

Biographical Sketch

ANGELA RUBAN		Assistant Professor	
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE	YEAR (S)	FIELD OF STUDY
Leon and Mathilda Recanati School for Community Health Professions, Faculty of Health Sciences, Ben-Gurion University of the Negev, Israel (<i>Cum laude</i>).	B.A.	1994-1998	Nursing
Department of Clinical Pharmacology, Faculty of Health Sciences, Ben-Gurion University of the Negev, Beer-Sheva, Israel.	M.Sc.	1998-2001	Clinical Pharmacology Neurobiology
Department of Clinical Pharmacology, Faculty of Health Sciences, Ben-Gurion University of the Negev, Beer-Sheva, Israel.	Ph.D.	2001- 2005	Clinical pharmacology: "Psychopharmacology of major depressive disorder"
Department of Neurobiology, Weizmann Institute of Science, Rehovot, Israel.	Postdoctoral Fellow	2005- 2008	Neurobiology: "Blood glutamate scavenging is a novel treatment in the prevention of CNS diseases"

A Position and Honors

1999-2000 **Lecturer**, "Innovations in Pharmacology" Course, Department of Clinical Pharmacology, Ben-Gurion University of the Negev, Beer-Sheva, Israel.

2001-2004 **Registered Nurse**, Ministry of Health, Israel.

2002-2004 **Lecturer**, "Regulation of GPCRs" Course, Department of Clinical Pharmacology, Ben-Gurion University of the Negev, Beer-Sheva, Israel.

2004-2005 **Lecturer**, "Methods for Quantitative Determination of Drugs" Course, Department of Clinical Pharmacology, Ben-Gurion University of the Negev, Beer-Sheva, Israel.

2008-2009 **Designer and Lecturer**, "Clinical Pharmacology" Course, School of Nursing, Barzilai Hospital, Ashkelon, Israel.

2007-2008 **Project Manager**, Braintact Ltd, Israel.

2008-2009 **Chief Science**, Braintact Ltd, Israel.

2009-2012 **Senior Research Fellow**, Department of Neurobiology, Weizmann Institute of Science, Rehovot, Israel.

2013-2015 **Head of Pre-clinical and Clinical Research**, Schwartz-Arad Day-Care Surgical Center, Israel

2014-2015 **Scientific Adviser**, Technology Transfer Units, Weizmann Institute of Science, Israel.

2015–present **Assistant Professor**, Sackler Faculty of Medicine, Tel Aviv University.

Membership in Professional/Scientific Societies

2008-2010 Israel Society for Neuroscience

2004-2010 Society for Neuroscience

2016-2017 American Association of Cancer Research (Active member)

2016-2017 Israel Cancer research Foundation

Patents

Teichberg, Vivian and Ruban-Matuzany, Angela. "Methods of treating cancer of the central nervous system". WO/2009/144699; international patent number PCT/IL2008/000711, 2008.

B. Publications

1. Avissar S, **Matuzany-Ruban A**, Tzukert K and Schreiber G. β -arrestin-1 levels are reduced in leukocytes of patients with depression and elevated by antidepressants in rat brain. *Am J Psychiatry*. 161; 2066-72, 2004.
2. **Matuzany-Ruban A**, Avissar S and Schreiber G. Dynamics of beta-arrestin1 protein and mRNA levels elevation by antidepressant in mononuclear leukocytes of patients with depression. *Affective Dis*. 88; 307-312, 2005.
3. **Matuzany-Ruban A**, Schreiber G, Farkash P and Avissar S: Phosphatidylinositol-3-OH kinase-like protein levels in leukocytes of patients with major depression and in rat cortex: the effect of chronic treatment with antidepressants. *Psychiatry Res*. 141; 287-94, 2006.
4. Zlotnik A, Gurevich B, Cherniavsky E, Tkachov S, **Matuzany-Ruban A**, Leon A., Shapira Y and Teichberg V. The contribution of the blood glutamate scavenging activity of pyruvate to its neuroprotective properties in a rat model of closed head injury. *Neurochem Res*. 33; 1044-50, 2008.
5. Marosi M, Fuzik J, Nagy D, Rákos G, Kis Z, Vécsei L, Toldi J, **Ruban-Matuzany A**, Teichberg VI and Farkas T. Oxaloacetate restores the long-term potentiation impaired in rat hippocampus CA1 region by 2-vessel occlusion. *Eur J Pharmacol*. 604; 51-7, 2009.
6. **Matuzany-Ruban A**, Golan M, Miroshnik N, Schreiber G and Avissar, S. Normalization of GRK2 protein and mRNA measures in patients with depression predict response to antidepressants. *Int J Neuropsychopharmacol*. 29; 83-91, 2009.
7. **Ruban A**, Berkutzki T, Cooper I, Teichberg V and Mohar B. Blood glutamate scavengers prolong the survival of rats and mice with brain-implanted glioma. *Invest New Drugs*. 30; 2226-35, 2012.
8. Pérez-Mato M, Ramos-Cabrera P, Sobrino T, Blanco M, **Ruban, A**, Mirelman D, Menendez P, Castillo J and Campos F. Human recombinant glutamate oxaloacetate transaminase 1 (GOT1) supplemented with oxaloacetate induces a protective effect after cerebral ischemia. *Cell Death Dis*. 9; 5:e992, 2014.
9. **Ruban A** Mohar B, Jona G and Teichberg VI. Blood glutamate scavenging as a novel neuroprotective treatment for paraoxon intoxication. *J Cereb Blood Flow Metab*. 34; 1-7, 2014.
10. Schwartz-Arad D, Ofec R, Eliyahu G and **Ruban A**, Sterer N. Long term follow-up of dental implants placed in autologous onlay bone graft. *Clin Implant Dent Rel Res*. 18; 449-61, 2014.
11. **Ruban A**, Biton I, Markovich A and Mirelman D. MRS of brain metabolite levels demonstrates the ability of scavenging of excess brain glutamate to protect against nerve agent induced seizures. *Int J Mol Sci*. 16; 3226-36, 2015.
12. **Ruban A**, Cohen-Kashi Malina K, Cooper I, Graubardt N, Babakin L, Jona G and Teichberg

V. Combined treatment of an ALS rat model with recombinant GOT1 and Oxaloacetic acid: a novel neuroprotective treatment. *Neurodegen Dis.* 15; 233-42, 2015.

13. Schwartz-Arad D, Ofec R, Eliyahu G, Sterer N and **Ruban A.** Onlay bone graft augmentation for the treatment of maxillary atrophy: implants long-term follow-up (up to 131 months). *J Cosmetic Dentistry* 31; 76-93, 2015.
14. Goldshmit A, Jona G, Schmuklerd E, Solomond S, Pinkas-Kramarskid R and **Ruban A.** Blood Glutamate Scavenger as a novel neuroprotective treatment in spinal cord injury. *J Neurotrauma* Mar 1. doi: 10.1089/neu.2017.5524, 2018.

C. Research Support

Ongoing research support

Cancer League, University of California (UCSF). Werb Z. (PI) 01/03/2016–02/28/2018
The goal of this study is to evaluate the therapeutic efficacy of a novel neuroprotective strategy recently developed and patented by us for purpose of treating brain cancers, to target metastatic triple negative breast cancer (TNBC).
Role: co-PI

Israel Science Foundation (ISF) Ruban A. (PI) 01/10/2016–09/31/2019
Individual Research and New Faculty Equipment Grant
The goal of this study is to evaluate the therapeutic efficacy against brain metastatic melanoma of a novel neuroprotective strategy that was recently developed for decreasing excess brain glutamate in glioblastoma.
Role: PI

Medical Research, Israel Defense Forces (IDF) Ruban A. (PI) 07/01/2017–12/28/2019
The lead hypothesis to be tested is that post-injury CNS glutamate scavenging will inhibit the secondary neuronal cell death, reactive astrogliosis and inflammation in the penumbra area, which will improve neurological and functional recovery of the treated mice.
Role: PI

California Breast Cancer Research Program (CBCRP) Werb Z. (PI) 09/01/2017-03/30/2019
The goal of this study is to evaluate the therapeutic efficacy of a novel neuroprotective strategy recently developed and patented by us for treating brain cancers, to target metastatic triple negative breast cancer (TNBC).
Role: co-PI