Georgia Antonopoulou

PhD / Scientific Technical Personnel

Institute of Chemical Biology (ICB)

National Hellenic Research Foundation (NHRF)

Work Phone: +30 210 7273882

E-mail: gant@eie.gr

Website: https://www.eie.gr/en/human-

resources/georgia-antonopoulou/



Education

2008: PhD in Organic Chemistry, National and Kapodistrian **University of Athens**, Greece.

PhD Thesis (with Dr. G. Kokotos, National and Kapodistrian University of Athens, Greece): "Synthesis and study of lipidic compounds with potential bioactivity".

2005: MSc in Organic Chemistry, National and Kapodistrian **University of Athens**, Greece.

MSc Thesis (with Dr. V. Constantinou-Kokotou, Agricultural University of Athens, Department of Sciences, Greece): "Synthesis of 2-oxo-amides containing a sulfonamide group and study of their activity against GIVA phospholipase A_2 ". Scholarship from the Postgraduate Studies programme entitled «Organic Synthesis and Applications in Chemistry Industry» for two years (after exams).

2002: Degree in Chemistry, National and Kapodistrian **University of Athens**, Greece. Undergraduate Thesis in Chemistry: "Synthesis of Non-Natural D-Amino Acids and 2-Amino Alcohols from serine".

Appointments

2009-present

Scientific Technical Personnel, **National Hellenic Research Foundation**, Institute of Organic and Pharmaceutical Chemistry (renamed to Institute of Biology, Medicinal Chemistry and Biotechnology in 2012 as a result of the merger with the Institute of Biological Research and Biotechnology of the NHRF, and on 2019 renamed to Institute of Chemical Biology), Athens, Greece.

6-9/2006

Short-term external scientific collaboration, **Agricultural University of Athens**, Department of Sciences, Greece.

Programme "**Pythagoras** — Isolation, characterization and study of secondary metabolite from cultured and native aromatic plants.

Supervisor: Dr M. Polissiou.

6/2005-5/2006 and 10/2006-3/2007

Short-term external scientific collaboration, **Agricultural University of**, Department of Sciences, Greece.

Programme "**Pythagoras**" Isolation, study and biotechnological enrichment of fish oils in ω -3 and ω -6 polyunsaturated fatty acids.

Supervisor: Dr Dr. V.Constantinou-Kokotou.

4-5/2005

Short term external scientific collaboration, **Agricultural University of Athens**, Department of Sciences, Greece.

Programme **"Iraklitos** — Synthesis and study of lipidic compounds with potential bioactivity

Supervisor: Dr Dr. V.Constantinou-Kokotou.

PUBLICATIONS

- Y. Batsi, G. Antonopoulou, C. Galatis-Vaxovanos, M. Goulielmaki, K. Koumaki, C. Papalouka, E. Poulou-Sidiropoulou, V. Kosmidou, M.-S. Vidali, E. Kritsi, C. Potamitis, S. Douna, E.-F. Gkotsi, G.E. Magoulas, A. Chatziioannou, V.L. Souliotis, V. Pletsa, O. Papadodi ma, V. Zoumpourlis, M. Zervou, P. Georgiadis, A. Pintzas, I.D. Kostas* *Bioorg. M ed. Chem.* 2026, *132*, 118450 "2-Cyclopropanecarboxamido- 6-carboxamide substituted benzothiazoles: Synthesis, *in vitro* and *in vivo* evaluation of their antiproliferative and anti-tumorigenic activity".
- Y. Batsi, G. Antonopoulou, T. Fotopoulou, K. Koumaki, E. Kritsi, C. Potamitis, M. Goulielmaki, S. Skarmalioraki, C. Papalouka, E. Poulou-Sidiropoulou, V. Kosmidou, S. Douna, M-S. Vidali, E-F. Gkotsi, A. Chatziioannou, V. L. Souliotis, V. Pletsa, O. Papadodima, V. Zoumpourlis, P. Georgiadis, M. Zervou, A. Pintzas, I. D. Kostas, *ChemMedChem*, 2023, 18 (22), "Design and Synthesis of Novel 2-Acetamido, 6-Carboxamide Substituted Benzothiazoles as Potential BRAFV600E Inhibitors *In vitro* Evaluation of their Antiproliferative Activity".
- 3. I.D. Kostas, **G. Antonopoulou**, P.-C. Ioannou, E. Ferentinos, P. Kyritsis *Results in Chemistry*, **2022**, *4*, 100525 (special issue: Recent Advances in Organic Chemistry, *Open Access*) "A synthetic methodology for the preparation of a water-soluble quaternized amino phosphine oxide ligand".

- 4. I. D. Kostas, **G. Antonopoulou**, C. Potamitis, C. P. Raptopoulou, V. Psycharis, *J. Organomet. Chem.* **2017**, *828*, 133-141, "Platinum Complexes with a Methoxy Amino Phosphine or a Nitrogen-Containing Bis(phosphine) Ligand. Synthesis, Characterization and Application to Hydrogenation of *trans*-Cinnamaldehyde".
- G. Antonopoulou, V. Magrioti, M. G. Kokotou, A. Nikolaou, E. Barbayianni, V. D. Mouchlis, E. A. Dennis, G. Kokotos, *Bioorg. Med. Chem.*, 2016, 24, 4544-4554, "2-Oxoamide inhibitors of cytosolic group IVA phospholipase A2 with redused lipophilicity".
- K.A. Vallianatou, D.J. Frank, G. Antonopoulou, S. Georgakopoulos, E. Siapi, M. Zervou, I.D. Kostas*, *Tetrahedron Lett.* 2013, 54(5), 397-401, "Rhodium-catalyzed asymmetric olefin hydrogenation by easily accessible aniline- and pyridine-derived chiral phosphites".
- 7. E. Barbayianni, **G. Antonopoulou**, and G. Kokotos, *Pure Appl. Chem.* **2012**, *84*(9), 1877-1894, "Potent and selective 2-oxoamide inhibitors of phospholipases A2 as novel medicinal agents for the treatment of inflammatory diseases".
- R. López-Vales, N. Ghasemlou, A. Redensek, B.J. Kerr, E. Barbayanni, G. Antonopoulou, C. Baskakis, K.I. Rathore, V. Constantinou-Kokotou, D. Stephens, T. Shimizu, E.A. Dennis, G. Kokotos, FASEB J., 2011, 25, 4240-52, "Phospholipase A2 superfamily members play divergent roles after spinal cord injury".
- G. Antonopoulou, E. Barbayianni, V. Magrioti, N. Cotton, D. Stephens, V. Constantinou-Kokotou, E. A. Dennis, and G. Kokotos, *Bioorg. Med. Chem.*, 2008, 16, 10257-10269, "Structure-activity relationships of natural and non-natural amino acid-based amide and 2-oxoamide inhibitors of human phospholipase A2 enzymes".
- 10. **G. Antonopoulou**, V. Magrioti, D. Stephens, V. Constantinou-Kokotou, E. A. Dennis, and G. Kokotos, *J. Peptide Sci.*, **2008**, *14*, 1111-1120, "Synthesis of 2-oxoamides based on sulfonamide analogues of γ-amino acids and their activity on phospholipase A₂".
- 11. V. Magrioti, **G. Antonopoulou**, E. Pantoleon, G. Kokotos, *ARKIVOC*, **2003**, *2002*, 55-61, "Synthesis of 2-amino alcohols and unnatural amino acids from serine".

POSTERS

- "Synthesis of unnatural amino acids from serine", V. Magrioti, <u>G. Antonopoulou</u>, E. Pantoleon, G. Kokotos, 4th Helenic Forum on Bioactive Peptides, 22-24 April 2004, Patras, P-01.
- 2. "Synthesis of 2-oxoamides containing a sulphonamide group and study of their activity against human GIVA phospholipase A_2 ", G. Antonopoulou, T. Markidis,

- D. Stephens, V. Constantinou-Kokotou, E. A. Dennis and G. Kokotos, 1st Helenic Symposium "ORGANIC SYNTHESIS" From Chemistry to Biology, Medicine and Materials Science, 4-6 November **2004**, Athens, P-41.
- 3. "Design, synthesis and anti-inflammatory activity of 2-oxoamide inhibitors of phospholipase A₂", G. Kokotos, E. Barbayianni, D. Stephens, G. Antonopoulou, V. Magrioti, A. Peristeraki, D. Hadjipavlou-Litina, J. Cooper, V. Constantinou-Kokotou, E. A. Dennis, 14th European Symposium on Organic Chemistry, 4-8 July **2005**, University of Helsinki, Finland.
- 4. "Polyunsaturated Fatty Acids: NMR Study of Fish Oils and their Enrichment in Ω -3 Fatty Acids", V. Constantinou-Kokotou, G. Antonopoulou, I. Fotakopoulou, E. Mikros, 7th Conference "Medicinal Chemistry" Drug Discovery and Design, 8-11 March **2006**, Patra, Greece.
- "NMR Study of the Lipase-Assisted Hydrolysis Products of Sardin Lipids", V. Constantinou-Kokotou, G. Antonopoulou, I. Fotakopoulou, E. Mikros, 7th Tetrahedron Symposium (Challenges in Organic Chemistry), 25-26 May 2006, Kyoto, Japan, P-102.
- 6. "Inhibition of Group V Phospholipase A₂ by 2-Oxoamide esters", E. Barbayianni, G. Antonopoulou, V. Magrioti, D. Stephens, E. A. Dennis, G. Kokotos, 2nd Helenic Symposium "ORGANIC SYNTHESIS" From Chemistry to Biology, Medicine and Materials Science, 19-24 April **2007**, Athens, P-46.
- 7. "Bioactive Lipids: NMR Study of Shark Liver Oils", I. Georgala, G. Antonopoulou, V. Constantinou-Kokotou, 2nd Helenic Symposium "ORGANIC SYNTHESIS" From Chemistry to Biology, Medicine and Materials Science, 19-24 April **2007**, Athens, P-73.
- 8. "Design and synthesis of 2-oxoamide phospholipase A₂ inhibitors for the treatment of hyperalgesia", G. Kokotos, G. Antonopoulou, C. G. Kokotos, K. Baskakis, E. Barbayianni, V. Magrioti, D. Stephens, D. Hadjipavlou-Litina, V. Constantinou-Kokotou, T. L. Yaksh, E. A. Dennis, 3rd International Conference on Phospholipases A₂ and Lipid Mediators, 9-12 May **2007**, Naples, Italy.
- 9. "NMR Study of Alkyl and Acylglycerols Obtained from Fish Oils", V. Constantinou-Kokotou, G. Antonopoulou, 15th European Symposium on Organic Chemistry, 8-13 July **2007**, University College Dublin-Ireland.
- "Synthesis of 2-oxoamides based on sulfonamide analogues of γ-amino acids and their activity on human phospholipase A₂ isoforms", G. Antonopoulou, V. Magrioti, D. Stephens, V. Constantinou-Kokotou, E. A. Dennis, G. Kokotos, 6th Helenic Forum on Bioactive Peptides, 18-20 May 2008, Patras, P-07.
- "Synthetic approaches towards dendrimeric organometallic near-infrared dyes",
 S. Georgakopoulos, C. Villalonga-Barber, K. A. Vallianatou, <u>G. Antonopoulou</u>, G. A. Heropoulos, M. Micha-Screttas and B. R. Steele, 3rd Helenic Symposium "ORGANIC SYNTHESIS" From Chemistry to Biology, Medicine and Materials Science, 15-17 October **2009**, Athens, P-75.

- 12. "Synthesis of new polyhydroxydendrimers for drug encapsulation and delivery", Barry R. Steele, Cécile Arbez-Gindre, Markella Konstantinidou, Constantinos Potamitis, Spyros Georgakopoulos, <u>Georgia Antonopoulou</u>, Georgios A. Heropoulos, Panagiotis Zoumpoulakis, Maria Zervou and Maria Micha-Screttas, Anatolian Conference on Synthetic Organic Chemistry, March 16-19, **2015**, Antalya, Turkey.
- "An organometallic route to halohydrin carboxylates", Constantinos G. Screttas, Georgia Antonopoulou, Cécile Arbez-Gindre, Barry R. Steele and Maria Micha-Screttas, Anatolian Conference on Synthetic Organic Chemistry, March 16-19, 2015, Antalya, Turkey.
- 14. "New glycodendrimers as potential carriers for anticancer drugs", M. Konstantinidou, A-C. Tenchiu, C. Arbez-Gindre, G. Antonopoulou, G. A. Heropoulos, B. R. Steele, C. Potamitis, P. Zoumpoulakis, S. Georgakopoulos, M. Zervou, M. Micha-Screttas, Frontiers in Medicinal Chemistry, 14-16 September, **2015**, Antwerp, Belgium, P-100.
- 15. "New urea derivatives containing a thiazole moiety as potent inhibitors of BRAFV600E", A-C. Tenchiu, <u>G. Antonopoulou</u>, M. Goulielmaki, A. Pintzas, I. D. Kostas, Frontiers in Medicinal Chemistry, 14-16 September, **2015**, Antwerp, Belgium, P-169.
- 16. 'Synthesis of new amide/sulfonamide derivatives as selective glucocorticoid receptor agonists", Y. Batsi, G. Antonopoulou, A-C. Tenchiu, D. Siakouli, D. Mitsiou, I. D. Kostas, Workshop on Targeted Drug Discovery, October 10-14, **2016**, Athens, National Hellenic Research Foundation.
- 17. "Synthesis of new amide/sulfonamide derivatives as selective glucocorticoid receptor agonists", Y. Batsi, <u>G. Antonopoulou</u>, A-C. Tenchiu, D. Siakouli, D. Mitsiou, I. D. Kostas, 22nd Hellenic Chemistry Congress, 2-4 December, **2016**.
- 18. 'Design and synthesis of new benzothiazole derivatives as potent BRAF^{V600E} inhibitors", Batsi, Y.; <u>Antonopoulou, G.</u>; Kostas, I.D., Athens Conference on Advances in Chemistry (acac2018), 30 October 2 November, **2018**, Athens, Book of Abstracts, Paper No. P77.
- 19. "Design, synthesis and biological evaluation of new benzothiazole amide derivatives as BRAFV600E inhibitors", Batsi, Y.; Antonopoulou, G.; Kostas, I.D., 6th EFMC Young Medicinal Chemist Symposium, 5-6 September **2019**, Athens, Greece Book of Abstracts, Paper No. P100.
- 20. "Design, synthesis and biological evaluation of new benzothiazole amide derivatives as BRAF^{V600E} inhibitors", Batsi, Y.; Antonopoulou, G.; Kostas, I.D., VIII EFMC International Symposium on Advances in Synthetic and Medicinal Chemistry, 1-5 September, **2019**, Athens, Greece, Book of Abstracts, Paper No. P317.

- 21. "Novel benzothiazole derivatives inhibit proliferation on BRAFV600E colorectal cancer cell lines", Kassandra Koumaki, Yakinthi Batsi, Vivian Kosmidou, Eftichia Kritsi, Maria Zervou, <u>Georgia Antonopoulou</u>, Ioannis D. Kostas, Vassilis L. Souliotis, Alexander Pintzas, 70th Panhellenic Conference of the Hellenic Society of Biochemistry and Molecular Biology, 29 November-1 December **2019**, Athens, Greece, Book of Abstracts, Paper No. P43.
- 22. "SYNTHESIS OF NOVEL BENZOTHIAZOLE DERIVATIVES AS POTENT BRAFV600E INHIBITORS FOR COLORECTAL CANCER", Yakinthi Batsi, Georgia Antonopoulou, Kassandra Koumaki, Vivian Kosmidou, Alexander Pintzas, Ioannis D. Kostas, 18th Hellenic Symposium on Medicinal Chemistry, 25-27 February 2021, Book of Abstracts, Paper No. P078
- 23. "Synthesis and biological activity of new benzothiazole derivatives with potent anticancer activity", Yakinthi Batsi, Georgia Antonopoulou, Kassandra Koumaki, Vivian Kosmidou, Maria Goulielmaki, Vassilis Zoumpourlis, Vassilis Souliotis, Alexander Pintzas, Ioannis D. Kostas, Athens Conference on Advances in Chemistry, 10-14 March 2021, Book of Abstracts page 87.
- 24. "Polyhydroxy-and glycodendrons containing an amino focal group as leitmotiv for the synthesis of dendritic species with biological applications|", Arbez-Gindre C., Fotopoulou T., M. Konstantinidou M., Tenchiu A., G. Antonopoulou, B.R. Steele B.R., Micha-Screttas M., N. Papaevgeniou N, Chondrogianni N., Selianitis D., Pispas S., Chountoulesi M., Naziris N., Demetzos C., Chemical Biology Workshop: Drug & Biomarker Discovery in memory of Dr Michael Alexis, NHRF, Athens, Greece, November 23-25, **2023**.