July 2017

**Maya Kleiman**

**CURRICULUM VITAE**

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| **Contact Information** |
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| **Education** |
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| 2007-2012 | Ph.D., Department of Chemistry, Faculty of Natural Sciences, Ben-Gurion University of the Negev, Be’er Sheva, Israel. Advisor: The late Prof. Emmanuel Tannenbaum. Area of Research: Mathematical Biology.Thesis title: “The Selective Advantage for Sexual Reproduction”. |
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| 2003-2006 | M.Sc., Faculty of Biology, Technion, Israel Institute of Technology, Haifa, Israel.Advisor: Prof. Michael Glickman.Area of Research: Biochemistry.Thesis title: “Interactions of the COP9 Signalosome with Components of the Ubiquitin System in Yeast”. |
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| 2001-2009 | B.Sc. (Cum Laude), Department of Mathematics, Technion, Israel Institute of Technology, Haifa, Israel. |
| 2000-2003 | B.Sc. (Summa Cum Laude), Faculty of Chemistry, Technion, Israel Institute of Technology, Haifa, Israel. |
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| **Employment** |
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| 2016 - current | Researcher, Department of Vegetables and Field Crops, Institute of Plant Sciences, Agricultural Research Organization, Volcani Center, Rishon Lezion, Israel |
| 2012 - 2016 | Postdoctoral fellow, Department of Chemistry, University of California Irvine, Irvine, CA.Advisor: Prof. Aaron Esser-Khan. |
| 2012 | Research associate Faculty of Medicine, Technion, Israel Institute of Technology, Haifa, Israel.Advisor: Dr. Oded Lewinson |
| **Fellowships and Awards** |
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| 2014-2016 | Israeli Council for Higher Education. Fellowship advancing women in science (20,000$ per year). |
| 2012-2014 | Postdoctoral Excellence Fellowship, jointly funded by Ben-Gurion University of the Negev and University of California Irvine (50,000$ per year). |
| 2012 | Postdoctoral Fellowship, Technion, Israel Institute of Technology (40,000$, declined).  |
| 2010 | Teaching excellence award, Department of Chemistry, Ben-Gurion University of the Negev (1200NIS). |
| 2003-2004 | Excellence scholarship, Graduate School, Technion, Israel Institute of Technology (76,800NIS). |
| 2000-2003 | President’s award for excellence in B.Sc. studies, Technion, Israel Institute of Technology (6000NIS). |
| 2002 | Excellence scholarship, Department of Mathematics, Technion, Israel Institute of Technology (2000NIS). |
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| **Publications** |
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| A. Bhattacharjee, M. Kahn, **M. Kleiman** and A.I. Hochbaum “Effects of Growth Surface Topography on Bacterial Signaling in Coculture Biofilms”, *ACS Appl Mater Interfaces* **2017** 9(**22**), 18531-18539.H. Mohapatra, **M. Kleiman** and A.P. Esser-Kahn “Mechanically Controlled Radical Polymerization Initiated by Ultrasound”, *Nat. Chem*. **2017** 9, 135-139.**M. Kleiman**, K.A. Ryu, and A. P. Esser-Kahn “Determination of Factors Influencing the Wet Etching of Polydimethylsiloxane Using Tetra-*n*-butylammonium Fluoride”, *Macromol Chem Physic* **2016** 217(**2**), 284-291. |
| **M. Kleiman**, K. Brubaker, D. Nguyen and A.P Esser-Kahn “Bio-inspired Structural Morphogenesis Using Microvascular Networks and Reaction-Diffusion”, *Chem. Mater.* **2015** 27(**13**), 4871-4876. |
| **M. Kleiman** and L. Hadany “The Evolution of Obligate Sex in Finite Populations: The Roles of Sexual Selection and Recombination”, *Ecol. Evol.* **2015** 5(**13**), 2572-2583. D. Nguyen, **M. Kleiman**, K. A. Ryu, S. Hiew, K. Brubaker, R. Mughnetsyan, R. Truong, B. Dolan, E. Tackett and A.P. Esser-Kahn “Three-dimensional Conformal Coating Through the Entrapment of Polymer Membrane Precursor”, *ACS Appl Mater Interfaces* **2014** 6(**4**), 2830-5.D. Nguyen, **M. Kleiman**, R. Truong and A.P. Esser-Kahn “Bio-inspired Microvascular Exchangers Employing Circular Packing – Designing Synthetic Rete Mirabile”, *Mater. Horiz*. **2014** 1(**6**), 602-607.Z. Yu, O. Kliefeld, A. Lande-Atir, M. Bsoul, **M.** **Kleiman**, D. Krutauz, A. Book, R.D. Vierstra, K. Hofmann, N. Reis, M.H. Glickman and E. Pick “Dual Function of Rpn5 in Two PCI Complexes, 26S Proteasome and COP9 Signalosome”, *Mol Biol Cell* **2011** 22(**7**), 911-920.**M. Kleiman** and E. Tannenbaum, “Diploidy and the Selective Advantage for Sexual Reproduction in Unicellular Organisms”, *Theory Biosci.* **2009** 128, 249-285. |
| *Submitted manuscripts* |
| K. Brubaker, **M. Kleiman**, D. Nguyen and A. P. Esser-Kahn “Chemical non-equilibrium leads to dynamic structural equilibrium”*.*S. Hiew, Z. Oh, R. Truong, D. Nguyen, **M. Kleiman**, and A.P. Esser-Kahn “A CO2-Binding Small Molecule System Employing Chelate Cooperativity”*.**Manuscripts in preparation* |
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| **Conference Presentations** |
| *Talks*N. Ginzburg and **M. Kleiman**, “Developing a Synthetic Platform to Uncover Ultrastructural Motifs Mediating Plant Root Interaction with Environment”,  *2017 IPG Symposium on Root Biology*, Columbia, MO, USA, **June 7-9, 2017**.**M. Kleiman** K. Brubaker, D. Nguyen and A.P Esser-Kahn, “Microfabrication of Microfluidic Devices Via Reaction-diffusion”,  *249th ACS National Meeting and Exposition*, Denver, CO, USA, **March 22-26, 2015**.**M. Kleiman** and L. Hadany, “Evolution of Obligate Sex in Finite Population: The Roles of Sexual Selection and Recombination”,  *The 13th Symposium in Memory of Merav Ziv – The Ecology of Sex*, Ben Gurion University, Sede Boqer Campus, Midreshet Ben Gurion, Israel, **May 17, 2012**.**M. Kleiman** and E. Tannenbaum, “Diploidy and the Selective Advantage for Sexual Reproduction in Unicellular Organisms”, *The 23rd Annual meeting of The Israel Society for Astrobiology and the Study of the Origin of Life (ILASOL)*, The Weizmann Institute of Science, Rehovot, Israel, **December 13,** **2009**. |
| *Posters***M. Kleiman** Kyle Brubaker, Du Nguyen and Aaron Esser Kahn, “Adaptable Materials”, *Gordon Research Conference of Multifunctional Materials&Structures,* Ventura, CA, USA*,* **January 31-February 5, 2016****M. Kleiman** Kyle Brubaker, Du Nguyen and Aaron Esser Kahn, “Microfabrication of Microfluidic Devices via Reaction-Diffusion”, *ACS fall meeting,* San-Francisco, CA, USA*,* **August 10-14, 2014****M. Kleiman** Kyle Brubaker, Du Nguyen and Aaron Esser Kahn, “Bio-inspired Structural Morphogenesis Using Microvascular Networks and Reaction-Diffusion”, *Gordon Research Conference of Bio-Inspired Materials,* Newry, ME, USA*,* **June 22-27, 2014**.**M. Kleiman** Kyle Brubaker, Du Nguyen and Aaron Esser Kahn, “Microfabrication of Microfluidic Devices via Reaction-Diffusion”, *MRS spring meeting,* San-Francisco, CA, USA*,* **April 21-25, 2014**.**M. Kleiman** and E.Tannenbaum, “Investigating the Advantage for Sexual Reproduction in Uni-cellular Organisms Using Stochastic and Deterministic Population Dynamics”, *Conference on Stochastic Systems Biology,* Monte Verita, Switzerland*,* **July 20-22, 2011**.**M. Kleiman** and E. Tannenbaum, “Diploidy and the Selective Advantage for Sexual Reproduction in Unicellular Organisms”, *Annual conference of the Israel Biophysical Society* The Weizmann Institute of Science, Rehovot, Israel, **October 7,** **2010**.**M. M. Kleiman** and E. Tannenbaum, “Diploidy and the Selective Advantage for Sexual Reproduction in Unicellular Organisms”, *The 3rd Conference of Computational and Mathematical Population Dynamics,*Bordeaux, France, **May 31-June 4,** **2010**.**M. Kleiman** and E. Tannenbaum, “Diploidy and the Selective Advantage for Sexual Reproduction in Unicellular Organisms”, *Annual meeting of the Israel Biophysical Society* Bar-Ilan University, Tel-Aviv, Israel, **October 13,** **2009**.**M. Kleiman** and E. Tannenbaum, “Associative Learning and the Emergence of Polycistronic RNA”, *GRC Theoretical Biology & Biomathematics,*Lucca (Barga), Italy, **June 22-27, 2008**. |
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| **Teaching** |
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| 2007-2012 | Teaching assistant “Physical Chemistry” and “General Chemistry”, Department of Chemistry, Ben-Gurion University of the Negev. |
| 2012 | Teaching assistant “Physical Chemistry”, Department of Chemical Engineering, Shamoon College of Engineering.  |
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| 2007 | Lecturer “Introduction to Infinitesimal Calculus”, Department of Mathematics and Computer Science, The Open University of Israel.  |
| 2003-2005 | Teaching assistant “Biochemistry” and “Genetics”, Faculty of Biology, Technion, Israel Institute of Technology. |
| 2002-2003 | Teaching assistant “Differential and Integral Calculus”, Department of Mathematics, Technion, Israel Institute of Technology. |
| **Professional Service**  |
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| *Ad hoc reviewer* |  |
| Nanoscale |  |
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| *Memberships:*  |  |
| IBS – Israeli Biophysics societyISM– Israel Society for MicroscopyESM– European Society for MicroscopyICS – Israel Chemistry SocietyMRS – Material Research Society ACS – American Chemistry Society |