



The ARO Innovative Research Forum presents:

Novel approaches for microbial-based biocontrol in agriculture: towards sustainable global pathogen and pest control solutions

November 27-28th, Cohen Auditorium, Volcani Center, Agricultural Research Organization (ARO)

Day I - November 27th

Greetings (9:00-9:30)

8:30-9:00 **Registration and coffee**

9:00-9:15 Eli Feinerman (Director of ARO) Greetings

9:15-9:30 Avi Pearl (Chief Scientist, Ministry of Agriculture and Rural Development) "Ag Research in Israel"

Session 1 - Development, formulation, production and application of biological agents

(chairperson: Sigal Braun)

9:30-10:30 Anant Patel (Bielefeld University, Germany) "Novel approaches for formulation of microbial-based biocontrol agents"

10:30-10:50 Amir Bercovitz (Evogene Ltd.) "Commercial upscaling of a biopesticide formulation: Requirements and some lessons learned"

10:50-11:10 **Coffee Break**

11:10-11:30 David Ezra (ARO) "Synthetic volatile mixture, from a fungal origin, controls soil pathogens both in *vitro* and in soil"

11:30-11:50 Samir Droby (Institute of Postharvest and Food Sciences, ARO) "Developing biological control products to control postharvest disease"

11:50-12:10 Avraham Gamliel (ARO) "Field application of biocontrol agents"

12:10-12:30 Dana Ment (ARO) "Application of biocontrol agents: progress, problems and potential (Young scientist point of view)"

12:30-13:30 **Lunch**

Session 2 - Route to market: IP, regulation and market opportunities for microbial-based products

(Session chairperson: Guy Cooper)

- 13:30-13:45 Michal Levy (Ministry of Agriculture) "New funding initiatives for applicative-oriented research"
- 13:45-14:00 Eyal Cohen (Copia Agro & Food) "Bridging the gap between industry and academia".
- 14:00-14:15 Dubi Raz (Netafim) "**TBA**"
- 14:15-14:30 Shimon Steinberg and Gal Yaacobi (Bio Bee) "Lessons learned from introducing entomopathogenic bioagents into the market"
- 14:30-14:45 Sami Shabtai (Adama) "Open innovation: critical aspects"
- 14:45-15:00 Eddie Kaufman (ICL), "ICL innovation - model and needs"
- 15:00-15:30 **Coffee Break**
- 15:30-15:45 Nitza Kardish (Trendline) "Experience from an Ag-Tech incubator"
- 15:45-16:00 Ahmed Taya (Stockton) "Regulatory aspects of microbial plant protection products"
- 16:00-16:15 Abed Gera (Director of Plant Protection and Inspection Services) "Principles for a better regulatory system for pesticides and bio-pesticides".
- 16:15-17:00 **ROUNDTABLE DISCUSSION: Product optimization and go to market strategy** (Mediator- *Guy Cooper*): Panel: Jack Weichselbaum (Kibbutz incubator), Gal Yarden (Monsanto), Dan Jacques (Indigo Ag).

Day II - November 28th

8:30-9:00 Registration and coffee

Session 3 - Novel technologies in biocontrol: Genomics, metagenomics, metabolomics and bioinformatics

(Session chairperson: Einat Zchori Fein)

- 9:00 -10:00 Joyce Loper (Oregon State University, USA) "Applying genomic and molecular methodologies to enhance understanding and efficacy of biocontrol agents"
- 10:00-10:30 Dror Minz (ARO) "The MICROBE initiative"
- 10:30-11:00 **Coffee Break**
- 11:00-11:30 Asaph Aharoni (Weizmann Institute of Science) "Live imaging of root–bacteria interactions and metabolomics in a microfluidics setup"
- 11:30-12:00 Nadav Kashtan (Hebrew University) "Combining genomics, microscopy and modeling toward systems understanding of biocontrol"

- 12:00-12:30 Maya Ofek Lalzar (Haifa University) “Mining microbial genomes for beneficial agricultural traits”
- 12:30-13:00 Michael Ionescu (Evogene Ltd.) “Applying metagenomics in the development of novel biostimulants”
- 13:00-14:00 **Lunch**
- 14:00-14:45 Jacob Oppenheim (R&D data science and machine learning, Indigo Ag) “Use of microbes to enhance sustainable agricultural systems”.
- 14:45-15:45 **ROUNDTABLE DISCUSSION: Harnessing novel technologies for future biocontrol agents** (Mediator- *Eddie Cytryn*). Jacob Oppenheim (Indigo Ag.), Ido Korman (Metabolic Insights), Joyce Loper (Oregon State University); Anant Patel (Bielefeld University)
- 15:45-16:00 Summary