

Calogeropoulou Theodora

Ph.D. / Research Director

Institute of Biology, Medicinal Chemistry and Biotechnology (I.B.M.C.B.)

Phone: 00302107273833

Fax: 00302107273831

E-mail: tcalog@eie.gr

Website: : <http://www.eie.gr>



Education

1987: Ph.D., University of Iowa, Division of Organic Chemistry, USA,

Supervisor: Prof. D. F. Wiemer

1983: B.Sc, in Chemistry, University of Athens, Greece

Appointments

2007-present: Research Director at the Institute of Biology, Medicinal Chemistry and Biotechnology, National Hellenic Research Foundation, Athens, Greece

2002-2007: Senior Researcher at the Institute of Organic and Pharmaceutical Chemistry of the National Hellenic Research Foundation, Athens

1991-2002: Researcher at the Institute of Organic and Pharmaceutical Chemistry of the National Hellenic Research Foundation, Athens

1990-1991: Researcher at the R&D Department of "Viochrom" Dye Industry, Athens, Greece

1987-1989: Postdoctoral Research Associate at The Scripps Research Institute, San Diego, U.S.A.

Fellowships

1983-1985: Teaching assistantship University of Iowa, U.S.A.

1986 -1987: Research assistantship University of Iowa, U.S.A.

Current Research Interests

The current research interests are focused on the design and synthesis of biologically active molecules. In particular:

- a) Design and synthesis of novel neurosteroid analogues with neuroprotective activity mimicking NGF activity
- b) Design and synthesis of antiprotozoal ether phospholipids

c) Design and synthesis of heterocyclic compounds with multifunctional pharmacological profile:

- Possessing neuroprotective activity
- Tyrosinase modulators

d) Design and synthesis of BRAF^{V600E} inhibitors for the development of agents against colorectal cancer.

e) Design and synthesis of proteasome activators against aging.

f) Design and synthesis of fluorescent bioactive compounds and probes for mechanistic studies and imaging.

A parallel research activity involves the development of synthetic methodology using conventional techniques and microwave or ultrasound irradiation.

Foreign Languages

English (excellent, Proficiency of Cambridge University); French (excellent, Sorbonne II); Spanish (working knowledge).

Professional Affiliations

Member, Greek Chemical Society; Member, American Chemical Society

Teaching Experience

1983-1985: Teaching assistant, University of Iowa, Chemistry Department, U.S.A.

1995-to date: Supervision of 6 M.Sc. students, 5 Ph.D. students and 12 Postdoctoral Fellows and 2 diploma students.

1998: Instructor in training seminar on "Modern Chemistry and its Applications" chemistry teachers in secondary education in Greece.

2/2000: Invited lecturer at the post graduate program of the Mediterranean Agricultural Institute of Chania

2002: External evaluator of the European Ph.D. of "Jordi Piro I Segarra" of University of Barcelona, Faculty of Pharmacy, Dept. of Pharmacol. and Med. Chem.

Participation In Scientific Committees

1998-2000: Participation in the team of evaluators for Current Drugs LTD, London.

1998-2004: National representative of the Management Committee of COST Chemistry, Action D13 "New Molecules Towards Human Health Care".

1999- to date: Member of the expert evaluators panel for EU FP6 programmes (*Marie Curie Individual Fellowships, Marie Curie Training Sites, Development Host Fellowships and Research Training Networks*) and FP7 People programme.

2004-2007: National representative of the Management Committee of COST Medicine, Action B22 "Drug development for parasitic diseases".

2005-2010: National representative of the Management Committee of COST Chemistry, Action D34 "Molecular Targeting and Drug Design in Neurological and Bacterial Diseases".

2006–to date: Member of NatSynDrugs (www.natsyndrugs.org)

2008-2012: Vice-Chair and National representative of the Management Committee of COST Chemistry, Action CM0801 "New drugs for neglected diseases"

2013-to-date: National representative of the Management Committee of COST Chemistry, Action CM1307 "Targeted chemotherapy towards diseases caused by endoparasites"

1993-2012: Member of the Organizing Committee of 8 Greek and 5 International Symposia

2001: Organizer of the COST D13 Mid-Term Evaluation Symposium

2006: Organizer of the COST B22 3rd Annual Congress on Drug Design and Development for parasitic diseases.

2012: Organiser of the COST CM0801 4th Annual Meeting on New Drug for Neglected Diseases

Funding

➤ ***National***

- National Drug Organisation (1991-94) "Design and Synthesis of alkyllysophospholipids"
- KESY (1993-95) "Synthesis and biological activity of new tamoxifen analogs"
- YPER (1995-98) "New anxiolytic and anticonvulsant neurosteroids"
Coordinator: Dr T. Calogeropoulou
- PENED 2000 GSRT (2000-01) "Development of new liposomal immunoassays"
- Bilateral Collaboration of Greece-Czech Republic "Synthesis and biological evaluation of new melatonin analogues"
- Bilateral Collaboration of Greece-Italy "Comparative study of benthic organisms from Greece and Italy for the determination and exploitation of their chemical constituents" Coordinator: Dr. T. Calogeropoulou
- Excellence in the Research Institutes supervised by the Greek General Secretariat for Research and Technology EPAN 3.3.1. (2002-2005). "Novel strategies against neurodegeneration."
- Bilateral Collaboration of Greece-Hungary (2002-2005) "Neuroactive steroids and ionotropic neurotransmitter receptors." Coordinator: Dr. T. Calogeropoulou

- GSRT programme Location and use of research results by the creation of new enterprises (Spin-off, 2003-05) "New ether phospholipids as ultrasound contrast agents" Coordinator: Dr. T. Calogeropoulou
- PENED 2001 GSRT (2002-2006). "Investigation of the mechanisms of action of neuroprotective neurosteroids. Development of new compounds with high neuroprotective and low estrogenic or androgenic activity."
 Scientist in charge for IOPC: Dr. T. Calogeropoulou
- Operational Programme for Competitiveness, GSRT YB/39 (2004-2008). "Therapeutic Interventions Against Protozoan Infections."
 Coordinator. Dr. T. Calogeropoulou
- Excellence in the Research Institutes supervised by the Greek General Secretariat for Research and Technology EPAN 3.3.1. (2006-2009).
 "Design and synthesis of bioactive and functional materials"
- Kouponia Kainotomias for SMEs (2011-2012).
- Research Funding Program KRIPIS: Project STHENOS: "Targeted therapeutic approaches against ageing and degenerative diseases, cancer in particular" (2013-2015).

➤ **European**

- COST D13/0019/01 (2001-2004) "Novel molecules, forms and strategies for treatment of Leishmanial infections" *Coordinator: T. Calogeropoulou*
- FP6. Marie Curie Transfer of Knowledge Programme - MTKD-CT-2004-014399 (2005-2009) "Solid-phase phospholipid and dendrimer synthesis" (SOPHOLIDES)
Coordinator: T. Calogeropoulou
- FP6. Marie Curie Host fellowships for Early Stage Research Training (EST) (2006-2009). EURODESYS: A European Research Training Site for the Design and Synthesis of Novel Neuroprotective and Hypoglycaemic Agents through a Multi-disciplinary approach.
- FP7-2009-REGPOT-1 (2010-2013) "Advancement of Research Capability for the Development of New Functional Compounds (ARCADE).
Deputy coordinator. T. Calogeropoulou
- FP7-HEALTH-2013-INNOVATION-1 (2014-2017) "New Medicines for Trypanosomatid Infections" P.I. for IBMCB/NHRF

➤ **International**

Professional Service Agreements with Univ. Connecticut, USA.

- PSA No 2328 (1998-1999) "Anticancer ether lipids" Deputy Coordinator
- PSA No 3324 (2001-02) "Biologically active ether phospholipids" Coordinator
- PSA No 3680 (2002-03) "Novel Antioxidants" Deputy Coordinator.

PSA No 4505 (2004-05) "Novel antioxidants and bioactive ether phospholipids"

Deputy Coordinator.

➤ ***Funding from contract research with industry***

- Research collaboration with ELPEN SA. (1999-2001) "Molecular probes for adrenergic receptors"
- Research collaboration with Medexis SA (2005-2006) "Total synthesis of ribenol and derivatives thereof"
- Research collaboration with Medexis SA (2006-2008) "Synthesis and Study of steroid-protein conjugates.
- Research collaboration with Medexis SA (2008-2010) "Synthesis and Study of Na⁺, K⁺-ATPase inhibitors"

Publications

Ph.D. Thesis

Calogeropoulou T. (July 1987) "New chemistry of vinyl phosphates. A novel 1,3-migration of phosphorus from oxygen to carbon."

Ph.D. Thesis, University of Iowa.

Chapter In Book

Theodora Calogeropoulou, Darryl C. Rideout.

Synergism and antagonism through direct covalent bond formation between agents.

Chapter 14 in Chemotherapeutic Synergism and Antagonism. (Ed. T.-C. Chou and Darryl C. Rideout, Academic Press **1990**).

Publications In Peer Reviewed Journals

(Publications in which T. Calogeropoulou is the corresponding author are designated with an asterisk)

- 1.** Hammond, G.B.; Calogeropoulou, T.; Wiemer, D.F. The 1,3 migration of phosphorus from oxygen to carbon: A new synthesis of β -keto phosphonates from enol phosphates. Tet. Lett. **1986**, 27, 4265.
- 2.** Calogeropoulou, T.; Hammond, G.B.; Wiemer, D.F. Synthesis of β -keto phosphonates from vinyl phosphates via a 1,3-phosphorus migration. J. Org. Chem. **1987**, 52, 4185.
- 3.** Calogeropoulou, T.; Wiemer, D.F. Cycloaddition reactions of phosphate dienes. J. Org. Chem. **1988**, 53, 2295.
- 4.** Rideout, D.C.; Calogeropoulou, T.; Jaworski, J.S.; Dagnino Jr., R.; McCarthy, M. Phosphonium salts exhibiting selective anticarcinoma activity *in vitro*. Anti-Cancer Drug Design **1989**, 4, 265-280.
- 5.** Rideout, D.C.; Calogeropoulou, T.; Jaworski, J.S.; Dagnino Jr., R.; McCarthy, M. Synergism through direct covalent bonding between agents: A strategy for rational design of chemotherapeutic combinations. Biopolymers **1990**, 29, 247-262.
- 6.** Gloer, K.B.; Calogeropoulou, T.; Jackson, J.A.; Wiemer, D.F. Regiochemistry of the rearrangement of cyclohexenyl and cyclohexadienyl phosphates to β -keto phosphonates. J. Org. Chem **1990**, 55, 2842-2846.
- 7.** Quinn, D.M.; Sutton, L.D.; Staout, J.S.; Calogeropoulou, T.; Wiemer, D.F.

Phospholipase A1 Activity and Catalytic Mechanism of Pancreatic Cholesterol Esterase. Phosphorus, Sulfur, and Silicon **1990**, 51/52, 43-46.

8. Rotenberg, S. A.; Calogeropoulou, T.; Jaworski, J.S.; Weinstein, I.B.; Rideout, D. A self-assembling protein kinase C inhibitor. Proc. Natl. Acad. Sci. USA **1991**, 88, 2490.

9. Rideout, D.; Schinazi, R.; Pauza, D.C.; Lovelace, K.; Chiang, L.-C.; Calogeropoulou, T.; McCarthy, M.; Elder, J. Derivatives of 4-Amino-3,6-Disulfonato-1,8-Naphthalimide Inhibit Reverse Transcriptase and Suppress Human and Feline Immunodeficiency Virus Expression in Cultured Cells. J. Cellular Biochem. **1993**, 51, 446.

10. Patel, J.; Rideout, D.; McCarthy, M. R.; Calogeropoulou, T.; Wadwa, K. S.; Oseroff, A.R. Antineoplastic Activity, Synergism, and Antagonism of Triarylalkylphosphonium Salts and their Combinations. Anticancer Research **1994**, 14, 21.

11. Mavromoustakos T., Theodoropoulou E., Koufaki M., Yang D.P. Lin S., Zervou M. Calogeropoulou T., Makriyannis A. "Conformational analysis of 1-thiohexadecyl-2-O-methyl-*rac*-glycero-3-phosphocholine." Epitheor Klin. Farmakol. Farmakokinet. Int. Ed. **1993**, 11, 178 .

12. Mavromoustakos T., Theodoropoulou E., Polychroniou V., Dimitriou A., Koufaki M., Calogeropoulou T. "Study of drug membrane interactions using a combination of differential scanning calorimetry and ³¹P-NMR spectroscopy." Epitheor Klin. Farmakol. Farmakokinet. Int. Ed. **1995**, 13, 81.

13. Calogeropoulou T., Koufaki M., Tsotinis A., Balzarini J., De Clercq E., Makriyannis A. "Synthesis and anti-HIV evaluation of alkyl and alkoxyethyl phosphodiester AZT derivatives" Antiv. Chem. Chemother. **1995**, 6, 43.

14. Koufaki M., Polychroniou V., Calogeropoulou T., Tsotinis A., Drees M., Fiebig H.H., LeClerc S., Hendriks H.R., Makriyannis. "Alkyl and Alkoxyethyl Antineoplastic Phospholipids" J. Med. Chem. **1996**, 39, 2609.

15. Tsotinis A., Calogeropoulou T., Koufaki M., Souli Ch., Balzarini J., De Clercq E., Makriyannis A. "Synthesis and Antiretroviral Evaluation of New Alkoxy and Aryloxy Phosphate Derivatives of AZT" J. Med. Chem. **1996**, 39, 3418.

16. Koufaki, M.; Calogeropoulou, T.; Mavromoustakos, T.; Theodoropoulou, E.; Tsotinis. A.; Makriyannis, A. "Synthesis of 2H-Labelled Alkoxyethyl Phosphodiester AZT Derivatives for Solid-State 2H-NMR Studies" J. Het. Chem. **1996**, 33, 619.

17. Varvaresou, A.; Tsotinis, A.; Siatra-Papastaikoudi, Th.; Calogeropoulou, T. "New Pyrazole-annulated azathioxanthenes as potential intercalators: synthesis and structure elucidation." J. Het. Chem. **1996**, 33, 831.

18. Tsotinis, A. Varvaresou, T. Calogeropoulou, Th. Siatra-Papastaikoudi and A. Tyligada "Synthesis and antimicrobial evaluation of indole containing derivatives of 1,3,4-thiadiazole, 1,2,4-triazole and their open-chain counterparts." Arzneim.-Forsch./Drug Res., **1997**, 47 (I), 307

19. Faust, R.; Garratt, P.J.; Jones, R.; Yeh, L.-K.; Tsotinis, A.; Panoussopoulou, M.; Calogeropoulou, T. Teh, M.-T.; Sugden, D. "Mapping the melatonin receptor. 6. Melatonin agonists and antagonists derived from 6H-isoindolo[2,1-a]indoles, 5,6-dihydroindolo[2,1-a]isoquinolines and 6,7-dihydro-5H-benzo[c]azepino[1,2-a]indoles." J. Med. Chem. **2000**, 43(6), 1050-1061.

20. Varvaresou A, Kriton I, Filippatos E., Souli C., Calogeropoulou T., Ioannidou I., Kourounakis A., Pannecouque C., Witvrouw M., Padalko E., Neyts J., De Clercq E., Tsotinis A. "Synthesis, Antiretroviral and Antioxidant Evaluation of a Series of New Benzo[*b*]furan Derivatives." Arzneim.-Forsch./Drug Res. **2001**, 51(I), 156.

21. Carbonelle D., Jacquot C., Lanco X., Le Dez G., Tomasoni C., Briand G., Tsotinis A., Calogeropoulou T., Roussakis C. "Up-regulation of a novel mRNA

(NY-CO-1) involved in the (1-(2-alkoxy-5-carboxyl)- α - β -unsaturated ketone (VT1)-induced proliferation arrest of a Non-Small Cell lung carcinoma cell line (NSCLC-N6)" International J. Cancer **2001**, *92* (3), 388-397.

22. Mavromoustakos, T.; Calogeropoulou, T.; Koufaki, M.; Kolocouris, A.; Demetzos, K.; Meng, Z.; Makriyannis, A.; Balzarini, J.; De Clercq, E. "Ether phospholipid-AZT conjugates possessing anti-HIV and anti-tumor cell activity. Synthesis, conformational analysis and study of their thermal effects on membrane bilayers" J. Med. Chem. **2001**, *44*(11), 1702-1709.

23. Koufaki, M.; Calogeropoulou, T.; Detsi, A.; Roditis, A.; Kourounakis, A.; Papazafiri, P.; Tsiakitzis, K.; Gaitanaki, C.; Beis, I.; Kourounakis P. "Novel potent inhibitors of lipid peroxidation with protective effects against reperfusion arrhythmias." J. Med. Chem. **2001**, *44*, 4300-4303.

24. Detsi A., Koufaki M., Calogeropoulou T.* "Synthesis of (*Z*)-4-hydroxytamoxifen and (*Z*)-2-(4-[1-(*p*-hydroxyphenyl)-2-phenyl]-1-butenyl)phenoxyacetic acid." J. Org. Chem. **2002**, *67*, 4608-4611.

25. Avlonitis, N.; Lekka, E.; Detsi, A.; Koufaki, M.; Calogeropoulou, T. ;* Skoulica, E.; Siapi, E.; Kyrikou, I.; Mavromoustakos, T.; Tsotinis, A.; Golic Grdadolnik, S.; Makriyannis, A. "Antileishmanial Ring-Substituted Ether Phospholipids" J. Med. Chem. **2003**, *46*, 755-767.

26. Koufaki, M.; Calogeropoulou, T.; Rekka, E.; Chryselis, M.; Papazafiri, P.; Gaitanaki, C.; Makriyannis, A. "Bifunctional Agents for Reperfusion Arrhythmias. Novel Hybrid Vitamin E/Class I Antiarrhythmics." Bioorg. Med. Chem. **2003**, *11*, 5209-5219.

27. Calogeropoulou T.,* Detsi A., Lekkas E, Koufaki M. " Strategies in the design of prodrugs of anti-HIV agents" in " Therapeutic strategies against HIV infection" Curr. Top. Med. Chem., **2003**, *3* (13), 1467.

28. Koufaki, M.; Detsi, A.; Theodorou, E.; Kiziridi, C.; Calogeropoulou, T.; Vassilopoulos, A.; Kourounakis, A.; Rekka, E.; Kourounakis, P.; Gaitanaki, C.; Papazafiri, P. "Synthesis of Chroman Analogues of Lipoic Acid and Evaluation of their Activity against Reperfusion Arrhythmias." Bioorg. Med. Chem. **2004**, *12*, 4835.

29. Papazafiri, P; Avlonitis, N.; Angelou, P.; Calogeropoulou, T. ;* Koufaki, M.; Skoulica, E.; Fragiadaki, I. "Structure-activity relationships of antineoplastic ring-substituted ether phospholipid derivatives" Cancer Chemother. Pharmacol. **2005**, *56*, 261-270.

30. Souli, C.; Avlonitis, N.; Calogeropoulou, T. ;* Tsotinis, A.; Maksay, G.; Bíró, T.; Politi, A.; Mavromoustakos, T.; Makriyannis, A.; Reis, H.; Papadopoulos, M. "Novel 17 β -substituted conformationally constrained neurosteroids that modulate GABA_A receptors" J. Med. Chem. **2005**, *48*(16), 5203-14.

31. Detsi, A. ; Roussis, V. Tsotinis, A. ; Roussakis, C.; Calogeropoulou, T.*
 A Concise Approach to Benzoic Acid Derivatives Bearing an α,β -Unsaturated Ketone Substituent: Synthesis of Methyl Tabogonate.
SYNLETT **2005** (20), 3131-3135.

32. Charalampopoulos, I.; Alexaki, V.-I.; Lazaridis, I.; Dermitzaki, E.; Avlonitis, N.; Tsatsanis, C.; Calogeropoulou, T.; Margioris, A. N.; Castanas, E.; Gravanis, A. G protein-associated, specific membrane binding sites mediate the neuroprotective effect of Dehydroepiandrosterone. FASEB J. **2006** (20), 577-579.

33. Tsotinis, A.; Vlachou, M.; Papahatjis, D.P.; Calogeropoulou, T., Nikas, S.P.; Garratt, P.J.; Piccio, V.; Vonhoff, S.; Davidson, K.; The, M.T.; Sugden, D. "Mapping the melatonin receptor. 7. Subtype selective ligands based on beta-substituted N-acyl-5-methoxytryptamines and beta-substituted N-acyl-5-methoxy-1-methyltryptamines." J. Med. Chem. **2006**, *49*(12), 3509-19.

- 34.** Kapou, A.; Benetis, N.P.; Avlonitis, N.; Calogeropoulou, T.; Koufaki, M.; Scoulica, E.; Nikolaropoulos, S.S.; Mavromoustakos, T. "3D-Quantitative Structure-Activity Relationships of New Synthetic Antileishmanial Ring-Substituted Ether Phospholipids" *Bioorg. Med. Chem.* **2007**, *15*(3), 1252-65.
- 35.** Xilouri, M.; Avlonitis, N.; Calogeropoulou, T.; Papazafiri, P. "Neuroprotective effects of steroid analogues on P19-N neurons." *Neurochem. Int.* **2007**, *50*(4), 660-70.
- 36.** Karanikolopoulos, N.; Pitsikalis, M.; Hadjichristidis, N.; Georgikopoulou, K.; Calogeropoulou, T.; Dunlap, J.R. "pH-Responsive Aggregates from Double Hydrophilic Block Copolymers Carrying Zwitterionic Groups. Encapsulation of Antiparasitic Compounds for the Treatment of Leishmaniasis." *Langmuir* **2007**, *23*(8), 4214-24.
- 37.** Maksay, G.; Fodor, L.; Bíró, T.; Avlonitis, N.; Calogeropoulou, T. "A 17 β -derivative of allopregnanolone is a neurosteroid antagonist of a cerebellar subpopulation of GABA_A receptors with nanomolar affinity." *Brit. J. Pharmacol.* **2007**, *151*(7), 1078-86.
- 38.** Calogeropoulou, T.*; Angelou, P.; Detsi, A.; Fragiadaki, I.; Scoulica, E. "Design and synthesis of potent antileishmanial cycloalkylidene-substituted ether phospholipid derivatives" *J. Med. Chem.* **2008**, *51*, 897-908.
- 39.** Wiesbrock, F.; Patteux, C.; Olszewski, T.K.; Blanrue, A.; Heropoulos, G.A.; Steele, B.R.; Micha-Screttas, M.; Calogeropoulou, T.* "Solution-Phase Synthesis and Scale-Up of 1st Generation Tetraester-Dendritic Branches Involving Microwave Irradiation and/or Ultrasound" *Eur. J. Org. Chem.* **2008**, 4344-4349.
- 40.** Koini, E.N.; Papazafiri, P.; Vassilopoulos, A.; Koufaki, M.; Horváth, Z.; Koncz, I.; Virág, L.; Papp, G.J.; Varró, A.; Calogeropoulou, T.* "5,7,8-Trimethylbenzopyran and 5,7,8-Trimethyl-1,4-benzoxazine aminoamide derivatives as novel antiarrhythmics against ischemia-reperfusion injury." *J. Med. Chem.* **2009**, *52*, 2328.
- 41.** Calogeropoulou T.*, Avlonitis N., Minas V., Alexi X., Pantzou A., Charalampopoulos I., Zervou M., Vergou V., Katsanou E. S., Lazaridis I., Alexis M., Gravanis A. "Novel DHEA Derivatives with Anti-Apoptotic Neuroprotective activity." *J. Med. Chem.*, **2009** *52* (21), 6569–6587.
- 42.** Papanastasiou I., Prousis, K.C, Georgikopoulou, K., Pavlidis, T., Scoulica, E., Kolocouris, N., Calogeropoulou, T.* "Design and synthesis of new adamantyl-substituted antileishmanial ether phospholipids" *Bioorg. Med. Chem. Lett.* **2010** *20* (18), 5484-5487.
- 43.** Koini, E. N.; Avlonitis, N.; Calogeropoulou, T.* "Simple and Efficient Method for the Halogenation of Oxygenated Aromatic Compounds" *SYNLETT* **2011** (11), 1537.
- 44.** Filippou, P. S.; Koini, E. N.; Calogeropoulou, T.; Kalliakmani, P.; Panagiotidis, C. A.; D. A. Kyriakidis "Regulation of the Escherichia coli AtoSC two component system by synthetic biologically active 5;7;8-trimethyl-1;4-benzoxazine analogues" *Bioorg. Med. Chem.* **2011**, *19*, 5061-5070
- 45.** Lazaridis, I., Charalampopoulos, I., Alexaki, V.-I., Avlonitis, N., Pediaditakis, I., Efstathopoulos, P., Calogeropoulou, T., Castanas, E., Gravanis A. "Neurosteroid Dehydroepiandrosterone Interacts with Nerve Growth Factor (NGF) Receptors, Preventing Neuronal Apoptosis." *PloS Biology* **2011**, *9* (4): e1001051.
- 46.** Koukouli, F., Paspaltsis, I., Salta, E., Xanthopoulos, K., Koini, E. N., Calogeropoulou, T., Sklaviadis, T. "Inhibition of PrP^{Sc} formation in scrapie infected N2a cells by 5,7,8-trimethyl-3,4-dihydro-2H-1,4-benzoxazine derivatives" *Prion* **2012**, *6*, 470-476.
- 47.** Gravanis, A., Calogeropoulou, T., Panoutsakopoulou, V., Thermos, K., Neophytou, C., Charalampopoulos, I. "Microneurotrophins: Neurosteroids bind to

NGF receptors, inducing pro- survival signaling in neuronal cells," *Science Signalling* **2012**, *5* (246), art. no. pt8.

48. Koini, E. N., Avlonitis, N., Martins-Duarte, E. S., de Souza, W., Vommaro, R. C., Calogeropoulou, T.* "Divergent synthesis of 2,6-diaryl-substituted 5,7,8-trimethyl-1,4-benzoxazines via microwave-promoted palladium-catalysed Suzuki-Miyaura cross coupling and biological evaluation" *Tetrahedron* **2012**, *68*, 10302-10309.

49. Godinho, J., Georgikopoulou, K., Calogeropoulou, T., de Souza, W., Rodrigues, J. "A novel phosphocholine dinitroaniline hybrid molecule exhibits biological activity in vitro against *Leishmania amazonensis*." *Experimental Parasitology* **2013**, *135*, 153–165.

50. Vila, T. V. M., Ishida, K., de Souza, W., Prousis, K., Calogeropoulou, T., Rozental, S. "Effect of alkylphospholipids on *Candida albicans* biofilm formation and maturation" *J. Antimicrob. Chemother.* **2013**, *68*, 113-125.

51. Prousis, K. C., Tzani, A., Avlonitis, N., Calogeropoulou, T., Detsi, A. "Reactivity of 2-methyl-4H-3,1-benzoxazin-4-ones and 2-methyl-4H-pyrido[2,3-d][1,3]oxazin-4-one under Microwave Irradiation Conditions" *J. Het. Chem.* **2013**, *50*, 1313-1321.

52. Prousis, K. C., Avlonitis, N., Heropoulos, G.A.; Calogeropoulou, T., "FeCl₃-catalysed ultrasonic-assisted, solvent-free synthesis of 4-substituted coumarins. A useful complement to the Pechmann reaction". *Ultrason. Sonochem.* **2013**
<http://dx.doi.org/10.1016/j.ultsonch.2013.10.018>

PATENTS

1. GR-1003103 "1-(2-Alkoxy-5-carboxyphenyl)- α,β -unsaturated ketones. Their preparation and application in therapeutics."

Inventors: A. Tsotinis, T. Calogeropoulou, C. Roussakis, V. Roussis

2. US 8,097,752 (issued 17-1-2012) "Antiprotozoal ring-substituted phospholipids"

Inventors: T. Calogeropoulou, M. Koufaki, N. Avlonitis, A. Makriyannis

3. GR20050100100 (2/3/05) «Ultrasound contrast agents containing anticancer ether phospholipids" Inventors: Theodora Calogeropoulou, Maria Koufaki

4. GR 1003725 "Bifunctional agents possessing antioxidant and antiarrhythmic activity" Applicants and Inventors: Maria Koufaki, Theodora Calogeropoulou, Alexandros Makriyannis

5. WO 0204438, US2004259763, CA2415523, EP1301504 , DE60106922T "Bifunctional agents possessing antioxidant and antiarrhythmic activity"

Applicant: UNI-PHARMA S.A.

Inventors: Maria Koufaki, Theodora Calogeropoulou, Alexandros Makriyannis

6. GR 1003861 "GABA_A MODULATING NEUROSTEROIDS"

Inventors: T. Calogeropoulou, C. Souli, A. Tsotinis, A. Makriyannis

7. US2005176976, US7064116, WO02053577, GR-1003861, AU2002217353 GABA_A MODULATING NEUROSTEROIDS

Inventors: T. Calogeropoulou, C. Souli, A. Tsotinis, A. Makriyannis

8. GR20080100530 "1,4-Benzoxazine Derivatives"

Inventors: Calogeropoulou, T.; Koini, E.; Alexis, M.N.; Avlonitis, N.; Alexi, X.

9. WO2008155534, GB20070011948, CA2691071, AU2008265046, US2010234335, KR20100040292, EP2158209, CN101784558, EA201070027

"Neurosteroid compounds"

Inventors: Gravanis A., Calogeropoulou T., Charalampopoulos I., Avlonitis N., Castanas E., Margioris A., Tsatsanis C., Minas V., Alexaki V.-I., Alexis M., Remboutsika E., Vergou B., Neophytou C. Applicant: Bionature EA Ltd, Cyprus

10. US20100369568 "Compounds and methods for treating neoplasia"

Inventors: Alevizopoulos K.; Calogeropoulou T.; Stournaras C.

11. WO2011030116, SG179049, CA2773600 "Use of steroid compounds for inflammatory and autoimmune disorders"

Inventors: : Panoutsakopoulou V.; Angelakopoulou M.; Calogeropoulou T. ; Gravanis A.; Lazaridis I.; Neophytou C.. Applicant: Bionature EA Ltd, Nicosia, Cyprus

Presentations

64 Presentations in International Symposia

25 Presentations in National Symposia

Invited speaker (2003-2012)

- COST CHEMISTRY D13 WORKSHOP, (Lisbon, Portugal, October 2003) "Antileishmanial Ring-Substituted Ether Phospholipids"
- COST D13 Final Meeting, (Louvain-La-Neuve, Belgium, September 2004), "Design and synthesis of antileishmanial ring-substituted ether phospholipid derivatives"
- 2nd COST B22 Annual Congress on Drug Development for Parasitic Diseases, (Siena, Italy, October 2005). "Bioactive Ring-Substituted Ether Phospholipids"
- 12^o Hellenic Medicinal Chemistry Symposium, (Patras, January 2006) "CNS acting compounds. Synthesis and Evaluation of their Biological Activity"
- University of Athens, Chemistry Department, (May 2006) "Design and Synthesis of Bioactive Ether Phospholipid Derivatives"
- Medicinal Chemistry in Parasitology (Modena, Italy, February 2007), "Phospholipid Analogues as Antileishmanial Agents"
- 4th COST B22 Annual Congress on Drug Development for Parasitic Diseases (Dundee, UK, June 2007 "Design and synthesis of antiparasitic phospholipid derivatives"
- 2nd European Conference on Chemistry for Life Sciences (Wroclaw, Poland, September, 2007 "Design and synthesis of novel neuroprotective agents encompassing heterocyclic moieties"
- Hellenic Pasteur Institute, Athens, May 2009
 Ring-Substituted Ether Phospholipid Derivatives: Design, Synthesis and Study of Mechanism of Action
- Federal University of Rio de Janeiro, Instituto de Biofisica Carlos Chagas Filho, 8 December 2008, Brasil. "Ring-Substituted Antileishmanial Ether Phospholipid Derivatives: Design, Synthesis and Study of the Mechanism of Action."
- 11th Cyprus Conference on New Methods in Drug Research, (Limassol, Cyprus, May 2008) "Ether Phospholipid Derivatives: Design, Synthesis and Evaluation of Antiparasitic Activity"
- 10th Drug Design and Development Seminar (19-21/3/09, Germany) "Design, Synthesis and Evaluation of Anti-leishmanial and Anti-trypanosomal Activities of Ring-Substituted Ether Phospholipid Derivatives"
- COST Action CM0801 2nd Annual Meeting, (Siena, Italy), 28/05/2010- 29/05/2010 "Anti-leishmanial and Anti-trypanosomal Constrained Ether Phospholipid Derivatives"
- COST Action CM0801 3rd Annual Meeting, (Modena, Italy) 5th-7th October 2011 "Novel 5,7,8-trimethyl-1,4-benzoxazine derivatives active against *Toxoplasma gondii*"
- 15th Hellenic Symposium on Medicinal Chemistry, Athens 25-27 May 2012
 "17-Spiro-Substituted Neurosteroid Derivatives: Design, Synthesis and Biological Evaluation"