

CURRICULUM VITAE – NIKOS TAPINOS

Correspondence address

Nikos Tapinos MD, PhD
Department of Neurosurgery
The Warren Alpert Medical School
Brown University
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Education

1996 - 2000: Ph.D. Molecular Biology, University of Athens, Greece

Thesis: Mechanisms of epithelial cell destruction and mediators of regeneration in Sjogren's syndrome.

Mentor: Dr. Haralampos M. Moutsopoulos MD, FRCP

1989 - 1996: M.D. Medicine, School of Medicine, University of Athens, Greece

Research/Academic Positions

2016-current: Associate Professor
Director, Molecular Neuroscience & Neuro-Oncology Research
Department of Neurosurgery
The Warren Alpert Medical School
Brown University

2013-2016: Associate Professor
Director of Neurosurgery Research
Head of Molecular Neuroscience & Neuro-Oncology Laboratory
Weis Center for Research
Geisinger Clinic

2011-2013: Assistant Professor
Director of Neurosurgery Research
Head of Molecular Neuroscience Laboratory
Weis Center for Research
Geisinger Clinic

2007-2011: Assistant Professor
Head of Molecular Neuroscience Laboratory
Weis Center for Research
Geisinger Clinic

2005-2007: Research Associate
Laboratory of Bacterial Pathogenesis and Immunology
The Rockefeller University

2001-2005: Postdoctoral Associate
Laboratory of Bacterial Pathogenesis and Immunology
The Rockefeller University

Publications

1. Moreno MM, O'Shea TM, Olaru A, Ness JK, Langer R, **Tapinos N.** Regulation of peripheral myelination through transcriptional buffering of Egr2 by an antisense long noncoding RNA. (**Submitted**)
2. Zepecki JP, Snyder KM, Martinez-Moreno M, Ness JK, Fajardo E, Fiser A, Toms SA, Sarkar A, **Tapinos N.** A locally translated Lck pathway regulates human glioma cell migration, tumor growth and stemness gene expression (**Submitted**)
3. Ness JK, Skiles AA, Yap E-H, Fiser A, **Tapinos N.** Nuc-ErbB3 regulates H3K27me3 levels and HMT activity to establish epigenetic repression during peripheral myelination. **Glia** 2016 Mar 28. doi: 10.1002/glia.22977. [Epub ahead of print]
4. Slotkin JR, Ness JK, Snyder KM, Skiles AA, Woodard EJ, O'Shea T, Layer RT, Aimetti AA, Toms SA, Langer R, **Tapinos N.** Sustained local release of methylprednisolone from a thiol-acrylate poly(ethylene glycol) hydrogel for treating chronic compressive radicular pain. **Spine** (Phila PA 1976). 2015 Nov 30, PMID: 26630427 [Epub ahead of print]
5. Pujato M, Kieken F, Skiles A, **Tapinos N.**, Fiser A. Prediction of DNA binding motifs from three dimensional models of transcription factors; identifying tlx3 regulated genes. **Nucleic Acids Res** 2014, pii: gku1228. [Epub ahead of print]

6. Averick SE, Paredes E, Dey SK, Snyder KM, **Tapinos N**, Matyjaszewski K, Das SR. Autotransfecting short interfering RNA through facile covalent polymer escorts. **J. Am. Chem. Soc** 2013, DOI: 10.1021/ja404520j
7. Ness JK, Snyder KM, **Tapinos N**. Lck tyrosine kinase mediates β 1-integrin signaling to regulate Schwann cell cytoskeletal rearrangements, migration and myelination. **Nat Commun** 2013, 4:1912. Doi:10.1038/ncomms2928
8. Tadepalli A, Sudol I, **Tapinos N**. Combinatorial action of miRNAs regulates transcriptional and post-transcriptional gene silencing following *in vivo* PNS injury. **PLoS One** 2012, 7;(7): e39674
9. Tadepalli A, Ness JM, Aliste CM, Fiser A, **Tapinos N**. A nuclear variant of ErbB3 receptor tyrosine kinase regulates E2f1 distribution and Schwann cell myelination. **J. Neurosci.** 2011 March 30; 31(13): 5106-5119.
 - Selected by Faculty of 1000
10. **Tapinos N**, Ohnishi M, Rambukkana A. ErbB2 receptor tyrosine kinase signaling mediates early demyelination induced by leprosy bacilli. **Nat. Med.** 2006 Aug 4; 12(8): 961-966.
 - Selected by Faculty of 1000
11. Im JS, **Tapinos N**, Chae G, Illarionov PA, Besra GS, DeVries G, Modlin RL, Sieling P, Rambukkana A, Porcelli SA. Expression of CD1d molecules by human Schwann cells and potential interactions with immunoregulatory invariant NK T cells. **J. Immunol.** 2006 Oct 15; 177(8): 5226-5235.
12. **Tapinos N**, Rambukkana A. Insights into regulation of human Schwann cell proliferation by Erk1/2 via a MEK-independent and p56Lck-dependent pathway from leprosy bacilli. **Proc Natl Acad Sci U S A.** 2005 Jun 28;102(26):9188-93.
13. Rambukkana A, Zanazzi G, **Tapinos N**, Salzer JL. Contact-dependent demyelination by *Mycobacterium leprae* in the absence of immune responses. **Science.** 2002 May 3;296(5569):927-31.
 - Selected by Faculty of 1000
14. Triantafilopoulou A, **Tapinos N***, Moutsopoulos HM. Evidence for Coxsackievirus infection in primary Sjogren's syndrome. **Arthritis Rheum.** 2004 Sep;50(9):2897-902. (*: equal contribution)
15. **Tapinos N**, Polihronis M, Thyphronitis G, Moutsopoulos HM. Characterization of the CRISP-3 gene as an early transcribed gene with a putative role in the pathophysiology of Sjogren's syndrome. **Arthritis Rheum.** 2002 Jan;46(1):215-22.

16. **Tapinos N**, Polihronis M, Tzioufas AG, Moutsopoulos HM. Sjogren's syndrome: autoimmune epithelitis. **Adv Exp Med Biol.** 1999;455:127-34.
17. Xanthou G, **Tapinos N**, Polihronis M, Nezis IP, Margaritis LH, Moutsopoulos HM. CD4 cytotoxic and dendritic cells in the immunopathologic lesion of Sjogren's syndrome. **Clin Exp Immunol.** 1999 Oct;118(1):154-63.
18. **Tapinos N**, Polihronis M, Moutsopoulos HM. Lymphoma development in Sjogren's syndrome: novel p53 mutations. **Arthritis Rheum.** 1999 Jul;42(7):1466-72.
19. Polihronis M, **Tapinos N**, Tzioufas AG, Moutsopoulos HM. Sjogren's syndrome: the significance of epithelial cells. In: Shoenfeld Y, eds. *The decade of autoimmunity*. Elsevier Sciences 135-141, 1999.
20. **Tapinos N**, Polihronis M, Tzioufas AG, Skopouli FN. Immunopathology of Sjogren's syndrome (invited review). **Ann Med Interne (Paris).** 1998 Feb;149(1):17-24.
21. Polihronis M, **Tapinos N**, Theocharis SE, Economou A, Kittas C, Moutsopoulos HM. Modes of epithelial cell death and repair in Sjogren's syndrome. **Clin Exp Immunol.** 1998 Dec;114(3):485-90.

Invited Speaker

1. Department of Biochemistry, Albert Einstein College of Medicine, November 2008.
2. Department of Biomedical Engineering, Ohio State University, March 2013.
3. Department of Biological Sciences, Rutgers-The State University of New Jersey, April 2013.
4. American Society of Neurochemistry Conference, Long Beach California, March 2014.
5. Department of Neuroscience, Bucknell University, November 2014.
6. National Neuroscience Institute, Neuro-Oncology Group, Singapore, April 2016.
7. Department of Physiology, National University of Singapore, April 2016
8. Mechanobiology Institute, National University of Singapore, April 2016.
9. Brown University Neurology Grand Rounds, Brown University, March 2017.

Trainees:

Postdoctoral Fellows & Associates:

-Adilakshmi Tadepalli	2007-2010
-Jennifer Ness	2008-2015
-Brian Powers	2014-2015

-Margot Martinez Moreno 2013-current
-Charlotte Guetta 2017-current

Graduate Students:

-John Zepecki 2012-current
-Sarah Fergione 2017-current

Undergraduate Students:

-*Katelyn Fridges*: Summer undergraduate research scholar.
-*Brittany Hacken*: Summer undergraduate research scholar.
-*Emily Arner*: Undergraduate research scholar.
-*Ida Sudol*: Undergraduate research scholar.
-*Eric Balaban*: Undergraduate research scholar.
-*Patrick Erickson*: Undergraduate research scholar.
-*Jeff Bergman*: Neuroscience Major

Member of PhD Advisory Committee:

- Bedia Akosman (Brown University): 2017-current

Professional Memberships

2010-current: Member of the Society for Neuroscience
2013-current: Member of the American Society for Neurochemistry
2017-current: Member of the Society of Neuro-Oncology

Peer reviewer for scientific journals

- *Ad hoc* reviewer: Journal for Neuroscience Research.
Oncogene
PLoS One
J. Neuroscience
FEBS Letters
Neuroscience
Nature Cell Biology

Reviewer for NIH

- 2016-current: Ad hoc reviewer for NIH, CMBG, ZRG1 MDCN-A (02)
- 2014-current: Ad hoc reviewer for NIH study section CMBG, NINDS

Honors

- 2016-current: Elected Affiliate of United Health Council

Committees and Administrative Duties

- Member of the IACUC, Geisinger Clinic, 2015-2016
- Strategic Planning Committee, Weis Center for Research, Geisinger Clinic, 2015

Advisory Boards

- Launchpad Medical LLC.

Patents:

- SYSTEMS AND METHODS FOR ATTRACTING AND TRAPPING CANCER CELLS. International Patent Application: # PCT/US2015/034159.

- TARGETING LCK FOR THE REGULATION OF GLIOMA CELL MIGRATION AND TREATMENT OF GLIOBLASTOMA. Provisional Patent Application 62/248108.

Current Awards

- Funding Source: NIH
Role: co-PI
Direct funds: \$224,987
Term: 6/2017 – 12/2018
Title: “Trans-nasal delivery of chemotherapy to glioblastoma using magnetic nanoparticles and magnetic focusing”

Pending Awards:

Funding Source: Advance Clinical Translational Research Pilot Program – Brown University
Role: PI
Direct funds: &75,000
Term: 6/1/2017 – 5/31/2018
Title: “Development of 3D human brain tissues to determine the origin and cellular interactions of primary glioblastoma”

Past Awards:

- Funding Source: NIH
Grant: R01 NS070975-02

Role: PI

Total funds: \$1,800,000

Term: 01/5/2010 – 04/30/2016

Title: *“Role of an alternatively spliced nuclear variant of ErbB3 in the nervous system”*

- Funding Source: In Vivo Therapeutics

Role: PI

Total funds: \$150,000

Term: 01/01/2012 – 12/31/2012

Title: *“Peripheral nerve injury initiative”*

- Funding Source: PA State CURE Grant

Role: PI

Total funds: \$120,000

Term: 01/01/2013 – 12/31/2014

Title: *“Role of PP2A antisense RNA in human glioblastoma”*

- Funding Source: Geisinger Clinic

Role: co-PI

Total funds: \$98,000

Term: 11/2012 – 10/2014

Title: *“Role of Lck protein tyrosine kinase in human glioblastoma migration”*

- Funding Source: SERAPH Foundation

Role: PI

Total funds: \$150,000

Term: 7/1/2013 – 6/30/2016

- Funding Source: Geisinger Clinic

Role: PI

Total funds: \$100,000

Term: 1/2015 – 12/2017

Title: *“A novel treatment paradigm for human gliomas”*