department of Medicine, Laboratory of Pharmacology, University of Patras, Greece

2003-2010: Postdoctoral Research Fellow, School of Health Science, Department of Pharmacy, Laboratory of Molecular Pharmacology, University of Patras, Greece

2007: Visiting Research Scientist, Department of Surgery, University of Medicine and Dentistry of New Jersey, Newark, USA

2010-2014: Special Laboratory Technical Personnel, School of Health Science, Department of Pharmacy, University of Patras, Greece

2014-: Special Teaching Staff, School of Health Science, Department of Pharmacy, University of Patras, Greece

Teaching Activities

Undergraduate Courses

1994 – 1998: University of London, Royal Holloway, Department of Biochemistry, London, UK

Laboratory demonstrator in Human Anatomy and Physiology

Tutor of: Human Anatomy and Physiology and Experimental Physiology

2005–2006: Lecturer on contract, Hellenic Open University, Greece

Courses: Biology, Molecular Biology and Biochemistry

2006-2010: Lecturer on contract, University of Patras, School of Health Science Department of Pharmacy, Greece

Courses: Pharmacology: Syllabus I and II and Molecular Pharmacology: Syllabus I and II

2010-2014: University of Patras, School of Health Science, Department of Pharmacy, Greece

Laboratory courses: Pharmacology I, Molecular Pharmacology and Introduction to Pharmaceutical Sciences

2014 - : University of Patras, School of Health Science, Department of Pharmacy, Greece

Laboratory courses:

1st Semester: Pharmacology I, Introduction to Pharmaceutical Sciences, Biochemistry I, Pharmaceutical Biotechnology

2nd Semester: Biochemistry II, Molecular Pharmacology, Molecular Biology-Genetics, Molecular Genetics and Pharmacogenomics

2019-: University of Patras, School of Health Science, Department of Pharmacy, Greece

Course: Cell Biology (PHA-A14-NEW), *lectures by:* G. Patrinos, G. Sotiropoulou, A. Pyriochou

Postgraduate Courses

2007-2009: Teaching assistant, Faculty of Medicine, National and Kapodistrian University of Athens, Greece

Course: Pharmacology (3rd Academic Semester)

Other Experience

2003-: Instructor of undergraduate and post-graduate students, University of Patras, School of Health Science, Department of Pharmacy, Greece

Professional Societies

Member of the British Society of Pharmacology

Member of the Hellenic Society for Basic and Clinical Pharmacology

Grant Holder

Responsible for the COST Action Number BM1005 (2011-2013)- Gasotransmitters: from basic science to therapeutic applications (ENOG: European Network on Gasotransmitters (Grant holder Institution: University of Patras)

Reviewer

British Journal of Pharmacology

Vascular Pharmacology

American Journal of Medical and Biological Research

American Journal of Epidemiology and Infectious Disease

Asian Journal of Pharmacy, Nursing and Medical Sciences

Editorial Board

International Journal of Pharmaceutical Sciences Review and Research

Honors

University of London, Royal Holloway, London

Awarded for my Ph.D. thesis: Mary-Isabella award and Christie Postgraduate Scholarship

University of Patras, Greece

Awarded for my research performance: Two Scholarships by the Greek State Foundation for the years 2001-2002 and 2002-2003

Greek Society of Pharmacology

Award for my presentation on the "Role of soluble guanylyl cyclase in angiogenesis" (2005)

British Pharmacological Society

Award for my presentation "Soluble guanylyl cyclase inhibition reduces VEGF-induced angiogenesis and permeability" British Pharmacological Society Winter Meeting (2008)

Research Interests

Studying of novel angiogenic factors and newly designed inhibitors of angiogenic processes

Mechanisms of angiogenic processes triggered by growth factors

The angiogenic actions of hydrogen sulfide (H₂S)-underlying molecular mechanisms in the vasculature

Publications

International Scientific Journals with Peer Review System: 21

Chapters in International Scientific Books: 2

Teaching material: 1

National Scientific Journals: 6

Abstracts of International and National Conferences: more than 25

Representative Research Publications

1. **Pyriochou A**, Beis D, Koika V, Potytarchou C, Papadimitriou E, Zhou Z, Papapetropoulos A. (2006). Soluble guanylyl cyclase activation promotes angiogenesis. *J Pharmacol Exp Ther.*, 319: 663-71
2. **Pyriochou A**, Zhou Z, Koika V, Petrou C, Cordopatis P, Sessa WC, Papapetropoulos A. (2007). The phosphodiesterase 5 inhibitor sildenafil stimulates angiogenesis through a protein kinase G/MAPK pathway. *J Cell Physiol.*, 211: 197-204.
3. **Pyriochou A**, Tsigkos S., Vassilakopoulos Th., Cottin, T., Zhou, Z., Gourzoulidou, E., Roussos, Ch., Waldmann, H., Giannis, A., Papapetropoulos, A. (2007). Anti-angiogenic properties of a sulindac analogue. *Br J Pharmacol.*, 152: 1207-14.
4. Zhou, Z., Sayed, N., **Pyriochou, A.**, Roussos, C., Fulton, D., Beuve, A., Papapetropoulos, A. (2008). Protein kinase G phosphorylates soluble guanylyl cyclase on serine 64 and inhibits its activity. *Arterioscler Thromb Vasc Biol.*, 28: 1803-10.
5. Papapetropoulos A., **Pyriochou A.***, Altaany Z., Yang G., Marazioti A., Zhou Z., Jeschke M.G., Branski L.K., Herndon D.N., Wang R., Szabó C. (2009). Hydrogen sulfide is an endogenous stimulator of angiogenesis. *Proc Natl Acad Sci U S A.*, 106:21972-7. ***(equal contribution)**
6. Bucci M., Papapetropoulos A., Vellecco V., Zhou Z., **Pyriochou A.**, Roussos C., Roviezzo F., Brancaleone V., Cirino G. (2010). Hydrogen sulfide is an endogenous inhibitor of phosphodiesterase activity. *Arterioscler Thromb Vasc Biol.*, 30:1998-2004.
7. Palmer G., Tiran Z., Zhou Z., Capozzi M., Park W., Coletta C., **Pyriochou A.**, Kliger Y., Levy O., Borukhov I., Dewhirst M., Rotman G., Penn J., Papapetropoulos A. (2012). A novel angiopoietin-derived peptide displays anti-angiogenic activity and inhibits tumour-induced and retinal neovascularization. *Br J Pharmacol.*, 165:1891-903.
8. Katsouda A., Bibli S.I., **Pyriochou A.**, Szabo C., Papapetropoulos A. (2016). Regulation and role of endogenously produced hydrogen sulfide in angiogenesis. *Pharmacol Res*, 113(Pt A):175-185.
9. Umaru B., **Pyriochou A.**, Kotsikoris V., Papapetropoulos A., Topouzis S. (2015). ATP-sensitive potassium channel activation induces angiogenesis in vitro and in vivo. *J Pharmacol Exp Ther.*, 354(1): 79-87.
10. Konstantinou E., Zagoriti Z., **Pyriochou A.**, Poulas, K. (2020). Microcurrent stimulation triggers MAPK signaling and TGF-beta-1 release: implications for accelerating tissue regeneration and wound healing. *Biosensors and Bioelectronics (submitted)*

Student Office Hours

Tuesday 10:00 a.m.-11:00 a.m.

Wednesday 10:00 a.m.-13:00 p.m.

Friday 09:00 a.m.-11:00 p.m.