PERSONAL INFORMATION

Evangelia Pantazaka

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0000-0001-6737-8428 6503848401

EDUCATION

2004-2008 — **PhD degree**
Department of Pharmacology, University of Cambridge, UK
PhD project on the "Targeting and dynamics of inositol 1,4,5-trisphosphate receptors (IP_3Rs)" supervised by Professor Colin W. Taylor

2004-2005 — **MPhil degree**
Department of Pharmacology, University of Cambridge, UK
MPhil project on the "Subcellular targeting of inositol trisphosphate receptors" supervised by Professor Colin W. Taylor

2002-2004 — **MSc degree**
Department of Chemistry, University of Patras
MSc in "Medicinal Chemistry: Drug Discovery and Design" ("Excellent", 9.36/10)
MSc project on the "Effects of novel acitretin-type retinoids in the production of MMPs and TIMPs from chondrocytes and in RNase P activity from the slime mold *Dictyostelium discoideum*" supervised by Professor Dionissios Papaioannou (collaboration with Profs. A. Aletras and D. Drainas)

1998-2002 — **BSc degree**
Department of Chemistry, University of Patras
BSc in Chemistry ("Very well", 8.07/10)
Undergraduate project on the "Total syntheses of medicinally interesting linear, conformationally restricted and branched polyamine analogs" supervised by Professor Dionissios Papaioannou

PROFESSIONAL EXPERIENCE

08/2025-today — **Assistant Professor of Pharmacology**
Laboratory of Molecular Pharmacology, Section of Pharmacology – Biosciences, Department of Pharmacy, University of Patras

2022-2025 — **Secondary education teacher** (Teaching Chemistry, Physics, Biology, Geography)

2020-2022 — **Postdoctoral researcher**
Department of Biology, University of Patras
Collaboration with Associate Professor Galatea Kallergi (RESEARCH-CREATE-INNOVATE, Project: Development of innovative diagnostic tools for the detection and characterization of Circulating Tumor Cells in patients' blood, JUNBlood)

2017-2020 — **Research career break for family reasons / Teaching fellow in the Departments of Pharmacy and Chemistry**

2015-2017 — **Postdoctoral researcher**
Department of Pharmacy, University of Patras
Collaboration with Professor Evangelia Papadimitriou (Marie Curie fellow, FP7 IEF 2013, Project: Understanding tumour resistance: Receptors and signalling pathways that can lead the race against tumour angiogenesis, ALTangioTARGET)

2013-2015 **Postdoctoral researcher**
Department of Pharmacy, University of Patras
Collaboration with Professor Evangelia Papadimitriou (IKY Fellowship of Excellence for Postgraduate studies in Greece - Siemens Program, Project: Identification of receptors and signalling pathways as potential new targets for the development of bioactive molecules against cancer growth and angiogenesis)

2012-2013 **Visiting fellow**
Department of Pharmacology, University of Cambridge, UK
Collaboration with Professor Colin W. Taylor (completion of the postdoctoral project)

2008-2011 **Postdoctoral researcher**
Department of Pharmacology, University of Cambridge, UK
Collaboration with Professor Colin W. Taylor (Medical Research Council, Project: Differential regulation of adenylyl cyclase by Ca^{2+} entry and Ca^{2+} release in arterial smooth muscle)

2004 **Research Assistant**
Department of Chemistry, University of Patras
Collaboration with Professors Dionissios Papaioannou and Constantinos Athanassopoulos (continuation of the BSc project)

TEACHING EXPERIENCE (Representative activities)

Lectures: Teaching fellow in Physiology I and II, Department of Pharmacy, University of Patras

Laboratory practicals: Teaching fellow in Biochemistry-2, Department of Chemistry, University of Patras

Laboratory demonstrations: Introduction to Pharmaceutical Sciences, Department of Pharmacy, University of Patras
Mechanisms of drug action, Department of Pharmacology, University of Cambridge, UK
Experimental Organic Chemistry I & II, Department of Chemistry, University of Patras

Tutorials: Organic Chemistry, Department of Chemistry, University of Patras

Co-supervision of students' projects: 2 undergraduate projects, Department of Biology, University of Patras
2 undergraduate projects, Department of Pharmacy, University of Patras
1 rotation PhD project, 1 undergraduate project, and 1 summer project, Department of Pharmacology, University of Cambridge, UK

ACADEMIC ACHIEVEMENTS

Fellowships, scholarships:

2015-2017: Marie Curie Fellowship (FP7-PEOPLE-2013-IEF)

2013-2015: IKY Fellowship of Excellence for Postgraduate studies in Greece - Siemens Program (1/14 fellowships in "Health" category and 1/50 of that year)

2005-2007: PhD scholarship from the Greek Foundation Propondis

2004-2007: PhD scholarship from the "George and Marie Vergottis" Cambridge Bursary, Cambridge European Trust, and from the Department of Pharmacology, University of Cambridge, UK

2002-2004: Postgraduate scholarship provided by the State Scholarships Foundation

1999-2000, **1998-1999:** Undergraduate scholarships provided by the State Scholarships Foundation

Travel grants: **2007:** Travel grants from the Department of Pharmacology and Churchill College to attend the Gordon research conference on Protein transport across cell membranes, and from the Cambridge Philosophical Society and Physiological Society to attend Life Sciences 2007

2006: Youth travel fund to attend the FEBS Advanced Course in "Microspectroscopy: Imaging Biochemical Dynamics in Living Cells" in Wageningen, the Netherlands

Award: **2014:** 1st poster prize (2nd Conference on Pharmaceutical Sciences)

Publications in journals

23. **Pantazaka, E** (2025) Isolation of rodent aortic smooth muscle cells by enzymatic digestions. *Methods Mol. Biol*. 2956, 65-70

22. Papakonstantinou, D, Roumeliotou, A, **Pantazaka, E**, Shaukat, AN, Christopoulou, A, Koutras, A, Dimitrakopoulos, FI, Georgoulias, V, Xagara, A, Chantzara, E, Koinis, F, Kotsakis, A, Stathopoulos, C & Kallergi, G (2025) Integrative analysis of circulating tumor cells (CTCs) and exosomes from small-cell lung cancer (SCLC) patients: a comprehensive approach. *Mol. Oncol*. 19, 2038-2055

21. **Pantazaka, E**, Alkahtani, S, Alarifi, S, Alkahtane, AA, Stournaras, C & Kallergi, G (2024) Role of KDM2B epigenetic factor in regulating calcium signaling in prostate cancer cells. *Saudi Pharm. J*. 32, 102109

20. Kaspiris, A, Vasiliadis, E, **Pantazaka, E**, Lianou, I, Melissaridou, D, Savvidis, M, Panagopoulos, F, Tsalimas, G, Vavourakis, M, Kolovos, I, Savvidou OD & Pneumaticos, SG (2024) Current progress and future perspectives in contact and releasing-type antimicrobial coatings of orthopedic implants: A systematic review analysis emanated from in vitro and in vivo models. *Infect. Dis. Rep*. 16, 298-316

19. Ferro, A[#], **Pantazaka, E**[#], Athanassopoulos CM & Cuendet, M (2023) Histone deacetylase-based dual targeted inhibition in multiple myeloma. *Med. Res. Rev*. 43, 2177-2236 ([#]equal contribution)

18. Roumeliotou, A, **Pantazaka, E**, Xagara, A, Dimitrakopoulos, FI, Koutras, A, Christopoulou, A, Kourelis, T, Aljarba, NH, Alkahtani, S, Koinis, F, Kotsakis, A & Kallergi, G (2022). Phenotypic characterization of circulating tumor cells isolated from non-small and small cell lung cancer patients. *Cancers* 15, 171

17. **Pantazaka, E**, Ntzifa, A, Roumeliotou, A, Lianidou, E, Georgoulias, V, Kotsakis, A & Kallergi, G (2022). PD-L1/pS6 in circulating tumor cells (CTCs) during osimertinib treatment in patients with non-small cell lung cancer (NSCLC). *Biomedicines* 10, 1893

16. Sklias, T[#], Vardas, V[#], **Pantazaka, E**, Christopoulou, A, Georgoulias, V, Kotsakis, A, Vasilopoulos, Y & Kallergi, G (2022) PARP-1 expression and BRCA1 mutations in breast cancer patients' CTCs. *Cancers* 14, 1731 ([#]equal contribution)

15. Kallergi, G, Kontopodis, E, Ntzifa, A, Jordana-Ariza, N, Karachaliou, N, **Pantazaka, E**, Charalambous, HA, Psyrri, A, Tsaroucha, E, Boukovinas, I, Koumarianou, A, Hatzidaki, D, Lianidou, E, Georgoulias, V, Rosell, R & Kotsakis, A (2022) Effect of osimertinib on CTCs and ctDNA in EGFR mutant non-small cell lung cancer patients: the prognostic relevance of liquid biopsy. *Cancers* 14, 1574

14. Vardas, V[#], Politaki, E[#], **Pantazaka, E**, Georgoulias, V & Kallergi, G (2021) Epithelial-to-mesenchymal transition of tumor cells: cancer progression and metastasis. *Int. J. Dev. Biol*. 66, 277-283 ([#]equal contribution)

13. Markou, A, Tzanikou, E, Kallergi, G, **Pantazaka, E**, Georgoulias, V, Kotsakis, A & Lianidou, E (2021) Evaluation of Monocarboxylate Transporter 4 (MCT4) expression and its prognostic significance in circulating tumor cells from patients with early stage non-small-cell lung cancer. *Front. Cell Dev. Biol.* 9, 641978

12. **Pantazaka, E**, Vardas, V, Roumeliotou, A, Kakavogiannis, S & Kallergi, G (2021) Clinical relevance of mesenchymal- and stem-associated phenotypes in circulating tumor cells isolated from lung cancer patients. *Cancers* 13, 2158

11. Taylor, EJA, **Pantazaka, E**, Shelley KL & Taylor, CW (2017) Prostaglandin E_2 inhibits histamine-evoked Ca^{2+} release in human aortic smooth muscle cells through hyperactive cAMP signaling junctions and protein kinase A. *Mol. Pharmacol.* 92, 533-545

10. Magoulas, GE, Tsigkou, T, Skondra, L, Lamprou, M, Tsoukala, P, Kokkinogouli, V, **Pantazaka, E**, Papaioannou, D, Athanassopoulos, CM & Papadimitriou, E (2017) Synthesis of novel artemisinin dimers with polyamine linkers and evaluation of their potential as anticancer agents. *Bioorg. Med. Chem.* 25, 3756-3767

9. Papadimitriou, E, **Pantazaka, E**, Castana, P, Tsalios, T, Polyzos, A & Beis, D (2016) Pleiotrophin and its receptor protein tyrosine phosphatase beta/zeta as regulators of angiogenesis and cancer. *Biochim. Biophys. Acta* 1866, 252-265

8. Koutsioumpa, M, Poimenidi, E, **Pantazaka, E**, Theodoropoulou, C, Skoura, A, Megalooikonomou, V, Kieffer, N, Courty, J, Mizumoto, S, Sugahara, K & Papadimitriou, E (2015) Receptor protein tyrosine phosphatase beta/zeta is a functional binding partner for vascular endothelial growth factor. *Mol. Cancer* 14, 19

7. **Pantazaka, E** & Papadimitriou, E (2014) Chondroitin sulfate-cell membrane effectors as regulators of growth factor-mediated vascular and cancer cell migration. *Biochim. Biophys. Acta* 1840, 2643-2650

6. **Pantazaka, E**, Taylor, EJA, Bernard, W & Taylor, CW (2013) Ca^{2+} signals evoked by histamine H_1 receptors are attenuated by activation of prostaglandin EP_2 and EP_4 receptors in human aortic smooth muscle cells. *Br. J. Pharmacol.* 169, 1624-1634

5. **Pantazaka, E** & Taylor, CW (2011) Differential distribution, clustering, and lateral diffusion of subtypes of the inositol 1,4,5-trisphosphate receptor. *J. Biol. Chem.* 286, 23378-23387

4. Tovey, SC, Dedos, SG, Rahman, T-U, Taylor, EJA, **Pantazaka, E** & Taylor, CW (2010) Regulation of inositol 1,4,5-trisphosphate receptors by cAMP independent of cAMP-dependent protein kinase. *J. Biol. Chem.* 285, 12979-12989

3. **Pantazaka, E** & Taylor, CW (2010) Targeting of inositol 1,4,5-trisphosphate receptor to the endoplasmic reticulum by its first transmembrane domain. *Biochem. J.* 425, 61-69

2. Taylor, CW, Rahman, T-U & **Pantazaka, E** (2009) Targeting and clustering of IP_3 receptors: key determinants of spatially organised Ca^{2+} signals. *Chaos* 19, 037102

1. Athanassopoulos, CM, Garnelis, T, **Pantazaka, E** & Papaioannou, D (2004) Efficient guanylation of N^{α},N^{ω}-difunctionalized polyamines at their secondary amino functions. *Tetrahedron Lett.* 45, 8815-8818

Talks

4. **Pantazaka, E** (2022) Monitoring Minimal Residual Disease with ctDNA, 6th Annual meeting on cancer biology and new molecules in cancer therapeutics (invited talk)

3. **Pantazaka, E** (2022) Liquid biopsy in non-small cell lung cancer, Applications of medical precision in oncology (round table)

2. Koutsioumpa, M, Poimenidi, E, Theodoropoulou, C, **Pantazaka, E**, Skoura, A, Megalooikonomou, V & Papadimitriou, E (2013) VEGF165 partnership with receptor protein tyrosine phosphatase beta/zeta mediates VEGF165-induced endothelial cell migration, 64th Congress of the Hellenic Society of Biochemistry and Molecular Biology (selected talk)

1. **Pantazaka, E** (2009) Fluorescent proteins: valuable tools in cellular biology and medicine, 10th Conference in Medicinal Chemistry: Drug Discovery and Design (invited talk)

Selected posters at national and international conferences

22. Mangani, K#, **Pantazaka, E**#, Lianidou, E, Gerogoulias, V, Kotsakis, A, Markou, A & Kallergi, G (2024) MCT1 and MCT4 on Circulating Tumor Cells isolated from non-small-cell lung cancer (NSCLC) patients, AACR 2024 (#equal contribution)

21. **Pantazaka, E**, Graikioti, D, Athanassopoulos, CM, Alix-Panabieres, C & Kallergi, G (2022) A promising circulating tumour cell model for the evaluation of the anti-tumour effects of artesunate, 72nd Congress of the Hellenic Society of Biochemistry and Molecular Biology

20. **Pantazaka, E**, Graikioti, D, Athanassopoulos, CM & Kallergi, G (2022) Non-adherent breast and non-small-cell lung cancer cell cultures as a promising CTCs' model for evaluation of the anti-tumor effects of artesunate, AACR 2022

19. Roumeliotou, A, **Pantazaka, E**, Xagara, A, Makatsoris, T, Koutras, A, Georgoulias, V, Kotsakis, A & Kallergi G (2022) Phenotypic characterization of Circulating Tumor Cells (CTCs) isolated from Non-Small (NSCLC) and Small Cell (SCLC) Lung Cancer Patients, AACR 2022

18. Roumeliotou, A, **Pantazaka, E**, Makatsoris, T, Koutras, A, Georgoulias, V, Kotsakis, A & Kallergi, G (2021) JunB and CXCR4 expression in circulating tumour cells (CTCs) isolated from non-small (NSCLC) and small (SCLC) lung cancer patients, 5th ACTC Advances in Circulating Tumor Cells "Liquid Biopsy in its best"

17. **Pantazaka, E**, Graikioti, D, Athanassopoulos, C & Kallergi, G (2021) Evaluation of the anti-tumour effect of artesunate on adherent and non-adherent (CTCs' model) non-small-cell lung and breast cancer cell lines, 5th ACTC Advances in Circulating Tumor Cells "Liquid Biopsy in its best"

16. Vardas, V, **Pantazaka, E**, Georgoulias, V & Kallergi, G (2021) Evaluation of CTCs isolated from triple-negative breast cancer patients (TNBC) related to cytoskeletal modifications and PD-L1 expression, 5th ACTC Advances in Circulating Tumor Cells "Liquid Biopsy in its best"

15. **Pantazaka, E**, Ntzifa, A, Tsakas, S, Lianidou, E, Kotsakis, A, Georgoulias, V & Kallergi, G (2021) Evaluation of PD-L1/pS6 on circulating tumor cells in patients with non-small-cell lung cancer treated with osimertinib, 5th ACTC Advances in Circulating Tumor Cells "Liquid Biopsy in its best"

14. Koutsioumpa, M, Poimenidi, E, **Pantazaka, E**, Theodoropoulou, Ch, Skoura, A, Megalooikonomou, V, Kieffer, N, Courty, J, Mizumoto, S, Sugahara, K & Papadimitriou, E (2014) Vascular endothelial growth factor-induced endothelial cell migration: a role for receptor protein tyrosine phosphatase beta/zeta, 2nd Conference on Pharmaceutical Sciences (1st prize)

13. Koutsioumpa, M, Poimenidi, E, **Pantazaka, E**, Theodoropoulou, C, Skoura, A, Megalooikonomou, V, Kieffer, N, Courty, J, Sugahara, K & Papadimitriou, E (2014) Receptor protein tyrosine phosphatase beta/zeta is involved in vascular endothelial growth factor-induced endothelial cell migration, 8th Biannual Meeting of the Hellenic Society for Basic & Clinical Pharmacology

12. Koutsioumpa, M, Poimenidi, E, Theodoropoulou, C, **Pantazaka, E**, Skoura, A, Megalooikonomou, V, Kieffer, N, Courty, J, Sugahara, K & Papadimitriou, E (2014) A role of receptor protein tyrosine phosphatase beta/zeta in vascular endothelial growth factor-induced endothelial cell migration, 5th International Meeting on Angiogenesis (Angiogenesis 17, 754)

11. **Pantazaka, E** & Taylor, CW (2010) Differential distribution and mobility of inositol 1,4,5-trisphosphate receptor subtypes, Semmelweis Symposium, Cellular Signaling in Physiology and Pathology

10. **Pantazaka, E** & Taylor, CW (2009) Attenuation of histamine-evoked Ca^{2+} release by cAMP in human vascular smooth muscle cells, FASEB conference, Smooth muscle

9. **Pantazaka, E** & Taylor, CW (2007) Targeting of inositol 1,4,5-trisphosphate receptors to the endoplasmic reticulum, Gordon Conference, Protein transport across cell membranes

8. **Pantazaka, E** & Taylor, CW (2007) Targeting of inositol 1,4,5-trisphosphate receptors to the endoplasmic reticulum, Life Sciences 2007

7. Athanassopoulos, CM, Garnelis, T, **Pantazaka, E** & Papaioannou, D (2004) Efficient guanylation of N^{α}, N^{ω} ditritylated polyamines at the secondary amino functions, 1st Hellenic Symposium, Organic Synthesis "From Chemistry to Biology, Medicine and Material Science"

6. Magoulas, G, **Pantazaka, E**, Stavroulakis, D, Papaioannou, D, Kalavrizioti, D, Vourekas, A, Tsambaos, D & Drainas, D (2004) Total Synthesis and RNase P Inhibitory Activity of Novel Acitretin-Type Retinoids, 1st Hellenic Symposium, Organic Synthesis "From Chemistry to Biology, Medicine and Material Science"

5. Athanassopoulos, C, Garnelis, T, **Pantazaka, E** & Papaioannou, D (2004) Efficient Guanylation of N^{α}, N^{ω} Ditritylated Polyamines at the Secondary Amino Functions, 4th Hellenic Forum on Bioactive Peptides

4. Magoulas, G, **Pantazaka, E**, Aletras, A & Papaioannou, D (2004) Total synthesis and biological activity of novel acitretin-type retinoids, 4th Hellenic Forum on Bioactive Peptides

3. Magoulas, G, **Pantazaka, E**, Aletras, A & Papaioannou, D (2004) Total Synthesis and Biological Activity of Novel Acitretin-Type Retinoids, 5th Conference in Medicinal Chemistry: Drug Discovery and Design

2. Tsiakopoulos, N, Vassis, S, Militsopoulou, M, Damianakos, C, Gatos, P, **Pantazaka, E** & Papaioannou, D (2002) Simple syntheses of conformationally constrained and branched polyamines using N-tritylated amino acids and peptides, 3rd Hellenic Forum on Bioactive Peptides

1. Tsiakopoulos, N, Magoulas, G, Gatos, P, Damianakos, C, **Pantazaka, E** & Papaioannou, D (2002) Total Syntheses of Medicinally Interesting Linear, Conformationally Restricted and Branched Polyamine Analogs using Amino Acids as Building Blocks, 3rd Conference in Medicinal Chemistry: Drug Discovery and Design

Publication in a database and chapters in books

5. **Pantazaka, E**, Kaspiris, A, Melissaridou, D, Savvidou, OD & Papagelopoulos, PJ (2021) Study of the role of vitamins K and D on the progression of human osteosarcoma based on *in vitro* results. (Eds. Stewart, N & Thomson, D, Nova Science Publishers, Inc.), 81-102

4. Kaspiris, A, Chronopoulos, E, **Pantazaka, E**, Savvidou, OD, Vasiliadis, E & Panagiotopoulos, E (2021) Implication of vitamin K in bone homeostasis and osseous metabolism. (Eds. Stewart, N & Thomson, D, Nova Science Publishers, Inc.), 103-120

3. **Pantazaka, E** & Papadimitriou, E (2012) PTN (pleiotrophin). *Atlas Genet. Cytogenet. Oncol. Haematol.* 16, 821-837

2. Magoulas, G, **Pantazaka, E**, Aletras, A & Papaioannou, D (2005) Total Synthesis and Biological Activity of Novel Acitretin-Type Retinoids. 4th Hellenic Forum on Bioactive Peptides. (Ed. Typorama), 263-267

1. Tsiakopoulos, N, Vassis, S, Militsopoulou, M, Damianakos, C, Gatos, P, Voyiatzi, K, **Pantazaka, E** & Papaioannou, D (2002) Recent applications of the amide approach to the synthesis of medicinally interesting polyamine analogues. Drug Discovery and Design: Medical Aspects In Biomedical and Health Research. (Eds Matsoukas, J & Mavromoustakos, T), 55, 53-63

Grant evaluator

Evaluator for EIC-Pathfinder Open
Evaluator for SNSF Swiss Postdoctoral Fellowships
Monitor for an EIC Pathfinder project
Evaluator for H2020-MSCA-IF
Evaluator for EU4H-2021-PJ2

Reviewer

International Journal of Molecular Sciences
Life
Scientific Reports
Heliyon

Courses/ Personal development

Coursera course on “Teaching in University Science Laboratories (Developing best practice)”
Course on Blended Learning and E-learning Trainers Training
Workshop on the use of the chorioallantoic membrane of the chick embryo
Seminars on Innovation and Entrepreneurship (and design of a business plan)
FEBS Advanced Course “Microspectroscopy: Imaging biochemical dynamics in living cells”
Lectures and workshops on supervising undergraduates, lab demonstrations, poster preparation, giving presentations, lecturing, grant writing, time management, communication skills, negotiation and assertiveness