

David Zeevi

The Rockefeller University
1230 York Ave.
New York, NY 10065

RESEARCH INTERESTS

Environmental microbiology; microbial genomics; marine, soil and human microbiomes.

CURRENT POSITION

Independent Postdoctoral Fellow, Center for Studies in Physics and Biology, 2017 -
The Rockefeller University, USA.

EDUCATION

Ph.D., Systems Biology, Weizmann Institute of Science, Israel. 2012 –2017

Advisor: Prof. Eran Segal.

M.Sc. in the Bioinformatics track, Tel-Aviv University, Israel. 2009 – 2011

Advisor: Prof. Tal Pupko.

Graduated *summa cum laude*. Final grade average 95.6.

B.Sc. in Computer Science and Life Sciences, Tel-Aviv University, Israel. 2006 – 2009

Combined program with an emphasis on bioinformatics.

Graduated *summa cum laude*. Final grade average 96 (Computer Science) and 95 (Life Sciences).

HONORS, AWARDS AND SCHOLARSHIPS

2018	Dan David Prize Scholarship in Personalized Medicine The Dan David Foundation.
2017 - 2019	Postdoctoral Fellowship Award in Studying Complex Systems James S. McDonnell Foundation.
2016	Travel fellowship for International Presentation of Research Israeli Ministry of Science.
2015	Levi Eshkol Full Ph.D. Scholarship for Personalized Medicine Israeli Ministry of Science.
2012, 2014	Two-time Student Project Grant Award Azrieli Center for Systems Biology, Weizmann Institute of Science.
2013	Award for Academic Excellence Feinberg Graduate School, Weizmann Institute of Science.
2013	Award for Innovative Use of High Throughput Sequencing

	Weizmann Institute of Science.
2011	Received <i>summa cum laude</i> honors (M.Sc.) Faculty of Life Sciences, Tel-Aviv University.
2007 - 2011	Four-year fellow, Edmond J. Safra Program in Bioinformatics Tel-Aviv University.
2009	Received <i>summa cum laude</i> honors (B.Sc.) Faculty of Exact Sciences, Tel-Aviv University.
2009	Received <i>summa cum laude</i> honors (B.Sc.) Faculty of Life Sciences, Tel-Aviv University.
2007 - 2009	Three-time Dean's List for Academic Excellence Faculty of Exact Sciences, Tel-Aviv University.
2007, 2009	Two-time Dean's List for Academic Excellence Faculty of Life Sciences, Tel-Aviv University.

PUBLICATIONS

*equal contribution; ^corresponding author.

- David Zeevi^{*}, Tal Korem*, Anastasia Godneva, Noam Bar, Alexander Kurilshikov, Maya Lotan-Pompan, Adina Weinberger, Jingyuan Fu, Cisca Wijmenga, Alexandra Zhernakova, Eran Segal[^], **Structural variation in the gut microbiome associates with host health**, *Nature* 568 (7750), 43-48, 2019.
- Jotham Suez*, Niv Zmora*, Gili Zilberman-Schapira*, Uria Mor*, Mally Dori-Bachash, Stavros Bashiardes, Maya Zur, Dana Regev-Lehavi, Rotem Ben-Zeev Brik, Sara Federici, Max Horn, Yotam Cohen, Andreas E Moor, David Zeevi, Tal Korem, Eran Kotler, Alon Harmelin, Shalev Itzkovitz, Nitsan Maharshak, Oren Shibolet, Meirav Pevsner-Fischer, Hagit Shapiro, Itai Sharon, Zamir Halpern, Eran Segal, Eran Elinav, **Post-Antibiotic Gut Mucosal Microbiome Reconstitution Is Impaired by Probiotics and Improved by Autologous FMT**, *Cell* 174(6), 1406-1423, 2018.
- Daphna Rothschild*, Omer Weissbrod*, Elad Barkan*, Alexander Kurilshikov, Tal Korem, David Zeevi, Paul Igor Costea, Anastasia Godneva, Iris N Kalka, Noam Bar, Smadar Shilo, Dar Lador, Arnau Vich Vila, Niv Zmora, Meirav Pevsner-Fischer, David Israeli, Noa Kosower, Gal Malka, Bat Chen Wolf, Tali Avnit-Sagi, Maya Lotan-Pompan, Adina Weinberger, Zamir Halpern, Shai Carmi, Jingyuan Fu, Cisca Wijmenga, Alexandra Zhernakova, Eran Elinav, Eran Segal, **Environment dominates over host genetics in shaping human gut microbiota**, *Nature* 555(7694), 2018.
- Tal Korem*, David Zeevi^{*}, Niv Zmora, Tali Avnit-Sagi, Maya Lotan-Pompan, Noa Kosower, Gal Malka, Michal Rein, Jotham Suez, Ben Z Goldberg, Adina Weinberger, Avraham A Levy, Eran Elinav, Eran Segal, **Bread induces personal glycemic responses and affects clinical parameters and gut microbiome**, *Cell Metabolism* 25(6), 2017.
- Christoph A. Thaiss*, Maayan Levy*, Tal Korem*, Lenka Dohnalová, Hagit Shaprio, Diego A. Jaitin, Eyal David, Deborah R. Winter, Meital Gury-BenAri, Evgeny Tatrovsky, Timur Tuganbaev, Sara Federici, Niv Zmora, David Zeevi, Mally Dori-Bachash, Meirav Pevsner-Fischer, Elena Kartvelishvily, Alexander Brandis, Alon Harmelin, Oren Shibolet, Zamir Halpern, Kenya Honda, Ido Amit, Eran Segal, and Eran Elinav, **Microbiota Diurnal Rhythmicity Programs Host Transcriptome Oscillations**. *Cell* 167(6), 2017.

- David Zeevi*, Tal Korem* and Eran Segal, **Talking about cross-talk: the immune system and the microbiome**, *Genome Biol* 17(50), 2016.
- Niv Zmora*, David Zeevi*, Tal Korem*, Eran Segal, Eran Elinav, **Taking it personally: personalized utilization of the human microbiome in health and disease**, *Cell Host Microbe* 19(1), 2016.
- David Zeevi*, Tal Korem*, Niv Zmora*, David Israeli*, Daphna Rothschild, Adina Weinberger, Orly Ben-Yacov, Dar Lador, Tali Avnit-Sagi, Maya Lotan-Pompan, Jotham Suez, Jamal A. Mahdi, Elad Matot, Gal Malka, Noa Kosower, Michal Rein, Gili Zilberman-Schapira, Lenka Dohnalová, Meirav Pevsner-Fischer, Rony Bikovsky, Zamir Halpern, Eran Elinav, Eran Segal, **Personalized nutrition by prediction of glycemic responses**, *Cell* 163(5), 2015.
- Tal Korem*, David Zeevi*, Jotham Suez*, Adina Weinberger*, Tali Avnit-Sagi, Maya Pompan-Lotan, Elad Matot, Gil Jona, Alon Harmelin, Nadav Cohen, Alexandra Sirota-Madi, Christoph A. Thaiss, Meirav Pevsner-Fischer, Rotem Sorek, Ramnik J. Xavier, Eran Elinav, Eran Segal, **Growth dynamics of gut microbiota in health and disease inferred from single metagenomic samples**, *Science* 349(6252), 2015.
- Maayan Levy*, Christoph A. Thaiss*, David Zeevi, Lenka Dohnalová, Gili Zilberman-Schapira, Jamal A. Mahdi, Eyal David, Alon Savidor, Tal Korem, Yonatan Herzig, Meirav Pevsner-Fischer, Hagit Shapiro, Anette Christ, Alon Harmelin, Zamir Halpern, Eicke Latz, Richard A. Flavell, Ido Amit, Eran Segal, Eran Elinav, **Microbiota-modulated metabolites shape the intestinal microenvironment by regulating NLRP6 inflammasome signaling**, *Cell* 163(6), 2015.
- Christoph A. Thaiss*, David Zeevi*, Maayan Levy*, Eran Segal, Eran Elinav, **A day in the life of the meta-organism: diurnal rhythms of the intestinal microbiome and its host**, *Cut Microbes* 6(2), 2015.
- Jotham Suez, Tal Korem*, David Zeevi*, Gili Zilberman-Schapira*, Christoph A. Thaiss, Ori Maza, David Israeli, Niv Zmora, Shlomit Gilad, Adina Weinberger, Yael Kuperman, Alon Harmelin, Ilana Kolodkin-Gal, Hagit Shapiro, Zamir Halpern, Eran Segal, Eran Elinav. **Consumption of artificial sweeteners induces glucose intolerance by functionally altering the gut microbiota**, *Nature* 514(7521), 2014.
- Ron Bochner, Yael Ziv, David Zeevi, Maya Donyo, Lital Abraham, Ruth Ashery-Padan, Gil Ast. **Phosphatidylserine increases IKBKAP levels in a humanized knock-in IKBKAP mouse model**, *Hum Mol Genet* 22(14), 2013.
- Nimrod D. Rubinstein*, David Zeevi*, Yaara Oren, Gil Segal, Tal Pupko. **The operonic location of auto-transcriptional repressors is highly conserved in bacteria**, *Mol Biol Evol* 28(12), 2011.
- Hadas Keren, Maya Donyo, David Zeevi, Channa Maayan, Tal Pupko, Gil Ast. **Phosphatidylserine increases IKBKAP levels in familial dysautonomia cells**, *PLoS ONE* 5(12), 2010

CONFERENCE PRESENTATIONS

- Symposium on Human Variability and Personalized Nutrition**, Singapore. 2019
Invited speaker. Talk title: Personalized nutrition by prediction of glycemic responses.
- ILSI CSIRO Human Variability Meeting**, Sydney, NSW, Australia. 2019
Keynote speaker. Talk title: Personalized nutrition: can our microbes tell us what to eat?
- IV North American Microbiome Congress**, Washington, DC, USA. 2019
Invited speaker. Talk title: Sub-genomic variation in the gut microbiome associates with host metabolic health.
- I International Congress of Food and Nutrition**, Lisbon, Portugal. 2018
Invited speaker. Talk title: Personalized nutrition and lowering glycemic responses.
- Natural Products and Synthetic Biology: Parts and Pathways**, Tahoe, CA, USA. 2018
Selected short talk. Talk title: Towards mining the gut microbiome for therapeutic targets.
- Rising Stars Symposium in Data Science**, Chicago, IL, USA. 2017
Invited speaker. Talk title: Personalized nutrition by prediction of glycemic responses.
- The 24th European Congress on Obesity**, Porto, Portugal. 2017
Invited speaker. Talk title: Personalized nutrition by prediction of glycemic responses.
- The XIII International Congress on Obesity**, Vancouver, Canada. 2016
Invited speaker. Talk title: Artificial sweeteners, the microbiome and personalized nutrition.
- Israel Big Data and Analytics Conference**, Bar-Ilan, Israel. 2015
Invited speaker. Talk title: On nutrition, bacteria and prediction.
- Frontiers In Microbiome Research**, Volcani Institute for Agricultural Research, Israel. 2015
Invited speaker. Talk title: The personalized nutrition project.

PROFESSIONAL SERVICE

- Reviewer **Microbiome**
- Ad-hoc reviewer **Landsteiner Foundation for Blood Transfusion Research**

WORK EXPERIENCE

- Tel-Aviv University**, Teaching Instructor, “Perl Programming for Biology”. 2010 – 2011
- Ofek Aerial Photography**, Freelance Pilot. 2007 – 2011

PUBLIC OUTREACH

- Volunteer, Israel Police, Ayalon District.** 2016 - 2017
Prediction project seeking the prediction of the occurrence and severity of violent crime based on past criminal activity and additional parameters.
- Tutor, Sparks of Science program, Davidson Institute of Science Education.** 2012 – 2016
This program aims to empower disadvantaged youth from the Ethiopian immigrant community by improving their mathematical and scientific skills.