CURRICULUM VITAE

Minos-Timotheos Matsoukas, MSc, PhD

October 2022

PERSONAL DETAILS

Name: Surname: Address: E-mail: Date of birth: Nationality: Marital status:	Minos-Timotheos Matsoukas Giasemion 58, Chalandri, 15233, Greece mmatsoukas@uniwa.gr 13 th March, 1981 Greek Married
EDUCATION	
Sep 2006 – Mar 2012	PhD in Medicinal Chemistry <i>"Structure Activity Relationship Study of Antihypertensive Agents through Molecular Modelling and NMR"</i> Faculty of Organic Chemistry, Biochemistry and Natural Products, Department of Chemistry, University of Patras, Greece
Oct 2004 – Feb 2006 Oct 1999 – Sep 2004	Master's degree in Medicinal Chemistry Departments of Chemistry and Pharmacy, University of Patras, Greece BSc (Hons) in Chemistry Department of Chemistry, University of Patras, Greece

LANGUAGES

- 1. Greek Native
- 2. English Exceptional

3. Spanish - Basic

POSITIONS

March 2022 – current	Assistant Professor of Computational Chemistry (coddia.uniwa.gr) Department of Biomedical Engineering, University of West Attica, Athens, Greece
May 2016 - current	Co-founder
	CloudPharm P.C.
	Cloud-Based Drug Design and Pharmaceutical Research
	Athens, Greece
Jan 2021 – Feb 2022	Post-Doctoral Researcher
	Faculty of Computational Medicine, Medicine Department, Autonomous
	University of Barcelona, Spain
Jan 2015 – Sept 2021	Post-Doctoral Researcher
	Department of Pharmacy, University of Patras, Greece
Apr 2012 – Oct 2014	Post-Doctoral Researcher
	Faculty of Computational Medicine, Medicine Department, Autonomous
	University of Barcelona, Spain
Jul 2006 – Jul 2013	Administrative Research Associate

ELDRUG S.A., Drug Research and Development, Patras Science Park, Greece

PERSONAL FUNDING

- **IKY-SIEMENS**, **personal grant** for post-doctoral research, **2019-2021**, "Allosteric targeting, molecular basis of activation and structural studies of the type 1 receptor for corticotropin releasing factor (CRF1R)"
- **HPC-Europa Short-Term Fellowship** (3 months), for the proposal "Investigation of GLP-1R dynamics to identify and target hidden allosteric sites for receptor modulation" Autonomous University of Barcelona, **2019**.
- **EMBO Short-Term Fellowship** (2 months), for the proposal "*Structure Determination of the GHRHR Extracellular Binding Domain in complex with novel non-peptide ligands*" to work at National Cancer Institute, Amsterdam, with Dr. A. Perrakis, **2017**.
- **IKY-SIEMENS**, **personal grant** for post-doctoral research, **2016-2017**, "In silico targeting and structural studies of the glucagon like peptide 1 receptor (GLP-1R) towards active compounds against diabetes"
- **IKY-SIEMENS**, **personal grant** for post-doctoral research, **2015-2016**, "Structural elucidation of the extracellular domain of the growth hormone releasing hormone receptor (GHRHR) through molecular modeling and NMR and drug design"
- SANTANDER BANK AUTONOMOUS UNIVERSITY BARCELONA. 24-month fellowship for post-doctoral research, 2013-2014, New approaches for G-protein coupled receptor (GPCR) modulation

AWARDS - DISTINCTIONS

- Best poster award, GLISTEN GPCR SYMPOSIUM, 2017, Porto, Portugal. *The Size Matters: Computational Design and Analysis of GPCR Bivalent Ligands.* Pérez-Benito L, Henry A, Matsoukas M-T, Cordomí A, Tresadern G, Pardo L.
- **1**st scored scholarship nationwide (94/100) amongst 100 granted fellowships for postdoctoral research from Greek State Scholarships Foundation, year **2017**, for the proposal "*In silico targeting and structural studies of the glucagon like peptide 1 receptor (GLP-1R) towards active compounds against diabetes*"
- European Commission **Seal of Excellence** for the **Marie Skłodowska-Curie Actions 2016** proposal "Structural Determination of the GHRH Extracellular Binding Domain and Dual Targeting for Novel Anti-cancer Compounds".
- **Best oral presentation award**, Hellenic Bioinformatics Symposium, Bioinformatics as a growth engine for Greece, **2016**, **Thessaloniki**, **Greece**. *A multi-pharmacophore virtual screening methodology and the discovery of novel compounds targeting pharmacological targets*.
- Greek State Scholarships Foundation: Distinction and money prize for 1st entree position in the

Chemistry Department, **1998**, Department of Chemistry, University of Patras, Greece.

GRANT COORDINATION

- EPAnEK 2014-2020, Competitiveness, Entrepreneurship & Innovation. "CloudScreen, A one stop shop integrated platform for drug repositioning", Jan 2020 –, Cloudpharm PC, Coordinator. (budget 0.5M)
- European Regional Development Fund (NSRF), GREECE-EU co-funded grant "Synthesis and Preclinical evaluation of an active substance, BV6, towards approval of clinical trials", Jan 2012
 Dec 2013, Eldrug SA, Scientific Coordinator. (budget 0.3M)

GRANT PARTICIPATION

- EΠANEK 2014-2020. Competitiveness, Entrepreneurship & Innovation "CloudScreen: A onestop-shop computational platform for drug repurposing", **Researcher**, **1/10/2020** - **28/2/2022**.
- EΠΑΝΕΚ 2014-2020. Competitiveness, Entrepreneurship & Innovation "NextGFS", Researcher, 1/6/2020 - 31/9/2020.
- INSPIRED The National Research Infrastuctures on Integrated Structural Biology, Drug Screening Efforts and Drug Target Functional Characterization MIS 5002550, Researcher, 1/8/2019 - 31/12/2019.
- Partnership Agreement (PA) 2014-2020, "Novel functional activators of soluble guanylate cyclase (sGC)", **May 2018 July 2019**, University of Patras, **Researcher**.
- EU FP7, RD-CONNECT, "An integrated platform connecting registries, biobanks and clinical bioinformatics for rare disease research", **Sep 2016 Feb 2017**, University of Patras, **Researcher.**
- European Regional Development Fund (NSRF), GREECE-EU co-funded grant "Pre-clinical and toxicologic evaluation of peptide mimetics, analogues of myelin conjugated immunodominant epitopes towards clinical trials", Jan 2011 – Dec 2013, Eldrug SA, Legal representative and Scientific associate.
- Operational Programme Competitiveness (OPCE II), GREECE-EU co-funded grant "Research and Development of sartans towards pre-clinical studies on hypertension and cardiovascular diseases", Mar 2007 – Oct 2008, Eldrug SA, Legal representative and Scientific associate.
- General Secretariat for Research and Technology (GSRT), "Design, synthesis and biological evaluation of Myelin Basic protein analogues against Multiple Sclerosis", Jan 2006 – Dec 2008, University of Patras, Researcher.
- General Secretariat for Research and Technology (GSRT), "Design of dual action antagonists against hypertention", Jan 2005 Dec 2005, University of Patras, Researcher.

TEACHING EXPERIENCE

Post-graduate courses

- 2017-2020: Master's Degree Informatics for Life Sciences, University of Patras, Greece, (<u>https://goo.gl/tUHgti</u>) "Biomolecular Simulations" (invited lectures)
- 2016-2018: Master's Degree Translational Research in Molecular Biology and Genetics, Department of Molecular Biology & Genetics of Democritus University of Thrace, (<u>https://goo.gl/gd2Nta</u>) "Computational methods in the identification of bioactive molecules" (invited lectures)
- **2012–2014**: Official Master's Degree in Bioinformatics, Autonomous University of Barcelona, Spain, (<u>https://goo.gl/a6NJBX</u>), *Computational methods in Drug Discovery* (theory and practice)

Undergraduate Courses

- **2022-2023:** Department of Biomedical Engineering, University of West Attica, Undergraduate course "Inorganic and Analytical Chemistry" (theory)
- **2022-2023:** Department of Biomedical Engineering, University of West Attica, *Undergraduate course "Pharmaceutical Mechanics"* (theory)
- **2021-2022:** Department of Biomedical Engineering, University of West Attica, *Undergraduate course "Biochemistry"* (theory)
- **2021-2022:** Department of Biomedical Engineering, University of West Attica, *Undergraduate course "Organic Chemistry"* (theory)
- **2017-2020:** Department of Pharmacy, University of Patras, Greece, *Undergraduate course "Molecular simulation: Bioinorganic Chemistry"* (theory and practice)
- **2005-2006:** Department of Chemistry, University of Patras, Greece, *Undergraduate course* "Organic Chemistry II" (laboratory assistance)

INVITED SEMINARS

- 1. **iNext** Workshop: Bridging Solution Methods: From NMR to X-ray Scattering and Biophysics, Dept of Pharmacy, University of Patras, **2017**, **Patras**, **Greece**. *Structure-Based Drug Design*.
- 2. Workshop in **Targeted Drug Discovery**, National Hellenic Research Foundation, **2016**, **Athens, Greece.** *Pharmacophore modeling and virtual Screening in Drug Discovery.*
- 3. 2016 Golden Helix Summer School, Syros, Greece. In silico drug design methods.

ORAL PRESENTATIONS

- 1. 4th Annual User Meeting of iNEXT, **2019, Lund, Sweden**. Conformational state sampling and dual targeting of the GHRHR, a class B GPCR. **Invited Speaker**
- 69th Panhellenic Conference of the Hellenic Society for Biochemistry and Molecular Biology,
 2018, Larisa, Greece. Conformational sampling and dual targeting of the GHRHR.

- 3. 2nd Synthetic & Medicinal Chemistry Symposium, **2018, Patras, Greece.** *A virtual screening methodology for the discovery of novel compounds.* **Invited Speaker**
- 4. Hellenic Symposium on Medicinal Chemistry, **2017, Thessaloniki, Greece.** *An in silico multipharmacophore virtual screening methodology for the discovery of novel compounds against pharmacological targets.* **Invited Speaker**
- 5. Hellenic Bioinformatics Symposium, Bioinformatics as a growth engine for Greece, **2016**, **Thessaloniki, Greece.** A multi-pharmacophore virtual screening methodology and the discovery of novel compounds targeting pharmacological targets. **Best oral presentation award**
- 6. The International Conference HeCrA-HSCBB-16, **2016**, **Athens, Greece.** *Discovery of novel immunosuppressants targeting* Calcineurin through computational methods.
- 7. 17th International Conference in Medicinal Chemistry, **2016**, **Spetses**, **Greece**. *Discovery of novel immunosuppressants targeting Calcineurin through pharmacophore virtual screening*. **Invited Speaker**
- 8. 22nd Panhellenic Chemistry Conference, **2016, Thessaloniki, Greece.** Identification of novel immunosuppressant agents targeting the Calcineurin/NFAT pathway through pharmacophore virtual screening.
- 9. SEE-DRUG: NMR Applications in Life Sciences Exploring Peptides & Proteins, **2015, Patras, Greece.** The discovery of novel immunosuppressant agents targeting the Calcineurin/NFAT pathway. **Invited Speaker**
- 10. Congress of The Hellenic Society of Biochemistry and Molecular Biology (FEBS), **2015, Athens, Greece**. *Discovery of novel immunosuppressants targeting the calcineurin-NFAT substrate interaction site through pharmacophore virtual screening*
- Computational Methods in Toxicology and Pharmacology Integrating Internet Resources, 2015, Chios, Greece. Structure based pharmacophore virtual screening for novel immunosuppressants against calcineurin
- 12. 9th Conference of the Hellenic Society for Computational Biology and Bioinformatics (HSCBB14), **2014**, **Athens, Greece.** *Computational approaches towards identification of structural and signaling properties of peptide binding G Protein-coupled receptors.* **Invited Speaker**
- 13. International Conference in Medicinal Chemistry, **2011**, **Patras, Greece.** *Conformational Elucidation of Aliskiren, a Potent Renin Inhibitor.* **Invited Speaker**

EDITOR IN PEER REVIEW JOURNALS

Editorial Board Member

2018 – 2020: Biochemistry and Molecular Biology

FUNDING BODY REVIEWER

- Czech Science Foundation, "Research, experimental development and innovation to support basic research grant projects for Standard Projects", 2023
- EPAnEK 2014-2020, Competitiveness, Entrepreneurship & Innovation. Scientific evaluator.
- Greek state Scholarship Foundation, "Strengthening human resources through doctoral research", ESPA 2014-2020.
- "European Digital Innovation Hubs- EDIHs", Digital Europe, 2021-2027

REVIEWER IN PEER REVIEW JOURNALS

- Journal Medicinal Chemistry
- Current Molecular Pharmacology
- Current Pharmaceutical Discovery
- Frontiers in Pediatrics
- Journal of Chemical Information and Modeling
- Journal of Peptide Science
- SAR and QSAR in Environmental Research
- Antiviral Research

- Frontiers in Pharmacology
- Gene Reports

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 Computational and Structural Biotechnology Journal

Scientific Reports (Nature)

- Molecules (MDPI)
- Journal of Molecular Graphics and Modelling

MEMBER IN CONSORTIA

• Cancer nanomedicine - from the bench to the bedside (COST action CA17140), **Management Committee**

PARTICIPATION IN EU INFRASTRUCTURES

- Access to ARIS Supercomputing Center, Greek National HPC Infrastructure, Athens, "Extending 3D Drug Repurposing predictions to the human Variome and extended (AlphaFold) Proteome space". 12th call, **2022**
- Access to MARENOSTRUM Barcelona Supercomputing Center, "New strategies in GPCR drug discovery". call IDs: BCV-2014-2-0012, BCV-2014-3-0008, BCV-2014-3-0013, BCV-2014-3-0015, 2014-2015

EXAMINATION/EVALUATION COMMITTEES

- June 2019: **PhD thesis Examination Board,** Eduardo Mayol Escuer, "Development of Bioinformatic Tools for the Study of Membrane Proteins", Universitat Autonoma de Barcelona, Barcelona, Spain
- June 2019: **PhD thesis External Evaluator,** Mireia Jimenez Roses, "*Structure and function of GPCRs*", Universitat Autonoma de Barcelona, Barcelona, Spain

- February 2019: **MSc thesis External Evaluator**, Robin du Preez, "Characterisation of potential novel small molecule therapeutics targeting the growth hormone releasing hormone receptor", Department of Physiology, at the Faculty of Health Sciences, University of Pretoria, South Africa.
- September 2017: PhD thesis External Evaluator, Santiago Ríos Azuara, "Sequence and structure-based bioinformatics tools to the characterization, clustering and modeling of Gprotein-coupled receptors (GPCRs)", Universitat Autonoma de Barcelona, Barcelona, Spain
- November 2016: **PhD thesis Examination Board,** Jose Carlos-Tamayo, "Development and application of computational techniques to drug discovery and structure-function relationships", Universitat Autonoma de Barcelona, Barcelona, Spain

PATENTS

- **P12223EP00 (EU)** M. Pérez-Riba, Á. Aranguren, **M.-T. Matsoukas**, L. Pardo (inventors). Therapeutic Uses of non-Peptide Inhibitors of the Calcineurin NFAT Signalling Pathway.
- WO2021197574A1 (WIPO) A Garcia Pino, CP Govaerts, H Ainelo, H Tamma, V Hauryliuk, L Pardo Carasco, M-T Matsoukas (inventors). Rel/rela/spot small molecules modulators and screening methods.

PUBLICATIONS

Overview

Publications	Citations	Total IF	<i>h</i> -index
	1086 Scopus	229 (Web of Science)	17 Scopus
57	1002 Web of Science	210 (without abstracts)	16 Web of Science
	1429 Google Scholar	4.42 (mean)	18 Google Scholar
1 st Author (or equal)	2 nd Author	Corresponding Author (*)	Total
10/57 (18%)	11/57 (19%)	8/57 (14%)	52%

- Salgado-Polo F, Borza R, Matsoukas M-T, Marsais F, Jagerschmidt C, Waeckel L, Moolenaar WH, Ford P, Heckmann B, Perrakis A. Autotaxin facilitates selective LPA receptor signaling. *Cell Chemical Biology*, 2023, 30, 69.
- Ridgway H, Ntallis C, Chasapis CT, Kelaidonis K, Matsoukas M-T, Plotas P, Apostolopoulos V, Moore G, Tsiodras S, Paraskevis D, Mavromoustakos T, Matsoukas JM. Molecular Epidemiology of SARS-CoV-2: The Dominant Role of Arginine in Mutations and Infectivity. *Viruses*. 2023, 15, 309.
- Sánchez-Morales A, Biçer A, Panagiotopoulos V, Crecente-Garcia S, Benaigesa C, Bayod S, Hernández JL, Busqué F, Matsoukas M-T*, Pérez-Riba M*, Alibés R*. Design and synthesis

of a novel non peptide CN-NFATc signaling inhibitor for tumor suppression in triple negative breast cancer. *European Journal of Medicinal Chemistry*, **2022**, 238, 114514.

- Swarbrick C, Zogali V, Chan KWK, Kiousis D, Gwee CP, Wang S, Lescar J, Luo D, von Itzstein M, Matsoukas M-T, Panagiotakopoulos G, Vasudevan SG, Rassias G. Amidoxime prodrugs convert to potent cell-active multimodal inhibitors of the dengue virus protease. *European Journal of Medicinal Chemistry*, 2021, 224, 113695.
- 5. Bisyris E, Zingkou E, Kordopati GG, **Matsoukas M-T**, Magriotis P, Pampalakis G, Sotiropoulou G. Generation of a quenched phosphonate activity-based probe for labelling the active KLK7 protease. *Organic and Biomolecular Chemistry*, **2021**, *19*, 6834.
- Bisyris E, Zingkou E, Kordopati GG, Matsoukas M-T, Magriotis P, Pampalakis G, Sotiropoulou G. A novel theranostic activity-based probe targeting kallikrein 7 for the diagnosis and treatment of skin diseases. *Chemical Communications*, 2021, 57, 6507.
- Kantsadi A, Cattermole E, Matsoukas M-T, Spyroulias GA, Vakonakis I. A COVID moonshot: assessment of ligand binding to the SARS-CoV-2 main protease by saturation transfer difference NMR spectroscopy. *Journal of Biomolecular NMR*. 2021, 75, 167.
- Rodríguez-Espigares I, Torrens-Fontanals M, Tiemann J, Aranda-García D, Ramírez-Anguita JM, Maciej Stepniewski T, Worp N, Varela-Rial A, Morales-Pastor A, Medel-Lacruz B, Pándy-Szekeres G, Mayol E, Giorgino T, Carlsson J, Deupi X, Filipek S, Filizola M, Gómez-Tamayo JC, Gonzalez A, Gutiérrez-de-Terán H, Jiménez-Rosés M, Jespers W, Kapla J, Khelashvili G, Kolb P, Latek D, Marti-Solano M, Matricon P, **Matsoukas M-T**, Miszta P, Olivella M, Perez-Benito L, Provasi D, Ríos S, Torrecillas I, Sallander J, Sztyler A, Vasile S, Weinstein H, Zachariae U, Hildebrand PW, De Fabritiis G, Sanz F, Gloriam DE, Cordomi A, Guixà-González R, Selent J. GPCRmd uncovers the dynamics of the 3D-GPCRome. *Nature Methods.* 2020 (*in press*).
- Busch J, Matsoukas M-T, Musgaard M, Spyroulias GA, Biggin P, Vakonakis I. Identification of compounds that bind the centriolar protein SAS-6 and inhibit its oligomerisation. *Journal* of *Biological Chemistry*. 2020, 295, 17922.
- Zachmann J, Kritsi E, Tapeinou A, Zoumpoulakis P, Tselios T, Matsoukas M-T*. A Combined Computational and Structural Approach into Understanding the Role of Peptide Binding and Activation of the Melanocortin Receptor 4, *Journal of Chemical Information and Modeling*. 2020, 60, 1461.
- 11. Jenko Bizjan B, Katsila T, Tesovnik T, Šket R, Debeljak M, **Matsoukas M.-T**.Kovač J. Challenges in identifying large germline structural variants for clinical use by long read sequencing. *Computational and Structural Biotechnology Journal.* **2020**, *18*, 83.
- Roumana A, Argyriou A, Makrynitsa G, Chasapi S, Matsoukas M-T, Topouzis S. Rational design of soluble guanylate cyclase (sGC) activators and modified synthesis of HMR-1766 (Ataciguat). *Review of Clinical Pharmacology And Pharmacokinetics, International Edition.* 2020, 34.
- Rassias G, Zogali V, Swarbrick C, Chan KWK, Chan SA, Gwee CP, Wang S, Kaplanai E, Canko A, Kiousis D, Lescar J, Luo D, Matsoukas M-T, Vasudevan DG. Cell-active carbazole derivatives as inhibitors of the zika virus protease. *European Journal of Medicinal Chemistry*. 2019, 180, 536.
- 14. Kritsi E, **Matsoukas M-T**, Potamitis C, Detsi A, Ivanov M, Sokovic M, Zoumpoulakis P. Novel Hit Compounds as Putative Antifungals: The Case of Aspergillus fumigatus. *Molecules*, **2019**, *24*, 3853.
- 15. Magafa V[‡], **Matsoukas M-T[‡]**, Karageorgos V, Dermitzaki E, Exarchakou R, Stylos EK, Pardalos M, Margioris AN, Varvounis G, Tzakos AG, Spyroulias GA, Liapakis G. Novel stable

analogues of the neurotensin C-terminal hexapeptide containing unnatural amino acids. *Amino Acids.* **2019**, *51*, 1009.

- Chepurny OG[‡], Matsoukas M-T[‡], Liapakis G, Leech C, Milliken B, Doyle RP, Holz GG. Nonconventional glucagon and GLP-1 receptor agonist and antagonist interplay at the GLP-1 receptor revealed in high-throughput FRET assays for cAMP. *Journal of Biological Chemistry*, 2019, 294, 3514.
- 17. Makrynitsa GI, Ntonti D, Marousis KD, Bikrou M, **Matsoukas M-T**, Asami S, Bentrop D, Papageorgiou N, Canard B, Coutard B, Spyroulias GA. Conformational plasticity of the VEEV macro domain is important for binding of ADP-ribose. *Journal of Structural Biology* **2019**, *206*, 119.
- Sakellaris S[‡], Matsoukas M-T[‡], Karageorgos V, Poulaki S, Kuppast B, Margioris A, Venihaki M, Fahmy H, Liapakis G. Selective antagonism of CRF1 receptor by a substituted pyrimidine. *Hormones*, 2019, 18, 215.
- 19. Katsila T, **Matsoukas M-T.*** How far have we come with contextual data integration in drug discovery? *Expert Opinion on Drug Discovery*, **2018**, *13*, 791.
- Salgado-Polo F, Fish A, Matsoukas M-T, Heidebrecht T, Keune WJ, Perrakis A. Lysophosphatidic acid produced by Autotaxin acts as an allosteric modulator of its catalytic efficiency. *Journal of Biological Chemistry*, 2018, 293, 14312.
- Perez-Benito L, Henry A, Matsoukas M-T, Lopez L, Pulido D, Royo M, Cordomi A, Tresadern G, Pardo L. The Size Matters? A Computational Tool to Design Bivalent Ligands. *Bioinformatics*, 2018, bty422.
- 22. Jiménez-Rosés M, **Matsoukas M-T**, Caltabiano G, Cordomí A. Ligand-Triggered Structural Changes in the M2 Muscarinic Acetylcholine Receptor. *Journal of Chemical Information and Modeling*, **2018**, *58*, 1074.
- 23. Karageorgos V, Venihaki M, Sakellaris S, Pardalos M, Kontakis G, **Matsoukas M-T**, Gravanis A, Margioris A, Liapakis G. Current understanding of the structure and function of family B GPCRs to design novel drugs. *Hormones*, **2018**, *17*, 45.
- Deraos G‡, Kritsi E‡, Matsoukas M-T‡, Christopoulou K‡, Kalbacher H, Zoumpoulakis P, Apostolopoulos V, Matsoukas J. Design of Linear and Cyclic Mutant Analogues of Dirucotide Peptide (MBP82–98) against Multiple Sclerosis: Conformational and Binding Studies to MHC Class II. Brain Sciences, 2018, 8, 213.
- Lourbopoulos A, Matsoukas M-T, Katsara M, Deraos G, Giannakopoulou A, Lagoudaki R, Grigoriadis N, Matsoukas J, Apostolopoulos V. Cyclization of PLP 139-151 peptide reduces its encephalitogenic potential in experimental autoimmune encephalomyelitis. *Bioorganic & Medicinal Chemistry*, 2018, 29, 2221.
- Smiljkovic M, Matsoukas M-T, Kritsi E, Zelenko U, Grdodolnik SG, Calhelha, R, Ferreira I, Sankovic-Babic S, Glamoclija J, Fotopoulou T, Koufaki M, Zoumpoulais, Sokovic M. Nitrate esters of heteroaromatic compounds as novel Candida albicans CYP51 enzyme inhibitors. ChemMedChem. 2018, 13, 251.
- 27. **Matsoukas M-T**,* Spyroulias GA. Dynamic properties of the growth hormone releasing hormone receptor (GHRHR) and molecular determinants of GHRH binding. *Molecular BioSystems*, **2017**, *13*, 1313.
- Liapakis G[‡], Matsoukas M-T[‡], Karageorgos V, Venihaki M, Mavromoustakos T. Family B G Protein-coupled Receptors and their Ligands: From Structure to Function. *Current Medicinal Chemistry*, 2017, 24, 3323.

- Wilsher NE, Arroo RR, Matsoukas M-T, Tsatsakis AM, Spandidos DA, Androutsopoulos VP. Cytochrome P450 CYP1 metabolism of hydroxylated flavones and flavonols: Selective bioactivation of luteolin in breast cancer cells. *Food and Chemical Toxicology*, 2017, 110, 383.
- Qaradakhi T, Matsoukas M-T, Hayes A, Rybalka E, Caprnda M, Rimarova K, Sepsi M, Büsselberg D, Kruzliak P, Matsoukas J. Alamandine reverses hyperhomocysteinemiainduced vascular dysfunction via PKA-dependent mechanisms. *Cardiovascular Therapeutics*, 2017, 35, e12306.
- Lourbopoulos A, Deraos G, Matsoukas M-T, Touloumi O, Giannakopoulou A, Kalbacher H, Grigoriadis N, Apostolopoulos V, Matsoukas J. Cyclic MOG 35-55 ameliorates clinical and neuropathological features of experimental autoimmune encephalomyelitis. *Bioorganic & Medicinal Chemistry*, 2017, 25, 4163.
- Katsila T, Matsoukas M-T, Patrinos GP, Kardamakis D. Pharmacometabolomics Informs Quantitative Radiomics for Glioblastoma Diagnostic Innovation. OMICS: A Journal of Integrative Biology, 2017, 21, 429.
- Cordomi A, Liapakis G, Matsoukas M-T.* Understanding Corticotropin Releasing Factor Receptor (CRFR) Activation Using Structural Models. *Current Molecular Pharmacology*, 2017, 10, 1.
- Apostolopoulos V, Deraos G, Matsoukas M-T, Day S, Stojanovska L, Tselios T, Androutsou M-E, Matsoukas J. Cyclic citrullinated MBP 87–99 peptide stimulates T cell responses: Implications in triggering disease. *Bioorganic & Medicinal Chemistry*, 2017, 25, 528.
- 35. Semidalas C, Semidalas E, **Matsoukas M-T**, Nixarlidis C, Zoumpoulakis P. In silico studies reveal the mechanisms behind the antioxidant and anti-inflammatory activities of hydroxytyrosol. *Medicinal Chemistry Research*, **2016**, *25*, 2498.
- Kritsi E, Matsoukas M-T, Potamitis C, Karageorgos V, Detsi A, Magafa V, Liapakis G, Mavromoustakos T, Zoumpoulakis P. Exploring new scaffolds for angiotensin II receptor antagonism. *Bioorganic & Medicinal Chemistry*, 2016, 24, 4444.
- 37. Katsila T, Spyroulias GA, Patrinos GP, **Matsoukas M-T**.* Computational approaches in target identification and drug discovery. *Computational and Structural Biotechnology Journal*, **2016**, *14*, 177.
- Bratakos S, Sinanoglou V, Matsoukas M-T, Siapi E, Papahatjis D, Riganakos K, Zoumpoulakis P. Fragmentation Patterns of Aromatic 2, 5-Diketopiperazines using Liquid Chromatography/mass Spectrometry. *Current Analytical Chemistry*, 2016, 12, 439.
- 39. Tapeinou A, **Matsoukas M-T**, Simal C, Tselios T. Cyclic peptides on a merry-go-round; towards drug design. *Peptide Science*, **2015**, *104*, 453.
- 40. **Matsoukas M-T**[‡], Aranguren-Ibáñez Á[‡], Lozano T, Nunes V, Lasarte JJ, Pardo L, Pérez-Riba M. Identification of small-molecule inhibitors of calcineurin-NFATc signaling that mimic the PxIxIT motif of calcineurin binding partners. *Science Signaling*, **2015**, *8*, 63.
- Lattanzi R, Congiu C, Onnis V, Deplano A, Salvadori S, Marconi V, Maftei D, Francioso A, Ambrosio C, Casella I, Costa T, Caltabiano G, Matsoukas M-T, Balboni G, Negri L. Halogenated Triazinediones Behave as Antagonists of PKR1: in vitro and in vivo Ppharmacological Characterization. *International Journal of Pharmaceutical Sciences and Research*, 2015, 6, 1033.
- Cordomí A, Ismail S, Matsoukas M-T, Escrieut C, Gherardi M-J, Pardo L, Fourmy D. Functional elements of the gastric inhibitory polypeptide receptor: Comparison between secretin- and rhodopsin-like G protein-coupled receptors. *Biochemical Pharmacology*, 2015, 96, 237.

- Spyridaki K, Matsoukas M-T, Cordomi A, Gkountelias K, Papadokostaki M, Mavromoustakos T, Logothetis DE, Margioris AN, Pardo L, Liapakis G. Structural-Functional Analysis of the Third Transmembrane Domain of the CRF1 Receptor: Role in Activation and Allosteric Antagonism. *Journal of Biological Chemistry*, 2014, 289, 18966.
- 44. **Matsoukas M-T**, Potamitis C, Plotas P, Androutsou M-E, Agelis G, Matsoukas J, Zoumpoulakis P. Insights into AT1 Receptor Activation through AngII Binding Studies. *Journal of Chemical Information and Modeling*, **2013**, 53, 2798.
- 45. **Matsoukas M-T**, Cordomí A, Ríos S, Pardo L, Tselios T. Ligand Binding Determinants for Angiotensin II Type 1 Receptor from Computer Simulations. *Journal of Chemical Information and Modeling*, **2013**, 53, 2874.
- *46.* Potamitis C, **Matsoukas M-T**, Tselios T, Mavromoustakos T, Golič Grdadolnik S. Conformational analysis of the MBP83–99 (Phe91) and MBP83–99 (Tyr91) peptide analogues and study of their interactions with the HLA-DR2 and human TCR receptors by using Molecular Dynamics. *Journal of Computer-Aided Molecular Design*, **2011**, *25*, 837.
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