

CURRICULUM VITAE

Post-Doc - Technion Institute of Technology 2016-2020

Biochemistry/Protein Biology

Research Topic: Molecular Dynamics and Experimental Studies on Type II ABC Importers and copper binding proteins

Visiting Senior Scientist - Weizmann Institute of Science 2016 Spring

Immunology

Subject: Intravital two-photon microscopy for visualization of the affinity maturation process in living mice

Post-Doc - Hebrew University of Jerusalem 2013-2015

Molecular Biology

Research topic: Epidemiological study of Rickettsia spp. transmitted by Ixodid ticks in Israel

Diploma - EurNegVec 2014

Geographical Information Systems

Course: Geospatial tools in Vector Research

Doctor of Philosophy (PhD) Computational Biology - Bar Ilan University 2008-2013

Dissertation title: Kinetics of Chronic Human Viruses - Comparative Analysis of Bio-Mathematical Models and their Clinical Implications

Coursework- Weizmann Institute of Science 2008

Computational Biology

Courses: Molecular Biology and Immunology

Master of Science in Medicine (MSc) Medicine(Immunology) – Memorial University of Newfoundland and Labrador 2003-2006

Thesis title: Dynamical Systems Analysis of HIV Immunopathogenesis and the Effects of Antiretroviral Treatment Interruption

Bachelor of Science (BSc) - Memorial University of Newfoundland and Labrador 1992-2002

Applied Mathematics

PUBLICATIONS

J. Rose. 2021. Science, *Public Health Policy and the Law (2021)*. Critical Appraisal of VAERS Pharmacovigilance: Is the U.S. Vaccine Adverse Events Reporting System (VAERS) a Functioning Pharmacovigilance System?

Rose, J. & McCullough P. 2021. A Report on Myocarditis Adverse Events in the U.S. Vaccine Adverse Events Reporting System (VAERS) in Association with COVID-19 Injectable Biological Products. *Current Problems in Cardiology*.

Rose, J. 2021. A report on the US Vaccine Adverse Events Reporting System (VAERS) of the COVID-19 messenger ribonucleic acid (mRNA) biologicals. *Sci Publ Health Pol & Law* 2:59-80.

The Bacillus anthracis virulence-determinant ABC transporter MntBC-A: transport specificity and trans-membrane metal recognition. (Submitted to *PLOS pathogens* for review.) Jessica Rose, Oded Lewinson et al.

Intra-host cytomegalovirus gB genotype dynamics in patients with multiple infections. (Submitted to *PLOS ONE* for review.) Jessica Rose, Deepali Kumar, Anders Asberg, Anders Hartmann, Alan G Jardine, Angelo A Bignamin, Avidan Neumann, Atul Humar, Vincent C Emery.



PUBLICATIONS Cont.

Distinct allosteric networks underlie mechanistic speciation of ABC transporters. (April 21, 2020). Burçin Acar, Jessica Rose, Burcu Aykac Fas, Nir Ben-Tal, Oded Lewinson and Turkan Haliloglu. *Structure*, Volume 28, Issue 6, 651 - 663.e5.

Vitamin B12 import is all about timing. (July 2018). News and view by Lutz Schmitt Nature Chem Biology. 14; 640-641.

Single-molecule probing of the conformational homogeneity of the ABC transporter BtuCD. (July 2018). Min Yang, Nurit Livnat Levanon, Burçin Acar, Burcu Aykac Fas, Gal Masrati, Jessica Rose, Nir Ben-Tal, Turkan Haliloglu, Yongfang Zhao and Oded Lewinson. *Nature Chem Biology*. 14; 715–722.

Novel decay dynamics revealed for virus mediated drug activation in cytomegalovirus infection. (May 2017). Rose J, Emery VC, Kumar D, Asberg A, Hartmann A, Jardine AG, Bignamini AA, Humar A, Neumann AU. *PLoS Pathog*. 2017 May 10;13(5):e1006386.

Genetic characterization of spotted fever group rickettsiae in questing ixodid ticks collected in Israel and environmental risk factors for their infection. (March 2017). Rose J. et al. *Parasitology*. 2017 Jul;144(8):1088-1101.

The highly synergistic, broad spectrum, antibacterial activity of organic acids and transition metals. (March 2017) Zhitnitsky D, Rose J, Lewinson O. *Sci Rep.* 2017 Mar 15;7:44554.

L-glutamine Induces Expression of Listeria monocytogenes Virulence Genes. (Jan 2017) Haber A, Friedman S, Lobel L, Burg-Golani T, Sigal N, Rose J, Livnat-Levanon N, Lewinson O, Herskovits AA. *PLoS Pathog.* 2017 Jan 23;13(1):e1006161.

Human Cytomegalovirus Kinetics Following Institution of Artesunate after Hematopoietic Stem Cell Transplantation. (April 2011). Wolf DG, Shimoni A, Resnick IB, Stamminger T, Neumann AU, Chou S, Efferth T, Caplan O, Rose J, Nagler A, Marschall M. Clinical Virology Unit, Hadassah Hebrew University Medical Center, Jerusalem, Israel. *Antiviral Res.* 2011 Jun; 90(3): 183–186.

Kinetic modeling of Hepatitis B Virus: the relationship between HBeAg and viral kinetics. Jessica Rose. *Mina and Everard Faculty of Life Sciences*, Bar Ilan University, Ramat Gan, Israel - in progress; manuscript to be submitted.

Kinetics of Chronic Human Viruses - Comparative Analysis of Bio-Mathematical Models and their Clinical Implications. (2013). Jessica Rose, Doctoral Thesis, Bar Ilan University, Ramat Gan, Israel.

Dynamical Systems Analysis of HIV Immunopathogenesis and the Effects of Antiretroviral Treatment Interruption. (2006). Jessica Rose, Master's Thesis, Memorial University of Newfoundland, Canada.