

Moran Yassour - Curriculum Vitae

Name: Moran Yassour

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DOB: 22 April, 1979

Website: www.yassourlab.com

Education & Appointments:

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| 2019- | Assistant professor at the School of Computer Science and Engineering, Hebrew University of Jerusalem. |
| 2018- | Assistant professor at the Microbiology & Molecular Genetics department, Hebrew University Faculty of Medicine. |
| 2012-2018 | Postdoctoral fellow at the Broad Institute of MIT and Harvard University (jointly advised by Eric Lander and Ramnik Xavier). |
| 2008-2012 | Graduate student at the Broad Institute of MIT and Harvard University; Visiting student at MIT. |
| 2008-2012 | PhD in computer science and computational biology, The Hebrew University of Jerusalem, Israel (jointly advised by Nir Friedman and Aviv Regev). |
| 2005-2007 | MSc in computer science and computational biology (<i>magna cum laude</i>), The Hebrew University of Jerusalem, Israel (advised by Nir Friedman). |
| 2002-2005 | BSc in computer science and computational biology (<i>magna cum laude</i>), The Hebrew University of Jerusalem, Israel. |

Grants, Honors & Awards:

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| 2022 | ISF Personalized Medicine Program grant |
| 2022 | Israel-US Binational Science Foundation grant |
| 2022 | Waterloo Foundation grant |
| 2022 | Israel Ministry of Health grant |
| 2021 | Center for Interdisciplinary Data Science Research collaborative grant |
| 2021 | Helmsley Foundation grant |
| 2020 | Rothschild Foundation - FightCorona grant |
| 2020 | Israel Science Foundation - Personal grant |
| 2019 | Israel Science Foundation – Broad Institute collaborative grant |
| 2018 | Azrieli Faculty Fellowship |
| 2018 | Israel Science Foundation grant |
| 2017 | K99/R00 Pathway to Independence award (NIH/NIDDK) |
| 2016 | Charles A. King Trust Foundation postdoctoral fellowship |
| 2013 | The Klarman Family and Israeli Science Foundation Postdoctoral Fellowship |
| 2012 | Dan David Scholarship |
| 2012 | Rothschild Postdoctoral Fellowship |
| 2011 | Lawrence H. Summers Fellowship |
| 2010 | Google European Doctoral Fellowship (declined) |
| 2010 | Clore Doctoral Scholarship |
| 2009 | Google Anita Borg Memorial Scholarship recipients |
| 2008 | The Canadian Friends of the Hebrew University Fellowship |
| 2008 | Google Anita Borg Memorial Scholarship finalist |
| 2005, 2006 | Rudin prize of excellence |
| 2003 | Stein scholarship of excellence |
| 2002 | The Hebrew University dean's list of excellence |

Selected Peer-Reviewed Publications (Total citations: 27,879, H-Index: 23)

Citations are indicated using Google Scholar (GS) and were updated in Jun 2022.

- Martin VM, ..., Yuan, Q. & **Yassour, M.** **Longitudinal disease-associated gut microbiome differences in infants with food protein-induced allergic proctocolitis.** *Microbiome* 10, 154 (2022).
- Ennis D, Moriel N, **Yassour M.** **Preemies going pro: How probiotic treatment matures the microbiome of extreme premature infants.** *Cell Host Microbe*. 2022 May 11;30(5):599–600.
- Kijner S, Kolodny O, **Yassour M.** **Human Milk Oligosaccharides and the Infant Gut Microbiome From an Ecological Perspective.** *Current Opinion in Microbiology*. 2022 May
- Kennedy K, de Goffau M, ..., **Yassour M.** and Walter J. **Questioning the “fetal microbiome”; pitfalls of low-biomass microbial studies.** *Nature*. June 2022 (in press).
- Dahan E, Martin VM, **Yassour M.** **EasyMap - an interactive web tool for evaluating and comparing associations of clinical variables and microbiome composition.** *Front Cell Infect Microbiol*. 2022 May.
- Vorontsov O, Levitt L, ... , **Yassour M.**, ... , Panet A, Wolf DG. **Chemerin and galectin-3-binding protein are prognostic amniotic fluid biomarkers for congenital cytomegalovirus infection severity.** *J Clin Invest*. 2022 Apr 19.
- Kijner S, Cher A, **Yassour M.** **The Infant Gut Commensal *Bacteroides dorei* Presents a Generalized Transcriptional Response to Various Human Milk Oligosaccharides.** *Front Cell Infect Microbiol*. 2022 Mar 18;12:854122.
- Vaishnav ED, de Boer CG, Molinet J, **Yassour M.**, ..., Regev A. **The evolution, evolvability and engineering of gene regulatory DNA.** *Nature*. 2022 Mar;603(7901):455–63. (GS:8)
- Moskovitz M, Nassar M, Moriel N, Cher A, ..., Zangen D, **Yassour M.** and Steinberg D. **Characterization of the Oral Microbiome Among Children with Type 1 Diabetes Compared with Healthy Children.** *Front Microbiol*. 2021 Oct 29;12:756808.
- Barak N, Ben-Ami R, Sido T, Perri A, ..., Dor Y, Wolf DG, **Yassour M.** **Lessons from applied large-scale pooling of 133,816 SARS-CoV-2 RT-PCR tests.** *Science Trans. Med*, 2021. (GS:45)
- Blaser MJ, Devkota S, McCoy KD, Relman DA, **Yassour M.** Young VB. **Lessons learned from the prenatal microbiome controversy.** *Microbiome* 9 (1), 1-7, 2021. (GS:29)
- Mitchell CM, Hogstrom L, Bryant AM, Bergerat A, Cher A, Pochan S, Herman P, Carrigan M, Sharp K, Huttenhower C, Lander ES, Vlamakis V, Xavier RJ, **Yassour M.** **Delivery Mode Affects Stability of Early Infant Gut Microbiota.** *Cell Reports Medicine*, 2020. (GS:33; Journal Cover).
- Ben-Ami R, Klochendler A, Seidel M, Sido T, Gurel-Gurevich O, **Yassour M.** Meshorer E, ..., Dor Y, Wolf D, Salton M, Drier Y. **Large-scale implementation of pooled RNA extraction and RT-PCR for SARS-CoV-2 detection.** *Clinical Microbiology and Infection*, 2020 (GS:168).
- Vatanen T, Plichta DR, Somani J, Münch PC, Arthur TD, Hall AB, Rudolf S, Oakeley EJ, Ke X, Young RA, Haiser HJ, Kolde R, **Yassour M.** Luopajarvi K, Siljander H, Virtanen SM, Ilonen J, Uibo R, Tillmann V, Mokurov S, Dorshakova N, Porter JA, McHardy AC, Lähdesmäki H, Vlamakis H, Huttenhower C, Knip M, Xavier RJ. **Genomic variation and strain-specific functional adaptation in the human gut microbiome during early life.** *Nature Microbiology*, 2019. (GS:125)

Yassour M.*, Hogstrom L.*, Jason E.*, ..., Knip M., Xavier R. J. **Strain-level analysis of mother-to-child bacterial transmission during the first few months of life.** *Cell Host & Microbe*, 2018 (GS:217; Journal Cover).

Hall A. B.*, **Yassour M.***, ..., Vlamakis H., Xavier R. J., Huttenhower C. **A novel *Ruminococcus gnavus* clade enriched in inflammatory bowel disease patients.** *Genome Medicine*, 2017. (GS:298)

Yassour M., Vatanen M., Siljander H., ..., Xavier R.J. **Natural history of the infant gut microbiome and impact of antibiotic treatments on strain-level diversity and stability.** *Science Translational Medicine*, 2016 (GS:643; Journal Cover)

Vatanen T.*, Kostic A.D.*, d’Hennezel E. *, ..., **Yassour M.**, ..., Xavier R.J. **Variation in Microbiome LPS Immunogenicity Contributes to Autoimmunity in Humans.** *Cell*, 2016 (GS:913).

Yassour M., ..., Huttenhower C. **Sub-clinical detection of gut microbial biomarkers of obesity and type 2 diabetes.** *Genome Medicine*, 2016 (GS:193).

Gevers G., ..., **Yassour M.**, ..., Xavier R.J. **The Treatment-Naïve Microbiome in New-Onset Crohn’s Disease.** *Cell Host & Microbe*, 2014 (GS:2478).

Haas B.J.*, Papanicolaou A.*, **Yassour M.**, ..., Friedman N. and Regev A. **De novo transcript sequence reconstruction from RNA-Seq using the Trinity platform for reference generation and analysis.** *Nature Protocols*, 2013 (GS:5,930).

Brar G.A., **Yassour M.**, Friedman N., Regev A., Ingolia N.T., Weissman J.S. **High-Resolution View of the Yeast Meiotic Program Revealed by Ribosome Profiling.** *Science*, 2011 (GS:493).

Grabherr M.*, Haas B.J.*, **Yassour M.***, ..., Friedman N., Regev A. **Full-length transcriptome assembly from RNA-Seq data without a reference genome.** *Nature Biotechnology*, 2011 (GS:13,525; Journal Cover)

Rhind N., Chen Z., **Yassour M.***, Thompson D.A.*, Haas B.J.*, Habib N.*, Wapinski I.*, Roy S.*, ... , Nusbaum C. **Comparative Functional Genomics of the Fission Yeasts.** *Science*, 2011 (GS:462; Journal Cover)

Yassour M., ..., Friedman N., Regev A. **Strand-specific RNA sequencing reveals extensive regulated long antisense transcripts that are conserved across yeast species.** *Genome Biol.*, 2010 (GS:156).

Levin J.Z.*, **Yassour M.***, ..., and Regev A. **Comprehensive comparative analysis of strand-specific RNA sequencing methods.** *Nature Methods*, 2010 (GS:828).

Yassour M.*, Kaplan T*., ..., Friedman N., and Regev A. **Ab initio Construction of a Eukaryotic Transcriptome by Massively Parallel mRNA Sequencing.** *Proceedings of the National Academy of Sciences (PNAS)*, 2009 (GS:253).

Book chapters

Cher A, **Yassour M.** **The compositional development of the microbiome in early life.** The Human Microbiome in Early Life, Academic Press, 2020. p 177-195. (GS:2)

Patents:

Hall AB, Xavier RJ, Huttenhower C, Yassour M, Vlamakis H. **Methods of treating and diagnosing ibd associated with *r. gnavus* and/or *r. gnavus* group ibd colonization.** US patent US20200155617A1 (pending).

Invited Talks:

- Norwegian Academy of Science, Center for Advanced Study, workshop
- Groningen University, Microbiome seminar
- Ben Gurion University, Health management seminar
- Soroka Hospital, OBGYN department
- Memorial Sloan Kettering, Comp bio seminar
- University of Minnesota Biotechnology Institute Seminar
- Stanford Center for Computational, Evolutionary and Human Genomics Seminar
- University of Chicago Department of Human Genetics Seminar
- Massachusetts General Hospital, department of Ob/Gyn, Vincent Center for Reproductive Biology

Conference Organization:

- 2019, 2020, 2022 - CSHL Microbiome meeting organizer
- 2022 - Faculty of Medicine, institute retreat

Teaching:

- 2022-ongoing: Mathematics for Medical Sciences (Medical students)
- 2020-ongoing: Workshop in Processing/Visualizing Big Data (Medical faculty graduate program)
- 2019-ongoing: Workshop in Computational Bioskills (Computer science undergraduate program)

Reviewing:

- Journal review: eLife, Cell Host & Microbe, Cell Reports Medicine, Nature, Nature Medicine, Nature Methods, Nature Communications, Frontiers, Gut, Microbiome, PLoS Computational Biology, Bioinformatics, BMC Genomics.
- Grant review: European Research Council (ERC), Israeli Science Foundation, Israeli Cancer Association, Wellcome Trust.

Professional Experience:

2004	Software developer - Mobileye. Worked on advanced image recognition algorithms supporting camera-based systems for automotive driver assistance.
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Voluntary Work:

2022-	A representative of the public on the Board of the Jerusalem Zoo.
2014-2018	Cambridge regional manager of BioAbroad, an Israeli non-profit organization encouraging Israeli scientists abroad to return to Israel. I co-founded a critical discussion group for Israeli post-docs, and organized multiple social and professional events for Israeli scientists in Boston.
1997-1998	A year of volunteering in the youth movement "Bnei Hamoshavim". I led the cultural and educational activity, while serving as a youth guide in the lower Galilee, and helped the high school students in math studies.