

### Personal information:

Family name, First name: Vardi, Assaf; Date of birth: 11 July 1970; Nationality: Israeli

Unique identifier: <https://orcid.org/0000-0002-7079-0234>

URL for web site: <http://www.weizmann.ac.il/plants/vardi/home>

### Education

- 2006-2009 Postdoctoral Fellow, Rutgers University, Institute of Marine and Coastal Sciences, NJ, USA.
- 2004-2006 Marie Curie Postdoctoral Fellow, *Ecole Normale Supérieure*, Ecology and Evolutionary Biology Section, Institut de Biologie, Paris, France.
- 1997-2004 Direct Ph.D. track, Department of Plant & Environmental Sciences, The Hebrew University of Jerusalem, Israel.
- 1993-1996 B.Sc. in Biology, Hebrew University of Jerusalem, Israel, *Magna Cum Laude*

### Professional positions

- 2021-present Full Professor, The Department of Plant and Environmental Sciences, Weizmann Institute of Science, Rehovot, Israel.
- 2016-2021 Associate Professor, The Department of Plant and Environmental Sciences, Weizmann Institute of Science, Rehovot, Israel.
- 2010-2016 Assistant Professor, The Department of Plant and Environmental Sciences, Weizmann Institute of Science, Rehovot, Israel.
- 2010-2013 Adjunct Scientist at the Marine Chemistry & Geochemistry Department, Woods Hole Oceanographic Institution, USA.

### Competitive grants

- Vardi, A. "Tripartite interactions between an algal host, its virus and associated microbiome generates a unique metabolic footprint in the ocean". **Minerva Stiftung - Research Grants**. 2022-2025.
- Vardi, A. "The impact of the viral shunt and its metabolic landscape on bacterial lifestyles and the flow of carbon during algal blooms". **European Research Council (ERC Advanced)**. 2022-2027.
- Vardi, A., Gwenaél, P. "Unravelling the unknown mechanisms of resistance to viral infection in marine algae". **Weizmann - CNRS Collaboration Program**. 2022-2025.
- Vardi, A. "Untangling the infection outcome of host-virus dynamics in algal blooms in the ocean". **The Simons Foundation**. 2020-2024.
- Vardi, A., Schatz, D. Tracking individuality in cell fate decisions in marine diatoms provides novel insights into the acclimation strategies to environmental stress conditions **Israel Science Foundation (ISF)**. 2020-2024.
- Vardi, A. "Host-virus chemical arms race during algal blooms in the ocean at a single cell resolution". **European Research Council (ERC CoG)**. 2016-2021.
- Vardi, A., Levy, A., "Development of genetic manipulation tools for *Emiliania huxleyi* and establishing it as a model system for marine microeukaryotes". **Gordon and Betty Moore Foundation GBMF-MMI**. 2015-2016.
- Vardi, A., "The ecological relevance of redox signaling in regulating cell fate and population dynamics of marine diatoms. **Israel Science Foundation (ISF)**. 2015-2020.
- Vardi, A. "Algal Bloom Dynamics: From Cellular Mechanisms to Trophic Level Interactions". **European Research Council (ERC StG)**. 2011-2016.

- Stocker, R. Seymour, J., Vardi, A., “A Microfabricated Coral to Unravel the Microbial Ecology of Coral Disease”. **Young Investigator Grant Human Frontiers (HFSP)**. 2011-2014.
- Vardi A. “The Role of Cell Signaling and Infochemicals in Marine Algal-Virus Interactions”. **Marie Curie, European Commission**. 2010-2014.
- Vardi A. “Cell Signaling and Life-Cycle Strategies in Marine Algal-Virus Interactions”. **Israel Science Foundation**. 2010-2013.

### **Fellowships and awards**

- 2015 Weizmann Institute Scientific Council Prize for Excellency.
- 2010 The Legacy Heritage Science fund, Brain Drain program, ISF
- 2004 Marie Curie Postdoctoral Fellow, Ecole Normale Superieure, Paris, France.
- 2005 FEBS -Youth Travel Grant, Plymouth, UK.
- 2002 Short term Fellowship, European Molecular Biology Organization (EMBO).
- 2002 The Rector Fellowship for outstanding Ph.D. Students, Hebrew University of Jerusalem.
- 1998, 2000 Rieger Foundation award for excellence in Ecology.

### **Supervision of graduate students and postdoctoral fellows**

- 2010-2021 16 Postdocs, 9 Ph.D. and 14 Master Students.

### **Teaching activities**

- 2019-Present: Distinguished Lecturer in the International Max Planck Research School for Marine Microbiology (MarMic).
- 2019: Lecturer, “Molecular principles of microbial symbiosis and pathogenicity”, Weizmann Institute of Science.
- 2011-Present: Lecturer, “Marine venoms and chemical defense systems”, The Interuniversity Institute of Marine Sciences, Eilat.
- 2019: Lecturer, “Marine Microbiology course”, The Interuniversity Institute of Marine Sciences, Eilat.
- 2015: Lecturer, “Marine photosynthesis course”, The Interuniversity Institute of Marine Sciences, Eilat.
- 2014: Lecturer, “Marine Biology course”, Tel Aviv University.
- 2014: Lecturer, “Chemical Ecology of Marine Microbes”, Stazione Zoologica, Naples, Italy.
- 2010: Lecturer, “Photosynthesis in a changing world”, Feinberg graduate school, Weizmann Institute of Science.
- 1997-2003: Teaching assistant, “Microbial Ecology” course, The Hebrew University of Jerusalem.
- 1998: Teaching assistant, “Biology of Algae” course, the Interuniversity Institute, Eilat.

### **Organization of scientific meetings**

- 2021 Conference organizer “Marine microbial chemical communication: the hidden language of interactions at sea”. A webinar series, <http://www.weizmann.ac.il/conferences/webinarM2C2/>
- 2021 Member of the scientific advisory committee, The Federation of all the Israel Societies for Experimental Biology (ILANIT) conference, Eilat, Israel.
- 2019 International workshop organizer, “The anatomy of a bloom- a mesocosm workshop”.

- 2017 Conference organizer, “Message in a bottle- Chemical Communication at Sea” at The Interuniversity Institute for Marine Sciences (IUI), Eilat, Israel.
- 2016 Session Chair, “Microbial Ecology”, Israeli Society for Microbiology (ISM) Annual Meeting, Bar Ilan University, Israel.
- 2015 Conference organizer, “The molecular life of diatoms”, Seattle, USA.
- 2015 Session Chair, “Infochemical controls on biogeochemical processes in aquatic and marine ecosystems”, ASLO Aquatic science meeting, Granda, Spain.
- 2014 Session Chair, Marine Microbes Gordon Conference “Small Microbes, Big Data” Bentley University, MA, USA.
- 2014 Session Chair, “Ecology and marine life”, The Federation of all the Israel Societies for Experimental Biology (ILANIT) conference, Eilat, Israel.
- 2014 Organizer, “Microbes: Ecology and Interaction with their host”, International Honor lecture series, the Weizmann Institute of science, Israel.
- 2013 Session Chair, The 29<sup>th</sup> Annual Meeting of the ISOFRR-The Israel Society for Oxygen and Free Radical Research, Migal, Galilee Research Institute, Israel.
- 2013 Workshop organizer, "When genetics meets oceanography", Banyuls sur Mer, France.
- 2013 Session Chair, “Microbial Ecology”, Israeli Society for Microbiology (ISM) annual meeting, Bar Ilan University, Israel.
- 2012 Organizer and Session Chair, The 28<sup>th</sup> annual meeting of the ISOFRR-The Israel Society for Oxygen and Free Radical Research, Weizmann Institute of Science, Israel.

### **Reviewing activities**

- 2012-Present Editorial Board, Frontiers in Aquatic Sciences.
- 2010-Present Editorial Board, Perspectives in Phycology.
- 2014-Present Editorial Board, Microbial Cell.
- 2014-Present Review panel member and Chair, Israel Science Foundation (ISF).
- 2009–Present Reviewer for the Scientific journals: Science, Science Advances, Nature Communications, Nature Microbiology, Nature Reviews in Microbiology, PNAS, PLoS Genetics, ISME J., Journal of Phycology, Environmental Microbiology, New Phytologists, Frontiers in Microbiology.
- 2009-Present Scientific evaluation of Israeli and international Grant applications (ISF, NSF, BSF, GIF, FWO, NSER, ANR, Royal Society).

### **Institutional responsibilities**

- 2020-2022 Member of the Board of Directors, The Interuniversity Institute for Marine Sciences, Eilat.
- 2020-Present Member of the service and administration committee, WIS.
- 2017-Present Member of the Life Sciences Faculties tenure track appointments committee, WIS.
- 2017-2019 Board member, The Israeli association for aquatic sciences.
- 2014-2015 Board member, The Israel Society for Oxygen and Free Radical Research.
- 2013-2015 Member of the users committee, the proteomics unit of the INCPM, WIS.
- 2010-Present M.Sc. and Ph.D. applicant’s admission committees, WIS.
- 2010-Present Ph.D. advisory board (>30 graduate students), WIS.

### **Major contributions to the early careers of excellent researchers**

To date, I have mentored 16 postdoctoral fellows, 9 Ph.D. and 14 MSc students.

**Nine former postdoc fellows from my group have established their own independent labs as excellent researchers that reached prominent positions.**

- Dr. Carmit Ziv, Principal Investigator at The Volcani Center, ARO, Israel.
- Dr. Sergey Malitsky, Head of the metabolic profiling unit at the Life Sciences Core Facilities, WIS.
- Dr. Orr Shapiro, Principal Investigator at The Volcani Center, ARO, Israel.
- Dr. Miguel Frada, Principal Investigator at The Hebrew University of Jerusalem, Israel.
- Dr. Shilo Rosenwasser, Principal Investigator at the Hebrew University of Jerusalem, Israel.
- Dr. Oren Tzfadia, Principal Investigator at Institute of Tropical Medicine, Antwerp (ITM), Belgium.
- Dr. Chuan Ku, Principal Investigator at the Academia Sinica, Taiwan.
- Dr. Naama Lang-Yona, Principal Investigator at the Technion - Israel Institute of Technology, Israel.
- Dr. Flora Vincent, Principal Investigator in EMBL Heidelberg, starting in Sept. 2022

**Patents:** Three international patent applications (2011, 2014, 2020).