

Sarit Avrani
Curriculum Vitae

Personal information

Date of birth: 17.06.75
Phone number: 052-6982201
E-mail address: sarit.avrani@gmail.com
I.D.: 032094658

Academic education and professional experience

- 2012-2013 Post-doctoral scholar, The Technion. Research subject: Evolution of *Prochlorococcus* strains resistant to phage. Advisor: Prof. Debbie Lindell.
- 2007-2012 Ph.D in Biology, The Technion. Thesis title: Resistance of marine cyanobacteria to cyanophage infection: An experimental evolution approach. Advisor: Prof. Debbie Lindell.
- 2004-2007 M.Sc. in Biology at the Department of Evolutionary & Environmental Biology, the University of Haifa. Thesis title: Genetic diversity in *Pistacia atlantica* and in the gall-forming aphid *Slavum wertheimae* across an ecogeographical gradient in Israel. Advisors: Prof. Moshe Inbar and Dr. Rachel Ben-Shlomo. Graduated *cum laude*.
- 1999-2002 B.A. in biology at the Faculty of Biology, Technion. Graduated *cum laude*. Research project in the field of yeast genetics. Advisor: Prof. Yona Kassir.

Teaching Experience

- 2008-2011 Teaching assistant, Genetics lab, Department of Biology, Technion.
- 2007 Teaching assistant, Biochemistry lab, Department of Biology, Technion.
- 2006 Teaching assistant, Genetics course and lab, University of Haifa at Oranim.

Academic distinctions, awards, scholarships

- Paper of the year prize, Faculty of Biology, Technion, 2011
- Prize for excellence in teaching, Technion, twice, 2009 and 2011
- The Katzir-Katchalsky Student Travel Fellowship, 2011
- Paper of the month prize, Faculty of Biology, Technion, July 2011
- 2nd prize for best poster, Biology Faculty Day, Haifa, Israel, 2010
- 4th prize for best poster, Darwin Symposium, Haifa, Israel, 2009
- Salim and Rachel Banin scholarship (The Jewish Agency), 2006
- The Wolf Foundation prize for M.Sc. students, 2006
- Prize for excellence, Dept. of Evolutionary and Environmental Biology, Haifa Univ., 2006
- Excellence Awards from the President of the Technion, twice, 1999 and 2000
- Dean's list of honors for scholarship achievements, Technion, twice, 2000 and 2001

Community Service

- 2009 Researchers Night at Madatek, discussion with the public and poster presentation on evolution related principles in my research.
- 2009-2013 Volunteering at "Latet" organization.
- 1993-1994 Voluntary year of service at the boarding school AHAVA for children at risk.

Membership in Professional Societies

- 2011 The Israel Society of Ecology and Environmental Sciences
- 2010,2012 International Society for Microbial Ecology
- 2010,2012-2013 Israel Society of Microbiology
- 2008-2009 The American Society for Microbiology

Published papers

1. **Avrani S.**, O. Wurtzel, I. Sharon, R. Sorek, and D. Lindell. 2011. Genomic island variability facilitates *Prochlorococcus*-virus coexistence. ***Nature*** 474: 604-608.
This paper was highlighted in News and Views of this issue: Partensky F. & L. Garczarek. 2011. Arms race in a drop of sea water. *Nature* 474: 582-583.
2. **Avrani S.**, R. Ben-Shlomo and M. Inbar. 2012. Cryptic speciation along the fragmented Irano-Turanian distribution zone: Phylogeography of *Pistacia atlantica* and its galling aphids. ***Tree Genetics & Genomes*** 8(4): 811-820.
3. **Avrani* S.**, D.A. Schwartz*, and D. Lindell. 2012. Virus-host swinging party in the oceans: Incorporating biological complexity into paradigms of antagonistic coexistence. ***Mobile Genetic Elements*** 2(2): 88-95. *equal contribution.
4. Dekel-Bird N.P., **S. Avrani**, G. Sabehi, I. Pekarsky, M.F. Marston, S. Kirzner, and D. Lindell. 2013. Diversity and evolutionary relationships of T7-like podoviruses infecting marine cyanobacteria. ***Environmental Microbiology*** 15(5): 1476-1491.

Papers in preparation

1. **Avrani S.** and D. Lindell. *Prochlorococcus* strains resistant to phage continue evolving toward an improved growth rate and reduced resistance range. Under review in PNAS.

Conference Presentations

A. Lectures

1. Agricultural Research Organization, Volcani Center, Beit Dagan, Israel, 2013. "*Going a few phenotypic steps backwards by taking a few genotypic steps forward: Continuous evolution of Prochlorococcus strains resistant to phage*". **Invited.**
2. Israel Society of Microbiology, Ramat-Gan, Israel, 2013. "*Going a few phenotypic steps backwards by taking a few genotypic steps forward: Continuous evolution of Prochlorococcus strains resistant to phage*". **Invited.**
3. Israel Society of Microbiology, Ramat-Gan, Israel, 2012. "*Genomic island variability facilitates Prochlorococcus-virus coexistence*".

A. Lectures - continued

4. Jacobs Showcase Lecture Series: "Plenty New under the Sun", Haifa, Israel, 2012. *"Sleeping with the enemy - how long-term coexistence is possible between photosynthetic bacteria and the viruses that infect them?"*.
5. Evergreen International Phage Biology Meeting, Olympia, USA, 2011. *"Genomic island variability facilitates Prochlorococcus-virus coexistence"*.
6. Scripps Institution of Oceanography, Marine Biology Research Division, Departmental seminar series, San Diego, USA, 2011. *"Genomic island variability facilitates Prochlorococcus-virus coexistence"*.
7. First Host-Pathogen Forum Meeting, Tel-Aviv University, 2009. *"Mutations in a Cluster of Genes of Unknown Function in a Marine Cyanobacterium Confer Resistance to Cyanophages"*.
8. The 25th annual meeting of the Entomological Soc. of Israel, 2006. *"Genetic diversity in the galling aphid *Slavum wertheimae* along a geo-climatic gradient in Israel: Speciation in fragmented populations?"*.
9. The 43rd meeting of the Zoological Soc. of Israel, 2006. *"Irano-Turanian fragmentation in Israel: Implications on the genetic structure of *Pistacia atlantica* and a gall aphid"*.

B. Posters

1. ISM Fall Workshop, Ein-Gedi, Israel, 2012. *"Prochlorococcus strains resistant to phage continue evolving toward an improved growth rate and reduced resistance range"*, S. Avrani, D.A. Schwartz, and D. Lindell.
2. International Society for Microbial Ecology, Copenhagen, Denmark, 2012. *"Prochlorococcus strains resistant to phage continue evolving toward an improved growth rate and reduced resistance range"*, S. Avrani, D.A. Schwartz, and D. Lindell.
3. Viruses of Microbes Conference, Brussels, Belgium, 2012. *"Prochlorococcus strains resistant to phage continue evolving toward an improved growth rate and reduced resistance range"*, S. Avrani, D.A. Schwartz, and D. Lindell.
4. Aquatic Virus Workshop, Texel, the Netherlands, 2011. *"Genomic island variability facilitates Prochlorococcus-virus coexistence"*, S. Avrani, O. Wurtzel, D.A. Schwartz, I. Sharon, R. Sorek, and D. Lindell.
5. International Society for Microbial Ecology, Seattle, USA, 2010. *"Mutations in Hypervariable Genomic Regions in Marine Cyanobacteria Confer Resistance to Cyanophages"*. S. Avrani, O. Wurtzel, R. Sorek, and D. Lindell.
6. Biology Faculty Day, Haifa, Israel, 2010. *"Mutations in Hypervariable Genomic Regions in Marine Cyanobacteria Confer Resistance to Cyanophages"*. S. Avrani, O. Wurtzel, R. Sorek, and D. Lindell. **Won 2nd prize.**
7. French-Israel Minisymposium IOLR, Haifa, Israel, 2010. *"Mutations in a Cluster of Genes of Unknown Function in a Marine Cyanobacterium Confer Resistance to Cyanophages"*. S. Avrani, O. Wurtzel, R. Sorek, and D. Lindell.
8. Israel Society of Microbiology, Ramat-Gan, Israel, 2010. *"Mutations in a Cluster of Genes of Unknown Function in a Marine Cyanobacterium Confer Resistance to Cyanophages"*. S. Avrani, O. Wurtzel, R. Sorek, and D. Lindell.

B. Posters - continued

9. Darwin Symposium, Haifa, Israel, 2009. "*Mutations in a Cluster of Genes of Unknown Function in a Marine Cyanobacterium Confer Resistance to Cyanophages*". S. Avrani, O. Wurtzel, R. Sorek, and D. Lindell. **Won 4th prize.**
10. IUI 40th anniversary conf., Eilat, 2009, "*Mutations in a Cluster of Genes of Unknown Function in a Marine Cyanobacterium Confer Resistance to Cyanophages*", S. Avrani, O. Wurtzel, R. Sorek, and D. Lindell.
11. Gordon Research Conf. on Evolutionary and Ecological Functional Genomics, Salve Regina University, Newport, USA, 2007. "*Speciation along the fragmented Irano-Turanian distribution zone: Phylogeography of a gall aphid and its host plant*", S. Avrani, M. Inbar and R. Ben-Shlomo.
12. The 13th Symposium on Insect-Plant Relationships, Uppsala, Sweden, 2007. "*Phylogeography of a gall forming aphid and its host plant: Speciation along the fragmented Irano-Turanian distribution zone*", S. Avrani, R. Ben-Shlomo and M. Inbar.