Omer Nadel

Contact

305-330-8050
+972-54-5445197

omernadel@gmail.com

Miami, Florida, USA

Languages

Hebrew - Proficient (C2)

English - Proficient (C2)

Spanish - Advanced (C1)

Skills

Molecular biology: DNA and RNA extraction, purification and cloning

Genetic engineering: bacteria and bacteriophages gene editing

Biophysics: light spectrometry

Data analysis: functional metagenomics and phylogenetics

Proteomics: protein extraction, sample preparation, and mass spectrometry analysis

Biochemistry: pigment extraction, purification, and analysis

Culturing: cyanobacteria culture maintenance, cyanophage infection experiments

Education

• Postdoc research fellowship: Viral ecology at the University of Miami in Antoni Luque's lab and at the San Diego State University in the Forest Rohwer's lab

• Ph.D.: Marine microbiology under the supervision of Prof. Oded Béjà

Technion - Institute of Technology, Israel, 2019 - 2024

Teaching Assistant in Zoology laboratories, Technion - Institute of Technology, Israel, 2020 – 2023

• M.Sc.: Marine microbiology under the supervision of Prof. Oded Béjà

Technion - Institute of Technology, Israel, 2016 - 2018

• B.Sc.: Biology and medical science. Haifa University, Israel, 2012 – 2015

Experience

Specialized research assistant in cyanobacteria cultivation in Shany Barath lab, Faculty of Architecture and city planning, Technion - Institute of Technology, Israel, 2023

Teaching Assistant in Zoology laboratories, Technion - Institute of Technology, Israel, 2020 – 2023

Grants and awards

The Faculty of Biology Interlaboratory-Collaboration Award, Technion, 2022

Traveling grant for presenting and participating ProSynFest2020, 2022

Published articles

O. Nadel, A. Rozenberg, J. Flores-Uribe, S. Larom, R. Schwarz, O. Béjà. An uncultured marine cyanophage encodes an active phycobilisome proteolysis adaptor protein NblA. Environmental Microbiology Reports, 2019

Articles under preparation

• O. Nadel, R. Hanna, A. Rozenberg, D. Shitrit, R. Tahan, I. Pakarsky, O. Kleifeld, D. Lindell, O. Béjà.
Oceanic photosynthesis is directly affected by viral NblA mediated degradation of cyanobacterial phycobilisomes.

• O. Nadel, R. Hanna, M. Suissa-Szlejf, A. Rozenberg, N. Adir, O. Béjà, O. Kleifeld.
An abundant uncultured marine cyanophage family encodes two distinct NblA proteins with differential activities toward different cyanobacterial phycobiliprotein subunits.

• O. Nadel, A. Rozenberg, L. Saied, J. P. Solanki, O. Béjà, N. F. Dinkel, G. Schuster, N. Adir, O. Kleifeld.
Multiplicity of marine cyanobacteria NblA proteins involved in chromatic acclimation in addition to nutrient stress.

Conference presentations

Department of Biology Seminar, University of Miami, Florida, USA, 2024

SAME17, Tartu, Estonia, 2023

AVW11, Quebec City, Canada, 2023

Faculty of Biology Retreat, Technion - Israel Institute of Technology, Haifa, Israel, 2023

The 10th ILANIT/FISEB Conference, Eilat, Israel, 2023

ISM, Ben Gurion University of the Negev, Beersheba, Israel, 2022

Faculty of Biology Retreat, Technion - Israel Institute of Technology, Haifa, Israel, 2022

ProSynFest2020, Cordoba, Spain, 2022

Faculty of Biology Retreat, Technion - Israel Institute of Technology, Haifa, Israel, 2021

The 2th MicroEco Symposium for Young Researchers, Weizmann Institute, Israel, 2021

Ministry of Agriculture and Rural Development, Volcani Center, Israel, 2019

ISME, Leipzig, Germany, 2018

Faculty of Biology Retreat, Technion - Israel Institute of Technology, Haifa, Israel, 2018