Curriculum Vitae Professor Dr Maya Schuldiner

Image: Dr. Michael Eisenberg-Bord

Name: **Maya Schuldiner**
Born: **15 March 1975**

Research Priorities: Systematic cell biology of organelles, organelles, contact sites, targeting, high content screens, functional genomics

Maya Schuldiner is an Israeli molecular geneticist. With her research, she aims to achieve a mechanistic understanding of the basic functions underlying intracellular organization.

Academic and Professional Career

since 2019	Full Professor, Department of Molecular Genetics, Weizmann Institute of Science, Rehovot, Israel
2017 - 2018	Hans Fischer Fellow, Institute for Advanced Study (IAS), Technical University (TU) Munich, Munich, Germany
2015 - 2019	Associate Professor, Department of Molecular Genetics, Weizmann Institute of Science, Rehovot, Israel
2008 - 2015	Assistant Professor, Department of Molecular Genetics, Weizmann Institute of Science, Rehovot, Israel
2003 - 2008	Post-doctoral research, University of California (UC) San Francisco, San Francisco, USA
2000 - 2003	PhD, Department of Genetics, Hebrew University, Jerusalem, Israel
1999 - 2002	Teaching assistant, Life Science Institute, Hebrew University, Jerusalem, Israel
1998 - 1999	MSc, Department of Genetics, Hebrew University, Jerusalem, Israel
1996 - 1998	BSc in Biology, Hebrew University, Jerusalem, Israel

Functions in Scientific Societies and Committees

2021	Member, Panel “Starting Grant”, European Research Council (ERC)
since 2020	Member, Life Sciences Board of Studies, Feinberg Graduate School, Weizmann Institute of Science, Rehovot, Israel
2020	Member, Advisory Editorial Board, European Molecular Biology Organization (EMBO)
since 2019	Member, LSVS, New Faculty Acceptance Committee in Life Sciences, Weizmann Institute of Science, Rehovot, Israel
since 2019	Reviewing Editor, eLIFE
2018	Member, Search and Evaluation Committee for Rudolf Mößbauer Tenure Track Professorships, TU Munich, Munich, Germany
2017	Member, Panel “Starting Grant”, ERC
2017 - 2019	Scientific Editor, GENETICS
since 2017	Member, Advisory Board, EMBO Publications (EPAB)
since 2017	Member, Editorial Board, Life Science Alliance Advisory
since 2017	Member, Editorial Board, Current Opinion in Cell Biology
since 2016	Member, Editorial Board, BBA-Molecular Cell Research
since 2016	Founder and member, Office of Supporting Young Scientists, Weizmann Institute of Science, Rehovot, Israel
since 2015	Member, Editorial Board, PLoS Biology
since 2015	Member, Editorial Board, Science Open
since 2014	Member, Steering Committee, Davidson Institute, Reno, USA
2014 - 2018	Member, The Israel Young Academy, Israel

Project Coordination, Membership in Collaborative Projects

since 2022	Applicant, Research Grant “The interplay between endoplasmic reticulum and mitochondria in protein targeting and mistargeting”, German Research Foundation (DFG), Germany
2019 - 2021	Collaborative Grant, German Israeli Foundation for Scientific Research and Development (GIF), Germany and Israel
2018 - 2022	International Training Network (ITN) “Peroxisome Interactions and Communication (PerICo)”, Horizon 2020 Research and Innovation Programme, European Union (EU)

2017 - 2022	Project “Design principles of living membranes”, VolkswagenStiftung, Hanover, Germany
2017 - 2021	Grant, German-Israeli Project Cooperation (DIP), German Research Foundation (DFG), Germany
2016 - 2023	Head, Subproject “Mapping cellular contact sites and their interplay (P11)”, Collaborative Research Centres (SFB) 1190, DFG

Honours and Awarded Memberships

since 2020	Ambassador, TU Munich, Munich, Germany
since 2020	Member, German National Academy of Sciences Leopoldina, Germany
2019	Jean Vance prize for breakthroughs in Contact Site research, UC San Francisco, San Francisco, USA
since 2017	Elected member, European Molecular Biology Organization (EMBO)
2017	Gold Medal, EMBO
2017	National Prize, Federation of European Biochemical Societies (FEBS)
2016	Dr. Gilbert Omenn and Martha Darling Professorial Chair in Molecular Genetics, Weizmann Institute of Sciences, Rehovot, Israel
2015	Anniversary Prize, Federation of European Biochemical Societies
2014	Weizmann Institute of Science Scientific Council Prize, Weizmann Institute of Sciences, Rehovot, Israel
2014	Selected, “40 under 40” young scientists, Cell
2011	Young Investigator Award, EMBO

Research Priorities

Maya Schuldiner is an Israeli molecular geneticist. With her research, she aims to achieve a mechanistic understanding of the basic functions underlying intracellular organization.

Proteins are the building blocks of life. They are involved in every vital process. But for 30% of all proteins, their function is not yet known. Maya Schuldiner wants to clarify the functions and basic processes of these proteins. To do so, she is using robotics combined with analytical methods. This has enabled her to accelerate the investigation of proteins enormously.

In her laboratory, she studies the sorting and transport of proteins to cell organelles, especially to peroxisomes, mitochondria, and the endoplasmic reticulum. The sorting to organelles is achieved by specific protein targeting sequences and targeting factors that identify them. Maya Schuldiner

and her team have identified two new targeting pathways for proteins to reach the endoplasmic reticulum (Guided Entry of Tail-anchored proteins (GET) and SND (Srp iNDependent) pathways). She was also able to describe completely new methods and pathways of protein targeting to mitochondria and peroxisomes (ER-SURF / targeting receptor Pex9).

Organelle communication plays an essential role in the coordination of cell function. Organelles communicate via contact sites between their membranes. Maya Schuldiner has enormously broadened the understanding of these contacts by discovering new contact sites, molecular tethers and regulators and describing new functions for selected contacts.

Her research results have deepened and advanced the understanding of the functioning and communication of organelles. She makes her analytical methods available to researchers around the world to help them characterize proteins faster.