

# Yael T. Salzman (Aminetzach)

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<b>EDUCATION &amp; HONORS</b>	<p><b><u>STANFORD UNIVERSITY, Stanford, CA</u></b> 2002-06  <b><u>PhD in Biological Sciences</u></b></p> <ul style="list-style-type: none"> <li>▪ Completed coursework in Population Genetics, Molecular Evolution, and Statistics</li> <li>▪ <b>Awarded:</b> <i>Center for Evolutionary Studies (CES) Research Fellowship</i> (2003-4)</li> </ul> <p><b><u>STANFORD UNIVERSITY, Stanford, CA</u></b> 2000-01  <b><u>M.Sc. in Civil and Environmental Engineering</u></b></p> <ul style="list-style-type: none"> <li>▪ Completed coursework in Computer Science, Environmental Engineering, Mathematics and Microbiology</li> <li>▪ <b>Awarded:</b> <i>Department of Civil and Environmental Engineering Fellowship</i> (2000-1)</li> </ul> <p><b><u>THE HEBREW UNIVERSITY OF JERUSALEM, Jerusalem, Israel</u></b> 1994-98  <b><u>B.Sc. in Biology</u></b></p> <ul style="list-style-type: none"> <li>▪ Completed an additional specialization program in Microbiology</li> </ul>
<b>RESEARCH EXPERIENCE</b>	<p><b><u>Harvard University, Dept of OEB, Cambridge, MA</u></b> 2008-Present  <b><u>Post-Doctoral Research</u></b></p> <ul style="list-style-type: none"> <li>□ Studying the population genetics and evolutionary history of a segregation distortion system in mice (the t-haplotype complex)</li> <li>□ In particular, interested in understanding the influences of the distortion haplotype on gene evolution</li> </ul> <p><b><u>HortResearch, Auckland, New Zealand</u></b> 2007-08  <b><u>Post-Doctoral Research</u></b></p> <ul style="list-style-type: none"> <li>▪ Studied the Genetic basis of specific anosmias in humans</li> <li>▪ Determined specific anosmias for various compounds and used SNPs chips in order to correlate each specific anosmia with the corresponding mutation in the olfactory receptor genes.</li> </ul> <p><b><u>STANFORD UNIVERSITY, Stanford, California</u></b> 2001-02  <b><u>Research Assistant, Dept of Biological Sciences, Molecular Evolution Lab</u></b></p> <ul style="list-style-type: none"> <li>▪ Examined the significance of ectopic recombination as a determinant in the strong negative selection that is acting on transposable elements (TEs) in the <i>D. melanogaster</i> genome</li> <li>▪ Determined population frequencies of TEs belonging to several distinct families in the <i>D. melanogaster</i> genome</li> </ul> <p><b><u>STANFORD UNIVERSITY, Stanford, California</u></b> 1999-2001  <b><u>Research Assistant, Dept of Civil and Environmental Engineering, Microbiology Lab</u></b></p> <ul style="list-style-type: none"> <li>▪ Conducted research on the physiology, genetics and genomics of the environmental persistence of <i>Vibrio cholerae</i>, specifically in biofilms</li> <li>▪ Constructed, in collaboration, the <i>Vibrio cholerae</i> full genome microarray chip (synthesis and printing)</li> <li>▪ Assembled a chemostat system for environmentally controlled experiments</li> <li>▪ Designed and conducted genetic studies and experiments that will enable inference of the genes and pathways that are responsible for biofilm formation in the bacteria</li> </ul>
<b>TEACHING EXPERIENCE</b>	<p><b><u>STANFORD UNIVERSITY, Stanford, California</u></b></p> <ul style="list-style-type: none"> <li>▪ <b>Teaching Assistant: Plant Biology, Evolution and Ecology</b> 2006 Lectured during sections, wrote and graded exams, graded homework assignments</li> <li>▪ <b>Teaching Assistant: Fundamentals of Molecular Evolution</b> 2004 Lead discussion sections, wrote and graded exams as well as coursework</li> <li>▪ <b>Teaching Assistant: Genetics, Biochemistry and Molecular biology</b> 2003 Lectured during sections, wrote and graded exams, graded homework assignments</li> </ul>

SELECTED LECTURES	<u>AUCKLAND UNIVERSITY, DEPARTMENT OF BIOLOGICAL SCIENCES</u>	2008
	<ul style="list-style-type: none"> <li>▪ The genetic basis of specific anosmias in humans</li> </ul>	
	<u>HORTRESEARCH, NEW ZEALAND INSTITUTION SEMINAR</u>	2007
	<ul style="list-style-type: none"> <li>▪ Recent Adaptations in <i>D. melanogaster</i></li> </ul>	
	<u>SOCIETY FOR MOLECULAR BIOLOGY AND EVOLUTION CONFERENCE.</u>	
	<ul style="list-style-type: none"> <li>▪ A recently truncated gene (<i>CHKov1</i>) by an insertion of a <i>Doc</i> element in <i>Drosophila</i> appears to have generated a novel protein. (Auckland, New-Zealand)</li> </ul>	2005
	<ul style="list-style-type: none"> <li>▪ A <i>Doc</i> insertion in <i>Drosophila</i> confers resistance to insecticides via gene truncation of a conserved gene. (Pennsylvania, USA)</li> </ul>	2004
	<ul style="list-style-type: none"> <li>▪ In a novel screen for putatively adaptive transposable elements in <i>D. melanogaster</i> one <i>Doc</i> insertion was found that truncates a conserved gene and appears to confer resistance to pesticides. (California, USA)</li> </ul>	2003

## PUBLICATIONS

- **Aminetzach, Y.T.**, M. J., Macpherson, and D.A. Petrov. (2006). Strong selective sweep is associated with parallel evolution in the *Chkov4* gene in *D. simulans*. (in preparation).
- **Aminetzach, Y.T.**, M. J., Macpherson, and D.A. Petrov. (2006). Peculiar parallel evolution in *D. melanogaster* between two close paralogs (*Chkov1* and *Chkov4*) belonging to the *Chkov* family. (in preparation).
- **Aminetzach, Y.T.**, M. J., and D.A. Petrov. (2006). Timing the spread of an adaptive insertion: *Doc1420*, an insertion in the drosophila genome that confers resistance to OPs have spread prior to the introduction of these insecticides to the environment. (in preparation-presubmission).
- **Aminetzach, Y.T.**, M. J., Macpherson, and D.A. Petrov. (2005). Pesticide resistance via transposition-mediated adaptive gene truncation in *Drosophila*. *Science*, **309**, 764-767.
- Petrov, D.A, **Aminetzach, Y.T.**, Davis, J.C., Bensasson, D., & Hirsh, A.E. (2003). Size matters: non-LTR retrotransposable elements and ectopic recombination in *Drosophila*. *Mol. Biol. Evol.* **20**, 880-892.

## REFERENCES

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