Theodore Tselios, PhD, MSc

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CURRENT POSITION: Professor of Organic Chemistry

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DETAILED DATA (Education, carrier)

Prof T. Tselios, born in Messolonghi in January 1971, obtained his diploma (Chemistry) in April 1994, PhD (Organic and medicinal Chmeistry) in October 2001 and MSc (Medicinal Chemistry) in July 2003 from the Department of Chemistry, University of Patras. He has joined, as a visiting scientist, Austin Research Institute, Melbourne Australia (2005 and 2013), School of Chemistry, University of Cardiff, UK (2006, 2008 and 2010) and University of Barcelona, Spain (2010).

Nov2017-May2019: Head of Division A, Department of Chemistry, University of Patras.

Aug2019-Sept2019: Head (first) of the Department of Crop Science, University of Patras (organize the department).

Aug2020-today: Director of "Chemical Biology" Research Institute of P.E.K. University of Patras.

Sept2022-Aug2024: Head of the departmental postgraduate program "Medicinal Chemistry & Chemical Biology" of the departments of Chemistry and Medicine of University of Patras.

RESEARCH/ACHIEVEMENTS

- Professor Theodore Tselios has a twenty-five-year experience in rational design, synthesis and evaluation of bioactive molecules (peptides and non-peptides) implicated in the treatment of Multiple Sclerosis (mainly), hormone dependent cancer and hypertension.
- The active patents (in which Prof. T. Tselios is inventor/applicant) include the discovery and pre-clinical evaluation of myelin peptides conjugated with the oxidized form of mannan polysaccharide namely ELMog, for which a phase-I clinical trial is in progress by a Greek pharmaceutical company

INTERNATIONAL CONFERENCES [I have also attended thirty (30) Greek conferences/workshops]:

1) 36th European Peptide Symposium & 12th International Peptide Symposium. Barcelona, Spain, 28 August-2 September **2022**.

2) 35th European Peptide Symposium. Dublin City University, Dublin, Ireland, 26-31 August **2018**.

3) 34th European Peptide Symposium & 8th International Peptide Symposium. Leipzig, Germany, 4-9 September **2016**.

4) 8th International Symposium on Computational Methods in Toxicology and Pharmacology Integrating Internet Recourses. Chios, Greece, 21-25 June **2015**.

5) Peptides in Paris Symposium, PIPS 2014. Paris, France, 5-8 October **2014**.

6) 33rd European Peptide Symposium. Sofia, Bulgaria, 31 August - 5 September **2014**.

7) 32nd Cyprus-Noordwijkerhout-Camerino Symposium: "Trends in Drug Research" Limassol, Cyprus, 18-22 May **2014**, **(Poster Prize; Member of Scientific Board).**

8) MipTec & BioValley Life Sciences Week 2013. Basel, Switzerland, 24-26 September **2013**.

9) 11th International Congress of Neuroimmunology & 12th ESNI COURSE – European School of Neuroimmunology. Boston, Massachusetts USA, 4-8 November **2012**.
10) 32nd European Peptide Symposium. Athens, Greece, 2-7 September **2012 (Member of Scientific Board)**.
11) 29th Cyprus-Noordwijkerhout-Camerino Symposium: "Trends in Drug Research" Limassol, Cyprus, 2-7 October **2011 (Member of Scientific Board)**.
12) East-NMR Satellite Meeting". Rhodes, Greece, 24-25 September **2010**.
13) 18th European Symposium on Quantitative Structure-Activity Relationships: "Discovery Informatics & Drug Design" Rhodes, Greece, 19-24 September **2010**.
14) 31th European Peptide Symposium. Copenhagen, Denmark, 5-10 Sept, **2010**.
15) 30rd European Peptide Symposium. Helsinki, Finland, 5-10 September, **2008**.
16) Select Biosciences: Virtual Discovery, London, UK, October **2007**.
17) Eurocombi 4. First International Symposium on Combinatorial Sciences in Biology, Chemistry, Catalysts and Materials. Firenze, Italy, July **2007**.
18) 3rd International & 28th European Peptide Symposium. Prague, Czech Republic, 5-10 September **200**4.

MEMBERSHIPS AND REVIEWING ACTIVITIES:

Member of European Peptide Society.

Reviewer of European Grants:

- **4/2022:** Austrian Science Fund (FWF).
- **8/2021:** Austrian Science Fund (FWF).
- **4/2019** and re-evaluation **11/2019:** Austrian Science Fund (FWF).
- **2/2014:** Medical Research Council (MRC), UK

Member in Editorial Board:

1) Journal of Molecular Graphics and Modelling; **2)** Molecules

Reviewer of manuscripts in journals in the field of Organic and Medicinal Chemistry: Journal of Medicinal Chemistry, European Journal of Medicinal Chemistry, PLOS ONE, Journal of Molecular Graphics and Modelling, Journal of Combinatorial Chemistry, Journal of Drug Delivery, Bioinorganic Chemistry and Applications, Molecules, Journal of Computer Aided Molecular Design, Protein and Peptide Letters.

TEACHING ACTIVITIES:

2005-today (*Undergraduate teaching)*: Courses in the field of "Organic Chemistry" & laboratories of "Experimental Organic Chemistry"

2005-today *(Graduate teaching)*: Courses in Medicinal Chemistry: "NMR Spectroscopy and Molecular Design" and laboratories of "Advanced Experimental Organic Chemistry" (MSc Program "Medicinal Chemistry").

SUPERVISING OF PhD / MSc THESES & POSTDOCTORAL FELLOWS:

- **2006-today:** Eight (8) PhD theses have been completed.
- **2005-today:** Twenty-nine (29) MSc theses have been completed, one (1) is in progress.
- • **Sept. 2014-March 2019** & **Aug. 2022-Oct. 2023:** Dr Haralambos Tzoupis **(Postdoctoral Fellow)**.
- **Jan. 2015-Jan. 2017:** Dr Carmen Simal Fernandez **(Postdoctoral Fellow)**.

FELLOWSHIPS and AWARDS:

- **1998:** Award from the "Leonidas Zervas" foundation, Athens, Greece.
- **2002-2003:** Scholarship by the State Scholarship's Foundation of Greece.
- Brain Science, Open Access Journal, **«Best Paper Award 2018»**. Title: Multiple Sclerosis: Immunopathology and Treatment Update.
- **«Poster Prize»** 32nd Cyprus-Noordwijkerhout-Camerino Symposium: "Trends in Drug Research" Limassol, Cyprus, **18-22 May 2014**.

MAIN RESEARCH GRANTS:

1) 2007-2010: 24.000,00 €. K. Karatheodooris Program, University of Patras. Scientific Supervisor: Assist. Prof. T. Tselios. Project title: "Design, Synthesis and Molecular Modeling of Cyclic GnRH analogues for the Treatment of Cancer".

2) 2011-2015: 3.000.000,00 €. Greek General Secretariat of Research and Technology. Cooperation Program. Scientific Supervisor: Prof. J. Matsoukas; **Collaborator, Scientific Supervisor the last three months and responsible for the last evaluation of the program: Assoc. Prof. T. Tselios.** Project title: "Pre-clinical and Toxicology Evaluation of Immunodominant Myelin Peptides/Mimetics Conjugated with Mannan towards Clinical Phase I-II Studies: A Potential Therapeutic Vaccine Drug in the Treatment of Multiple Sclerosis (MS)".

3) 2014-2015: 480.500,00 €. Greece-Israel cooperation program, Greek General Secretariat of Research and Technology. **Scientific Supervisor: Assoc. Prof. T. Tselios.** Project Title: "A novel combined approach for the Immunotherapy of Multiple Sclerosis".

4) 1/11/2017-30/04/2019: 16.200,00 €, ELIDEK for PhD candidates; PhD student: Agathi Deli. **Scientific Supervisor: Assoc. Prof. T. Tselios.** Project Title: "Design, synthesis and evaluation of peptides and non-peptide mimetics of gonadotropin releasing hormone (GnRH)".

5) 2018-2021: 834.800,71 € (total); 150.000,00 € (Department of Chemistry, University of Patras). Co-financed by the European Union and Greek national funds through the Operational Program Competitiveness, Entrepreneurship and Innovation, under the call RESEARCH – CREATE - INNOVATE. **Scientific Supervisor for the Department of Chemistry, University of Patras: Assoc. Prof. T. Tselios.** Project Title: "Development of an advanced humanized mouse model for multiple sclerosis: application for pre-clinical studies and drug testing"

6) 15/10/2019-14/05/2021: 17.100,00 €, 2nd ELIDEK for PhD candidates; PhD studentç: Iro Triantafyllakou. **Scientific Supervisor: Assoc. Prof. T. Tselios.** Project Title: "Design, synthesis and evaluation of nanoparticles encapsulated with myelin peptides".

7) 2020-2023: 667.511,82 € (total); 306.092,73 € (Department of Chemistry, University of Patras). Co-financed by the European Union and Greek national funds through the Operational Program

Competitiveness, Entrepreneurship and Innovation, under the call RESEARCH – CREATE - INNOVATE. **Scientific Supervisor: Prof. T. Tselios.** Project Title: "Development of targeted hormone-dependent cancer therapy".

Patents:

1. Granted in European countries: J. Matsoukas, **T. Tselios** et al. **"Peptide Analogues and Conjugates Thereof"**: PCT/IB2008/003493, WO 2009/066175, (28.05.2009), European No. 08851987.1 / 1402/2227486. Short Description: "MBP analogues conjugated with mannan using KLH bridge".

2. Granted in USA, Australia and all European countries: T. Tselios et al. **"Immunotherapy of Multiple Sclerosis Using Mannosylated Peptides as Therapeutic Vaccines"**: PCT/IB2009/000382, WO 2009/093143 (30.07.2009). Greece (OBI) No. 1006998/30.09.2010. European No. 09703874.9 / 1412/2240200; Short Description: "MBP analogues conjugated with mannan via KGn bridge". Divisional No. 14156495.5; Short Description: "MOG analogues conjugated with mannan via KGn bridge". Australia No. 2009207345; Short Description: "MOG analogues conjugated with mannan via KGn bridge". Divisional No. 2014200921; Short Description: "MBP analogues conjugated with mannan via KGn bridge". USA No. 12/864,019; Short Title: "Conjugates comprising mannan and myelin oligodentrocyte glycoprotein (MOG)"; Short Description: "MOG analogues conjugated with mannan via KGn bridge". Divisional: No. 14/877,679; Short Title: "Conjugates comprising mannan and myelin basic protein (MBP)"; Short Description: "MBP analogues conjugated with mannan via KGn bridge".

BOOKS:

- "Organic Chemistry", eds: Marc Loudon, Jim Parise. **Prof T. Tselios** was a member of the translation team under the supervision of Prof. Thomas Mavromoustakos, 2019.
- "A Microscale Approach to Organic Laboratory Techniques", eds: Donald L. Pavia, Gary M. Lampman, George S. Kriz, Randall G. Engel. **Prof T. Tselios** was a member of the translation team under the supervision of Prof. Thomas Mavromoustakos, 2023.
- "Basic Principles of Organic Chemistry", eds: T. Mavromoustakos, **Θ. Τσέλιος**, K. Papakonstantinou. ISBN 978-960-266-387-5.

PUBLICATIONS:

Overview:

- **Publications: 87 (69 the last ten years)**
- **Average of Impact Factor: almost 4.5**
- **Total citations (excluding self-citations): more than 1150**
- **Book Chapters: 10**
- **Abstracts in Referred Journals: 51**
- **Conference Proceedings: 78**
- **Abstract-Proceedings in National Conferences: 97**
- **Hirsch Index: 28, i10: 58 (Google Scholar), 26 (Scopus)**

Publications in Peer Reviewed Journals:

- **Guest Editor:** Special Issue "Cyclic Peptide Analogues and Non-Peptide Mimetics" in Molecules, **2019-2020.**

1. T. Tselios, L. Probert, G. Kollias, E. Matsoukas, P. Roumelioti, K. Alexopoulos, G. Moore, J. Matsoukas*. Design and synthesis of small semi-mimetic peptides with Immunomodulatory activity based on Myelin Basic Protein (MBP). *Amino Acids*, **1998**, 14(4): 333-341.

2. K. Alexopoulos, J. Matsoukas*, **T. Tselios**, P. Roumelioti, T. Mavromoustakos, K. Holada. A Comparative SAR Study of Thrombin Receptor Derived non-peptide Mimetics: Importance of Phenyl/Guanidino Proximity for Activity. *Amino Acids*, **1998**, 15(3): 211-220.

3. J. Pires, **T. Tselios**, J. Matsoukas, G. Moore*. Role of Myelin Basic Protein Epitope MBP_{74-85} in Experimental Autoimmune Encephalomyelitis: Elaboration of Agonist and Antagonist Motifs. *Drug Development Research*, **1999**, 48: 1-5.

4. T. Tselios, L. Probert, I. Daliani, E. Matsoukas, A. Troganis, I. Gerothanasis, T. Mavromoustakos, G. Moore, J. Matsoukas*. Design and Synthesis of a Potent Cyclic Analogue of the Myelin Basic Protein Epitope MBP_{72-85}: Importance of the Ala^{81} Carboxyl Group and of a Cyclic Conformation for Induction of Experimental Allergic Encephalomyelitis (E.A.E.). *J. Med. Chem.*, **1999**, 42(7):1170-1177.

5. P. Roumelioti, **T. Tselios**, K. Alexopoulos, T. Mavromoustakos, A. Kolocouris, G. Moore, J. Matsoukas*. Structural Comparison Between Type I and type II Antagonists: Possible Implications in the Drug Design of AT1 Antagonists. *Bioorg. Med. Chem. Lett.,* **2000**, 10(8): 1-4.

6. T. Tselios, I. Daliani, L. Probert, S. Deraos, E. Matsoukas, S. Roy, J. Pires, G. Moore, J. Matsoukas*. Treatment of Experimental Allergic Encephalomyelitis (EAE) Induced by Guinea Pig Myelin Basic Protein Epitope 72-85 with a Human MBP_{87-99} Analogue and Effects of Cyclic Peptides. *Bioorg. Med. Chem.*, **2000**, 8(8): 1903-1909.

7. T. Tselios, I. Daliani, S. Deraos, S. Thymianou, E. Matsoukas, A. Troganis, I. Gerothanassis, A. Mouzaki, T. Mavromoustakos, L. Probert, J. Matsoukas*. Treatment of Experimental Allergic Encephalomyelitis (EAE) by a Rationally Designed Cyclic Analogue of Myelin Basic Protein (MBP) Epitope 72-85. *Bioorg. Med. Chem. Lett.*, **2000**, 10(24): 2713-2717.

8. T. Tselios, V. Apostolopoulos, I. Daliani, S. Deraos, S. Golič Grdadolnik, T. Mavromoustakos, M. Melachrinou, S. Thymianou, L. Probert, A. Mouzaki, J. Matsoukas*. Antagonistic Effects of Human Cyclic MBP_{87-99} Altered Peptide Ligands in Experimental Allergic Encephalomyelitis and Human T-Cell Proliferation. *J. Med. Chem.,* **2002**, 45(2): 275-283.

9. A.G. Tzakos, P. Fuchs, N.A. van Nuland, A. Troganis, **T. Tselios**, S. Deraos, J. Matsoukas, I.P. Gerothanassis*, A.M. Bonvin. NMR and molecular dynamics studies of an autoimmune myelin basic protein peptide and its antagonist: structural implications for the MHC II (I-Au)-peptide complex from docking calculations. *Eur. J. Biochem.,* **2004**, 271(16): 3399-3413.

10. A. Mouzaki*, **T. Tselios,** P. Papathanassopoulos, I. Matsoukas, K. Chatzantoni. (Review) Immunotherapy for Multiple Sclerosis: Basic insights for new clinical strategies. *Curr. Neurovasc. Res.,* **2004**, 1(4): 325-340.

11. J. Matsoukas*, V. Apostolopoulos, H. Kalbacher, A.M. Papini, **T. Tselios,** K. Chatzantoni, T. Biagioli, F. Lolli, S. Deraos, P. Papathanassopoulos, A. Troganis, E. Mantzourani, T. Mavromoustakos, A. Mouzaki*. Design and synthesis of a novel potent myelin basic protein epitope 87-99 cyclic analogue: enhanced

stability and biological properties of mimics render them a potentially new class of immunomodulators. *J. Med. Chem*., **2005**, 48(5): 1470-1480.

12. A. Tzakos, P. Kursula, V. Theodorou, **T. Tselios,** C. Svarnas, J. Matsoukas, A. Troganis, V. Apostolopoulos, I. Gerothanassis*. (Review) Structure and Function of the Myelin Proteins: Current Status and Perspectives in Relation to Multiple Sclerosis. *Cur. Med. Chem.,* **2005**, 12(13): 1569-1587.

13. N. Grigoriadis*, **T. Tselios,** S. Deraos, A. Orologas, G. Deraos, J. Matsoukas, I. Mavromatis, I. Milonas. (Review) Animal models of central nervous system immune-mediated diseases: Therapeutic interventions with Bioactive Peptides and Mimetics. *Cur. Med. Chem.,* **2005**, 12(13): 1513-1519.

14. E.D. Mantzourani, T.M. Mavromoustakos, J.A. Platts, J.M. Matsoukas, **T.V. Tselios***. (Review) Structural Requirements for Binding of Myelin Basic Protein (MBP) Peptides to MHC II: Effects in Immune Regulation. *Cur. Med. Chem.,* **2005**, 12(13): 1569-1587.

15. T.V. Tselios, F.N. Lamari, I. Karathanasopoulou, M. Katsara, V. Apostolopoulos, G.A. Pietersz, J.M. Matsoukas, N.K. Karamanos*. Synthesis and study of the electrophoretic behavior of mannan conjugates with cyclic peptide analogue of myelin basic protein using lysine-glycine linker. *Anal. Biochem.,* **2005**, 347(1): 121-128.

16. M.K. Keramida*, **T. Tselios,** E. Mantzourani, K. Papazisis, T. Mavromoustakos, C. Klaussen, G. Agelis, S. Deraos, I. Friligou, H. Habibi, J. Matsoukas*. Design, synthesis, and molecular modeling of a novel amide-linked cyclic GnRH analogue cyclo(4-9)[Lys4,D-Trp6,Glu9]GnRH: stimulation of gonadotropin gene expression. *J. Med. Chem.,* **2006**, 49(1): 105-110.

17. M. Katsara, **T. Tselios**, S. Deraos, G. Deraos, J. Matsoukas, V. Apostolopoulos*. (Review) Round and round we go: cyclic peptides in disease. *Cur. Med. Chem.,* **2006**, 13(19): 2221-2232.

18. E. Mantzourani, **T. Tselios,** S. Golič Grdadolnik, A. Brancale, J. Matsoukas, T. Mavromoustakos*. A putative bioactive conformation for the altered peptide ligand of myelin basic protein and inhibitor of experimental autoimmune encephalomyelitis [Arg^{91}, Ala^{96}]$MBP_{87\text{-}99}$. *J. Mol. Graph. Model.,* **2006**, 25(1): 17-29.

19. E.D. Mantzourani, **T.V. Tselios***, S. Golič Grdadolnik; J.A. Platts, A. Brancale, G. Deraos, J.M. Matsoukas, T.M. Mavromoustakos*. Comparison of Proposed Putative Active Conformations of Linear Altered Peptide Ligands of Myelin Basic Protein Epitope 87-99 by Spectroscopic and Modelling studies: The Role of Position 91 and 96 in T-cell Receptor Activation. *J. Med. Chem.,* **2006**, 49(23): 6683-6691.

20. E.D. Mantzourani, J.A. Platts, A. Brancale, T.M. Mavromoustakos, **T.V. Tselios***. Molecular dynamics at the receptor level of immunodominant myelin basic protein epitope 87-99 implicated in multiple sclerosis and its antagonists altered peptide ligands: Triggering of immune response. *J. Mol. Graph. Model.,* **2007**, 26(2): 471-481.

21. Z. Spyranti, G.A. Dalkas, G.A. Spyroulias*, E.D. Mantzourani, T. Mavromoustakos, I. Friligou, J.M. Matsoukas, **T.V. Tselios***. Putative Bioactive Conformations of Amide Linked Cyclic Myelin Basic Protein Peptide Analogues Associated with Experimental Autoimmune Encephalomyelitis. *J. Med. Chem.,* **2007**, 50(24): 6039-6047.

22. T. Tselios*, K. Kelaidonis, A. Resvani, K. Prousalis, J. Matsoukas, T. Tsegenidis*. Solid Phase Synthesis of a Glycopeptide analogue using the acid sensitive 4-Methoxybenzhydryl bromide resin. *Protein Pept. Lett.,* **2008**, 15(1): 1-5.

23. G. Agelis, N. Tzioumaki, **T. Tselios**, T. Botić, A. Cencic, D. Komiotis*. Synthesis and molecular modelling of unsaturated exomethylene pyranonucleoside analogues with antitumor and antiviral activities. *Eur. J. Med. Chem.,* **2008**, 43(7): 1366-1375.

24. E.D. Mantzourani, K. Blokar, **T.V. Tselios**, J.M. Matsoukas, J.A. Platts, T.M. Mavromoustakos, S. Golič Grdadolnik*. A combined NMR and molecular dynamics simulation study to determine the conformational properties of agonists and antagonists against experimental autoimmune encephalomyelitis. *Bioorg. Med. Chem.,* **2008**, 16(5): 2171-2182.

25. Z.D. Sofianos, T. Katsila, N. Kostomitsopoulos, V. Balafas, J. Matsoukas, **T. Tselios,** C. Tamvakopoulos*. In vivo evaluation and in vitro metabolism of leuprolide in mice-mass spectrometry-based biomarker measurement for efficacy and toxicity. *J. Mass. Spectrom.,* **2008**, 43(10): 1381-1392.

26. M**.** Katsara, E. Yuriev, P.A. Ramsland, G. Deraos, **T. Tselios**, J. Matsoukas, V. Apostolopoulos*. Mannosylation of mutated MBP83-99 peptides diverts immune responses from Th1 to Th2. *Mol. Immunol.,* **2008**, 45(13): 3661-3670.

27. M. Katsara, G. Deraos, **T. Tselios**, J. Matsoukas, V. Apostolopoulos*. Design of novel cyclic altered peptide ligands of myelin basic protein MBP83-99 that modulate immune responses in SJL/J mice. *J. Med. Chem.,* **2008**, 51(13): 3971-3978.

28. M. Katsara, E. Yuriev, P.A. Ramsland, G. Deraos, **T. Tselios**, J. Matsoukas, V. Apostolopoulos*. A double mutation of MBP(83-99) peptide induces IL-4 responses and antagonizes IFN-gamma responses. *J. Neuroimmunol.,* **2008**, 30, 200(1-2): 77-89.

29. E. Mantzourani, D. Laimou, M.T. Matsoukas, **T. Tselios***. (Review) Peptides as therapeutic agents or drug leads for autoimmune, hormone dependent and cardiovascular diseases. *Anti-Inflammatory & Anti-Allergy Agents in Medicinal Chemistry,* **2008**, 7, 294-306.

30. K. Gkountelias, **T. Tselios**, M. Venihaki, G. Deraos, I. Lazaridis, O. Rassouli, A. Gravanis, G. Liapakis*. Alanine scanning mutagenesis of the second extracellular loop of type 1 corticotropin-releasing factor receptor revealed residues critical for peptide binding. *Mol. Pharmacol.,* **2009**, 75(4): 793-800.

31. M. Katsara, G. Deraos, **T. Tselios,** MT. Matsoukas, I. Friligou, J. Matsoukas, V. Apostolopoulos*. Design and synthesis of a cyclic double mutant peptide (cyclo(87-99)[A91,A96]MBP87-99) induces altered responses in mice after conjugation to mannan: implications in the immunotherapy of multiple sclerosis. *J. Med. Chem.,* **2009**, 52(1): 214-218.

32. G. Deraos, K. Chatzantoni, MT. Matsoukas, **T. Tselios**, S. Deraos, M. Katsara, P. Papathanasopoulos, D. Vynios, V. Apostolopoulos*, A. Mouzaki*, J. Matsoukas* Citrullination of linear and cyclic altered peptide ligands from myelin basic protein (MBP(87-99)) epitope elicits a Th1 polarized response by T cells isolated from multiple sclerosis patients: implications in triggering disease. *J. Med. Chem.,* **2008**, 51(24): 7834-7842.

33. Z. Spyranti, **T. Tselios,** G. Deraos, J. Matsoukas, G.A. Spyroulias*. NMR structural elucidation of myelin basic protein epitope 83-99 implicated in multiple sclerosis. *Amino Acids,* **2010**, 38(3): 926-936.

34. M. Katsara, E. Yuriev, P.A. Ramsland, **T. Tselios**, G. Deraos, A. Lourbopoulos, N. Grigoriadis, J. Matsoukas, V Apostolopoulos*. Altered peptide ligands of myelin basic protein (MBP87–99) conjugated to reduced mannan modulate immune responses in mice. *Immunology,* **2009**, 128(4), 521-533.

35. M. Emmanouil, E. Taoufik, V. Tseveleki, S.S. Vamvakas, **T. Tselios**, M. Karin, H. Lassmann, L. Probert*. Neuronal IκB kinase *β* protects mice from autoimmune encephalomyelitis by mediating neuroprotective and immunosuppressive effects in the CNS. *J. Immunol.,* **2009**, 183(12): 7877-7889.

36. DK. Laimou, M. Katsara, M.T. Matsoukas, V. Apostolopoulos, AN. Troganis, **TV. Tselios***. Structural elucidation of Leuprolide and its analogues in solution: insight into their bioactive conformation. *Amino Acids,* **2010**, 39(5): 1147-1160.

37. I. Friligou, E. Papadimitriou, D. Gatos, J. Matsoukas, **T. Tselios*.** Microwave-Assisted Solid-Phase Peptide Synthesis of the 60-110 Domain of Human Pleiotrophin (hPTN) on 2-Chlorotrityl Resin. *Amino Acids,* **2011**, 40(5): 1431-1440.

38. A. Aggelis, A. Resvani, M-T. Matsoukas, **T. Tselios,** K. Kelaidonis, D. Kalavrizioti, D. Vlahakos, J. Matsoukas*. Towards non-peptide ANG II AT1 receptor antagonists based on urocanic acid: rational design, synthesis and biological evaluation. *Amino Acids,* **2011,** 40(2): 411-420.

39. T. Katsila, E. Balafas, G. Liapakis, P. Limonta, M. Montagnani Marelli, K. Gkountelias, **T. Tselios**, N. Kostomitsopoulos, J. Matsoukas, C. Tamvakopoulos*. Evaluation of a stable gonadotropin-releasing hormone analog in mice for the treatment of endocrine disorders and prostate cancer. *J. Pharmacol. Exp. Ther.,* **2011**, 336(3): 613-623.

40. M.T. Matsoukas, P. Zoumpoulakis, **T. Tselios***. Conformational analysis of aliskiren, a potent renin inhibitor, using high-resolution nuclear magnetic resonance and molecular dynamics simulations. *J. Chem. Inf. Model.,* **2011**, 51(9): 2386-2397.

41. C. Potamitis, M.T. Matsoukas, **T. Tselios*,** T. Mavromoustakos*, S. Golič Grdadolnik*. Conformational analysis of the MBP(83-99) (Phe (91)) and MBP (83-99) (Tyr (91)) peptide analogues and study of their interactions with the HLA-DR2 and human TCR receptors by using Molecular Dynamics. *J. Comput. Aided Mol. Des.,* **2011**, 25(9): 837-853.

42. E. Taoufik, V. Tseveleki, S.Y. Chu, **T. Tselios,** M. Karin, H. Lassmann, D.E. Szymkowski, L. Probert*. Transmembrane tumour necrosis factor is neuroprotective and regulates experimental autoimmune encephalomyelitis via neuronal nuclear factor-kappaB. *Brain,* **2011**, 134(9): 2722-2735.

43. D. Laimou, E. Lazoura, A.N. Troganis, M-T. Matsoukas, S.N. Deraos, M. Katsara, J. Matsoukas, V. Apostolopoulos, **T.V. Tselios*.** Conformational studies of immunodominant myelin basic protein 1-11 analogues using NMR and molecular modelling. *J. Comput. Aided Mol. Des.,* **2011**, 25(11): 1019-1032.

44. D. Laimou, T. Katsila, J. Matsoukas, A. Schally, K. Gkountelias, G. Liapakis, C. Tamvakopoulos, **T. Tselios***. Rationally designed cyclic analogues of luteinizing hormone-releasing hormone: enhanced enzymatic stability and biological properties.
Eur. J. Med. Chem., **2012**, 58: 237-247.

45. M.T. Matsoukas, A. Cordomí, S. Ríos, L. Pardo, **T. Tselios***. Ligand binding determinants for angiotensin II type 1 receptor from computer simulations. *J. Chem. Inf. Model.,* **2013**, 53(11): 2874-2883.

46. I. Friligou, F. Rizzolo, F. Nuti, **T. Tselios***, M. Evangelidou, M. Emmanouil, M. Karamita, J. Matsoukas, M. Chelli, P. Rovero, A.M. Papini*. Divergent and convergent synthesis of polymannosylated dibranched antigenic peptide of the immunodominant epitope MBP(83-99). *Bioorg. Med. Chem.,* **2013**, 21(21): 6718-6725.

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