

Biographical Sketch

NAME Frenkel, Dan		POSITION TITLE ASSOCIATE PROFESSOR, PhD	
EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE (IF APPLICABLE)	YEAR(S)	FIELD OF STUDY
Technion Institute, Haifa, Israel	B.Sc. (cum laude)	1996	Food Engineering and Biotechnology
Tel Aviv University, Israel	MSc (cum laude)	1997	Biotechnology
Tel Aviv University, Israel	PhD. (with distinction)	2002	Biotechnology
A. PERSONAL STATEMENT			
<p>The research in the laboratory focus on glial-neuronal cell interactions to clarify their role in neurological diseases, both in culture and in animal models of Parkinson's Disease, and Alzheimer'. The laboratory combines approaches such as molecular biology, immunological approaches, histological approach and behavioral approach to shed light on the genes and proteins involved in glial cell function, in particular microglia and astrocyte in neurodegenerative diseases. The laboratory developed novel approaches to isolate adult glia from mice and to investigate their genetic and proteins profile that relate to pathological condition. Research focus on the link between inflammation to neurodegenerative diseases and the laboratory develop and investigate new therapeutic approach to treat AD and has several approved patents.</p>			
B. POSITIONS AND HONORS			
EMPLOYMENT			
1996-2002	Teaching assistant, Biotechnology, Tel Aviv University		
2002-2005	Post- doctorate fellow in Neuroimmunology , Harvard Medical School		
2005-2007	Instructor in Neurology, Harvard Medical School		
2007-2011	Lecturer, Dept. of Neurobiology, Faculty of Life Sciences, Tel Aviv University		
2011- 2016	Senior Lecturer, Dept. of Neurobiology, Faculty of Life Sciences, Tel Aviv University		
2012- 2015	Head of B.Sc. In a Double Major Program in Biology and in Psychology with an emphasis on Neuroscience, Sagol School of Neuroscience, Tel Aviv University		

2016-2017 Visiting Scientist in Medicine Harvard Medical School
2016- Associate Professor, Dept. of Neurobiology, Faculty of Life Sciences, Tel Aviv University

Other Experience and Professional Memberships

2013-2015 Member of the executive committee of the Israel society for Neuroscience
2008-2013 Treasurer of the Israel society for Neuroscience
2008-present Member of the Israel Society of Neuroscience
2007- present Member of the Society of Neuroimmunology
2002- present Member of the Society of Neuroscience

Honors and Service:

Prizes/Fellowships

1998 Dean scholarship for excellence Ph. D. student
2002 The Tel Aviv University, Adams Super Center for Brain Research-awards for
The best Ph.D. thesis of the year in Neuroscience.
2003 Human Frontier Science organization Program (HFSP) Long Term fellow Award
2005 Massachusetts Alzheimer's Disease Research Center (ADRC) Pilot Grant Award
2006 Teva Neuroscience award for Young researchers outstanding
abstract and dedication to the field of immunology. FOCIS
2008 HFSP Career development award for outstanding young scientist
2011 New Research Investigator award grant in Alzheimer's association
2014 Best Mentor in neuroscience- Adam super center for neuroscience, Tel Aviv University
2016 Mary K. Iacocca Visiting Interdisciplinary Faculty Fellowship, Joslin Diabetic center,
Harvard Medical School

Editorial board: World Journal of Methodology, Frontiers in Immunology, Austin Journal of Multiple sclerosis
and Neuroimmunology

C. Selected Peer-reviewed Publications (Selected papers from 72 peer-reviewed publications, 5 granted patents,
h-index 32)

Levy H, Assaf Y, Frenkel D. Characterization of brain lesions in a mouse model of progressive multiple
sclerosis. *Exp Neurol*. 2010;226(1):148–158. doi:10.1016/j.expneurol.2010.08.017

Farfara D., Trudler D., Amzaleg-Segev N., Galron R., Stein R., Frenkel D. Gamma-secretase component
presenilin mediates microglia beta amyloid clearance. *Ann Neurology*, 2011, 69(1):170-80.

Levy-Barazany H, Frenkel D. Expression of scavenger receptor A on antigen presenting cells is important
for CD4+ T-cells proliferation in EAE mouse model. *J Neuroinflammation*. 2012;9:120. 2012 Jun 7.
doi:10.1186/1742-2094-9-120

Lifshitz V., Benromano T., Kfir E., Blumenfeld-Katzir T. , Tempel-Brami C. Assaf Y., Xia W., Wyss-
Coray T., Weiner HL, and Frenkel D.. “Immunotherapy of cereberovascular amloidosis in a transgenic
mouse model” , *Neurobiology of aging*, 2012 33(2):432.e1-432.e13

Frenkel, D., Wilkinson, K., Zhao, L., Hickman, S. E., Means, T. K., Puckett, L., Farfara, D., Kingery, N.
D., Weiner, H. L. & El Khoury, J. (2013). Scara1 deficiency impairs clearance of soluble amyloid-beta by
mononuclear phagocytes and accelerates Alzheimer's-like disease progression. *Nat Commun* 4, 2030.

Segev-Amzaleg N, Trudler D, Frenkel D. Preconditioning to mild oxidative stress mediates astroglial neuroprotection in an IL-10-dependent manner. *Brain Behav Immun.* 2013 30: 176-185

Trudler D, Weinreb O, Mandel SA, Youdim MB, Frenkel D. DJ-1 deficiency triggers microglia sensitivity to dopamine toward a pro-inflammatory phenotype that is attenuated by rasagiline. *J Neurochem.* 2014;129(3):434-47.

Levy Barazany H, Barazany D, Puckett L, Blanga-Kanfi I S, Borenstein-Auerbach N, Yang K, Peron JP, Weiner HL, Frenkel D. Brain MRI of nasal MOG therapeutic effect in relapsing-progressive EAE. *Exp Neurol.* 2014;255:63–70. doi:10.1016/j.expneurol.2014.02.010

Iram T., Byrne MH, Coleman UA, Kingery ND, Ramirez-Ortiz Z, Means TK, Frenkel D, El Khoury J. MEGF10 IS A RECEPTOR FOR C1Q AND MEDIATES CLEARANCE OF APOPTOTIC CELLS BY ASTROCYTES. *Journal of Neuroscience* (2016) 11;36(19):5185-92.

Iram T, Trudler D, Kain D, Kanner S, Galron R, Vassar R, Barzilai A, Blinder P, Fishelson Z, Frenkel D. Astrocytes from old Alzheimer's disease mice are impaired in A β uptake and in neuroprotection. *Neurobiol Dis.* 2016;96:84-94.

Nash Y, Schmukler E, Trudler D, Pinkas-Kramarski R, Frenkel D. DJ-1 deficiency impairs autophagy and reduces alpha-synuclein phagocytosis by microglia. *J Neurochem.* 2017 :143(5):584-594.

Trudler D, Levy-Barazany H, Nash Y, Samuel L, Sharon R, Frenkel D. Alpha synuclein deficiency increases CD4+ T-cells pro-inflammatory profile in a Nurr1-dependent manner. *J Neurochem.* 2020;152(1):61–71. doi:10.1111/jnc.14871.

Lazdon E, Stolero N, Frenkel D. Microglia and Parkinson's disease: footprints to pathology. *J Neural Transm (Vienna).* 2020;127(2):149–158. doi:10.1007/s00702-020-02154-6

