

Barak Dror – Curriculum Vitae

Personal Information

Birth Date: August 4, 1989

Address: Emek Hachola 88/7, Modiin

Country of Birth: Israel

Phone Number: 0548-326163

Family Status: Married

E-mail: barakdror@outlook.com

National ID. Number: 201554755

Reserve Service: Active (Captain)

Education

2017-2021 The Hebrew University of Jerusalem, Israel.

Joint track- PhD in Biotechnology and MBA.

Supervisors: Dr. Eddie Cytryn (ARO) and Prof. Eduard Jerkewitz (HUJI).

Thesis title: Elucidating the temporal dynamics and potential function of NRPS/PKS genes in the rhizosphere.

2015-2017 The Hebrew University of Jerusalem, Israel.

Agro-ecology and Plant Health, M.Sc, *Magna cum laude*.

Supervisors: Dr. Dani Eshel and Prof. Shlomo Sela, ARO, Israel.

Thesis title: Involvement of dextran synthesis in the pathogenicity of *Leuconostoc mesenteroides*.

2012-2015 Tel-Aviv University, Israel.

Biology- Ecology and Evolution, B.Sc.

Research Project: Fitness effects of environmental and genomic factors in *Brachypodium distachyon* (under the supervision of Dr. Yuval Sapir, TAU).

Publications (partial)

Dror B. et al. (2018) High levels of CO₂ induce the pathogenicity of lactic acid bacteria by up-regulating dextran-synthesis genes. Applied and Environmental Microbiology (DOI: <https://doi.org/10.1128/AEM.00473-18>).

Lampert, Y., **Dror, B.**, Sela, N., Teper-Bamnolker, P., Daus, A., Sela, S., & Eshel, D. (2017). Emergence of *Leuconostoc mesenteroides* as a causative agent of oozing in carrots stored under non-ventilated conditions. Microbial biotechnology, 10(6), 1677-1689.

Scholarships and Awards (Partial)

- 2019 Winner, Greenstein Scholarship for Excellent PhD Student.
- 2018 Winner, 'Rieger' Fellowship for Excellence.
- 2017 Winner, Israel Vegetable Growers Association scholarship for excellence.
- 2017 Winner, 'Nathen Jaffe' scholarship for Excellence.
- 2017 Winner, 'Lily Teper' scholarship for Excellence.
- 2017 Winner, 'Danziger' scholarship for Excellence.

Main Professional Experience

2018 Data Science Summer Intern, [Indigo Agriculture Inc.](#) (Boston, MA).

During a 3-months summer internship, I applied bioinformatics and statistical tools on bacterial genomic data to reveal and assess primary and secondary metabolism pathways. I was involved in building platforms for evaluating in-house genomic pipelines for research and development and for patentability of bacterial strains.

2017-Present Founder and Manager, [FaculTech](#) Entrepreneurship Center, Faculty of Agriculture, Food and Environment, Hebrew U.

I initiated and co-founded FaculTech, aimed at fostering innovation and entrepreneurship skills among undergraduate and graduate students, specifically in the domains of Agritech and Foodtech. I manage the center in terms of creating professional and scientific networking with the surrounding Israeli ecosystem and abroad and building the annual program.

Professional Skills

- Molecular biology- Nucleic acid extraction methods, PCR/qPCR.
- Bioinformatics- -DNA and RNA analysis- from QC to annotation and analysis (amplicon-sequencing, shotgun metagenome, meta-transcriptome).
- Microbiology- culturing and isolation techniques, biological control assays.
- R and Python programming and statistical analysis (data cleaning and organizing, microbial ecology statistics, ML methods).