

Curriculum Vitae Ofer Yizhar

Ofer Yizhar, Ph.D.

Departments of Brain Sciences and Molecular Neuroscience

Weizmann Institute of Science

234 Herzl st., Rehovot 76100, Israel

Email: ofer.yizhar@weizmann.ac.il

Website: <http://www.weizmann.ac.il/neurobiology/labs/yizhar/>

 ORCID ID: [0000-0003-4228-1448](https://orcid.org/0000-0003-4228-1448)



Academic Degrees & Positions

2019 – Present	Associate Professor, Dept. of Neurobiology, Weizmann Institute of Science
2019 –2020	Visiting Professor, Dept. of Chemistry and Chemical Biology, Harvard University
2011 – 2019	Senior Scientist, Dept. of Neurobiology, Weizmann Institute of Science
2008 – 2011	Postdoctoral fellowship, Dept. of Bioengineering, Stanford University, CA, USA
2001 – 2008	Graduate studies (M.Sc. + Ph.D.) – Dept. of Neurobiology, Tel Aviv University
1998 – 2001	B.Sc., Hebrew University of Jerusalem (Life Science Honors Program – Etgar)

Selected Projects

My research is focused on the neural circuit underpinnings of adaptive, goal-directed behaviors. My lab studies how specific populations of neurons in the mouse brain contribute to social behavior, decision-making, learning and memory. Using mouse models of autism, we aim to understand how these processes are altered by gene mutations linked to autism spectrum disorders. A parallel line of research in the lab deals with developing new optogenetic tools. Our projects intertwine the development of new tools with their implementation to address basic neuroscience questions. We have recently found that a family of bi-stable rhodopsin proteins that couple to the Gi/o signaling pathway is capable of effectively silencing presynaptic transmission in vitro and in vivo. We seek to identify additional naturally-occurring rhodopsin variants with unique spectral/kinetic properties and to engineer existing ones to improve and diversify their function. Tools developed by the lab are rapidly disseminated to the community, and hundreds of labs across the world have already received our newly developed tools and are using them in their research.

Honors and Awards

- 2022 Elected member of the European Molecular Biology Organization (EMBO)
- 2021 Joseph and Wolf Lebovic Charitable Foundation Chair for Research in Neuroscience
- 2019 Recipient of the Levinson Prize, awarded by the Weizmann Institute of Science Scientific Council
- 2019 Recipient of the Sir Bernard Katz Prize (Heidelberg, Germany)
- 2018 Recipient of the Adelis Foundation Brain Research Award (Haifa, Israel)
- 2013 Career Development Award, Human Frontier Science Program
- 2012 'Alon Fellowship' for returning scientists, granted by the Israeli Council for Higher Education
- 2012 Incumbent of the Gertrude and Philip Nollman Career Development Chair, Weizmann Institute
- 2011 Recipient of the Sieratzki Prize for Advances in Neuroscience