

Or David Shahar

Curriculum Vitae

Contact details

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Current position

Principal Investigator: Head of the laboratory for molecular dynamics in the brain (Molecular Neurodynamics) at MIGAL Galilee Research Institute.

Lecturer: Tel-Hai Academic College.

Education

2007-2013 Ph.D. in genetics. Department of Genetics, The Hebrew University of Jerusalem.
 Advisor: Prof. Michal Goldberg.
 2005-2007 M.Sc. in genetics. Department of Genetics, The Hebrew University of Jerusalem.
 Advisor: Prof. Michal Goldberg.
 2001-2004 B.Sc. in life sciences. The Hebrew University of Jerusalem. Graduated with excellence.

Employment and ventures

12/2021-2021 Group leader, Migal Galilee Research Institute.
 2021 Research fellow at Tel Aviv University, The lab of Prof. Oded Rechavi.
 10/2019- Initiative in collaboration with Ramot and the Bar Lab of Tel Aviv University for high-throughput production of antibodies.
 2/2019-8/2019 Guest scientist. Max Planck Institute for Brain Research, Germany.
 11/2013-1/2019 EMBO and Marie Curie Postdoctoral fellow. Max Planck Institute for Brain Research, Germany. Host: Prof. Erin Schuman.
 3/2013-9/2013 Postdoctoral fellow. Department of Genetics, The Hebrew University of Jerusalem.

Fellowships and awards

2016 EMBO long-term fellowship.
 2015 Marine Biology Lab (MBL) scholarship award (100%).
 2014-2016 Marie Curie Intra-European fellowship.
 2012 EMBO short-term fellowship award.
 2012 Aharon Katzir Student Travel Fellowship.
 2009 Anisfeld scholarship for excellent PhD students.
 2009 Prize for the best poster presentation in the faculty – 1st place.
 2008 Polak prize for excellence in research and academic achievements.
 2007 Weirth scholarship for outstanding students.
 2006 Rudin scholarship for outstanding students during M.Sc.
 2001-2004 'Etgar' program for outstanding students in life sciences.

Research grants since last position

2023 MIGAL Inner Grant: Examining the effect of Psilocybe cubensis and Hericium erinaceus derived metabolites on neuroplasticity and resilience. 100,000 NIS.
 2023 ICA Accelerator & Migal: Establishing cultivated fish cell lines using an innovative AI-driven approach. 65,000 NIS.

Teaching experience

2022- Teaching the course 'The development of the nervous system', Tel-Hai Academic College.
 2023- Teaching the course 'Molecular mechanisms of learning and memory', Tel-Hai Academic College.

2023-2014-2015	Teaching the course 'Advanced seminars (Seminar 2)', Tel-Hai Academic College.
2008-2011	Teaching in the course 'Modern Techniques in Neuroscience', Max Planck Institute for Brain Research, Frankfurt.
2005-2007	Teaching assistant for the course 'Introduction to probability and statistics', The Hebrew University of Jerusalem.
2005-2007	Teaching assistant for the course 'General Genetics A', Hebrew University of Jerusalem.

Supervision of Students and Postdoctoral Fellows

2022-	Dr. Kitty Reemst	Postdoctoral fellow.
2022-	Heba Shahin	M.Sc. student.
2023-	Maayan Shirizly	Undergraduate student, guided project.
2022-	Nitsan Lahav	Undergraduate student, guided project.
2022-2023	Alon Kedem	Undergraduate student, guided project.

Further professional training

2019	EMBO Lab Management Course, Heidelberg, Germany.
2015	Zebrafish Development and Genetics Course, Marine Biology Lab (MBL), Woods Hole, USA.
2015	Marine Fish Course by Charles River, London, UK.

Other activity

2021	Outreach lecture for Unistream. Exposing young students from the periphery to science and innovation, Kfar Giladi, Israel.
2021	Guest editor of a special issue of 'Frontiers in Neuroscience - Neuroenergetics, Nutrition, and Brain Health'.
2018	Outreach lecture 'Into the brain of a transparent fish' as part of the 'Bar of Science' lecture series, Frankfurt, Germany.
2017	Initiating and organizing a series of science outreach lectures that has since become a yearly tradition: 'Bar of Science', Frankfurt, Germany.
2009-2011	Volunteering activity at ELEM, a non-profit organization for youth in distress, Jerusalem.
2007-2007	Elected chair of the junior teaching and research staff organization at The Hebrew University of Jerusalem.

Conferences and invited seminars

2023	Gordon Research Conference (GRC), Translation Machinery in Health and Disease. Galveston, TX, USA. (Oral presentation).
2022	Invited seminar at The Necker Institute, Faculty of Medicine, University of Paris, Paris.
2022	Intrinsic Mechanisms of Size and Growth Regulation in Neurons, Weizmann Institute, Rehovot. (Oral presentation).
2022	Invited seminar at the Department of Genetics, The Hebrew University of Jerusalem.
2021	Guest lecturer at the "Selected Topics in Neurobiology" seminar, Tel Aviv University, Tel Aviv, Israel.
2021	Seminar at the Sagol Department of Neurobiology, University of Haifa, Haifa, Israel.
2021	The 6 th Israeli Zebrafish Meeting, Jerusalem. (Oral presentation and chair of the neurobiology session).
2020	Seminar at the Azrieli Faculty of Medicine, Bar-Ilan, Safed, Israel.
2019	Invited seminar at CNRS Toulouse, France.
2017	The 5th Israeli zebrafish meeting, Be'er-Sheva (oral presentation).
2017	FISEB (ILANIT) Eilat (oral presentation).
2017	Behaviour 2017, Estoril, Portugal (poster).
2016	The Fish Meeting, Frankfurt, Germany (oral presentation).

- 2016 Imaging Structure and Function in the Zebrafish Brain, Martinsried, Germany (poster).
- 2016 EMBO conference, Dendritic Anatomy, Molecules and Function, Crete, Greece (poster).
- 2012 Gordon Research Conference, DNA Damage, Mutation, and Cancer, California, USA (oral presentation).
- 2012 The 14th International A-T Workshop, ATW, Delhi, India (oral presentation).
- 2011 Invited lecture at IGBMC, 2011, France (oral presentation).
- 2011 Israeli Live Imaging Forum, Weizmann Institute, Rehovot (oral presentation).
- 2010 Maintenance of Genome Stability, Antigua (poster presentation).
- 2010 Genome Stability Meeting 2010, BGU, Be'er Sheva (oral presentation).

Publications

1. Reemst K, Shahin H and **Shahar OD**. Fish Memory – Learning and Memory Formation in Zebrafish. doi.org/10.3389/fcell.2023.1120984. **Frontiers in Cell and Developmental Biology**. 2023
2. **Shahar OD** and Schuman EM. Large-scale cell-type-specific imaging of protein synthesis in a vertebrate brain. DOI: 10.7554/eLife.50564. **Elife**. 2020.
3. Langebeck-Jensen K, **Shahar OD**, Schuman EM, Langer JD, Ryu S. Larval Zebrafish Proteome Regulation in Response to an Environmental Challenge. doi:10.1002/pmic.201900028. **Proteomics**. 2019.
4. **Shahar OD***, Kalousi A*, Eini L, Fisher B, Weiss A, Darr J, Mazina O, Bramson S, Kupiec M, Eden A, Meshorer E, Mazin AV, Brino L, Goldberg M, Soutoglou E. A high-throughput chemical screen with FDA approved drugs reveals that the antihypertensive drug Spironolactone impairs cancer cell survival by inhibiting homology directed repair. doi: 10.1093/nar/gku217. **Nucleic Acids Res**. 2014.
5. **Shahar OD**, Gabizon R, Feine O, Alhadeff R, Ganoth A, Argaman L, Shimshoni E, Friedler A, Goldberg M. acetylation of lysine 382 and phosphorylation of serine 392 in p53 modulate the interaction between p53 and MDC1 in vitro. doi: 10.1371/journal.pone.0078472. **PLoS One**. 2013.
6. Nowarski R, Wilner O, **Shahar OD**, Baraz L, Cheshin O, Kenig E, Britan-Rosich E, Nagler A, Goldberg M, Willner I and Kotler M. APOBEC3G enhances lymphoma cell radioresistance by promoting cytidine deaminase-dependent DNA repair. doi: 10.1182/blood-2012-01-402123. **Blood**. 2012.
7. Lemiatre C, F. B., Kalousi A, Guirouilh-Barbat J, **Shahar OD**, Hoffbeck A, Goldberg M, Bertrand P, Lopez B, Lauren B, and Soutoglou E. The nucleoporin 153 regulates double strand break repair by promoting 53BP1 nuclear localization. doi: 10.1038/onc.2011.638. **Oncogene**. 2012.
8. **Shahar OD**, Edupuganti V, Shimshoni E, Hareli S, Meshorer E and Goldberg M. Live imaging of induced and controlled DNA double-strand break formation reveals extremely low repair by homologous recombination in human cells. doi: 10.1038/onc.2011.516. **Oncogene**. 2012.
9. Sklan EH, Berson A, Birikh KR, Gutnick A, **Shahar O**, Shoham S, Soreq H. Acetylcholinesterase modulates stress-induced motor responses through catalytic and noncatalytic properties. doi: 10.1016/j.biopsych.2006.03.080. **Biol Psychiatry**. 2006.

Patent

Shahar OD and Bar DZ. "Method for high-throughput generation and sequencing of antibodies", Provisional patent application, USA, (Application Number 63/115271).

References

Michal Goldberg, Professor, The Hebrew University of Jerusalem, Givat-Ram, Israel. +972-2-65-86452. goldbergm@mail.huji.ac.il

Eran Meshorer, Professor, The Hebrew University of Jerusalem, Givat-Ram, Israel. +972-2-6585161. eran.meshorer@mail.huji.ac.il

More references will be provided upon request.