

Name and Academic Title: Dr. Oren Moscovitz

Postgraduate professional career

- Since 2025 **Assistant professor** at the Scojen Institute for Synthetic Biology at the Reichman University, Israel. (starting in June 1st)
- Since 2018 **Research Group leader** of the “Glycan-Targeted Therapeutics” research group at Max Planck Institute of Colloids and Interfaces, Berlin. The glycan biology group develops mAbs against tumor-associated carbohydrate antigens (TACAs) and investigates changes in endogenous anti-glycan antibodies during the development of human pathologies.
- Since 2018 **A lecturer** at the department of Biochemistry, Freie Universität Berlin.
- 2014-2018 **Post-doctoral research fellow** at the Biomolecular Systems department at Max Planck Institute of Colloids and Interfaces in Potsdam.
- 2014-2017 **Alexander von Humboldt fellow**, Technische Universität Berlin.
- 2007-2013 **Ph.D.** in Biochemistry from the Weizmann Institute of Science, Israel.

Education

- 2005-2007 **M.Sc.**, Biotechnology and Molecular Biology, The Hebrew University of Jerusalem, Israel
- 2001-2004 **B.Sc.**, Summa cum laude, Molecular Biology, Bar Ilan University, Israel

Awards – Functions – Editorial Boards

- 2024: **The Hermann Neuhaus Prize-** the Max Planck Society
- 2014: **Alexander Von Humboldt Foundation-** research fellowship
- 2013: **The Minerva Fellowship Program-** research fellowship
- 2013: **“Best Young Scientist Award”-** Israeli Society for Mass Spectrometry (ISMS).

Recent Publications (# (co)-corresponding author

1. Jost Lühle, Simon Krost, Felix Goerdeler, Christian Seitz, Peter H. Seeberger, and **Oren Moscovitz**[#]. Cysteine-Engineered CAR-T Cells to Counter Antigen Escape in B Cell Lymphoma. **ACS Central Science** (In press) (2025)
2. Felix Goerdeler, Emelie E. Reuber, Jost Lühle, Sabrina Lechnitz, Anika Freitag, Ruslan Nediellkov, Raluca Groza, Helge Ewers, Heiko M. Möller, Peter H. Seeberger[#], and **Oren Moscovitz**[#]. Thiol-mediated Uptake of a Cysteine-containing Nanobody for Anti-Cancer Drug Delivery. **ACS Central Science**. 9(6): 1111–1118 (2023). <https://doi.org/10.1021/acscentsci.3c00177>
3. Sana Khan Khilji, Felix Goerdeler, Kristin Frensemeier, David Warschkau, Jost Lühle, Zeinab Fandi, Falko Schirmeister, Zhuo Angel Chen, Onur Turak, Alvaro Mallagaray, Stefan Boerno, Bernd Timmermann, Juri Rappsilber, Peter H Seeberger[#], **Oren Moscovitz**[#]. Generation of glycan-specific nanobodies. **Cell Chemical Biology**, 29(8): 1353-1361.e6 (2022). [doi: 10.1016/j.chembiol.2022.05.007](https://doi.org/10.1016/j.chembiol.2022.05.007)
4. Hila Ben Ami Pilo, Sana Khan Khilji, Jost Lühle, Karina Biskup, Bar Levy Gal, Irit Rosenhek Goldian, Daniel Alfandari, Or-Yam Revach, Edo Kiper, Mattia I. Morandi, Ron Rotkopf, Ziv Porat, Véronique Blanchard, Peter H. Seeberger, Neta Regev-Rudzki, **Oren Moscovitz**[#]. Sialylated N-glycans mediate monocyte uptake of extracellular vesicles secreted from Plasmodium falciparum-infected red blood cells. **Journal of Extracellular Biology** 1(2), e33: (2022). <https://doi.org/10.1002/jex2.33>

5. Ankur Midha, Guillaume Goyette-Desjardins, Felix Goerdeler, **Oren Moscovitz**, Peter H. Seeberger, Karsten Tedin, Luca D. Bertzbach, Bernd Lepenies, and Susanne Hartmann. Lectin-Mediated Bacterial Modulation by the Intestinal Nematode *Ascaris suum*. **Int. J. Mol. Sci.** 22(16): (2022). doi: 10.3390/ijms22168739
6. Simon Budde, Felix Goerdeler, Johannes Floß, Peter Kreitmeier, Elliot F. Hicks, **Oren Moscovitz**, Peter H. Seeberger, Huw M. L. Davies and Oliver Reiser. Visible-light mediated oxidative ring expansion of anellated cyclopropanes to fused endoperoxides with antimalarial activity. **Org. Chem. Front.**, 7: 1789-1795 (2020). <https://doi.org/10.1039/D0QO00168F>
7. Silvia Varela-Aramburu, Chandradhish Ghosh, Felix Goerdeler, Patricia Priegue, **Oren Moscovitz**, Peter H. Seeberger. Targeting and Inhibiting Plasmodium falciparum Using Ultra-small Gold Nanoparticles. **ACS Appl. Mater. Interfaces**, 12(39): 43380-43387 (2020). <https://doi.org/10.1021/acsami.0c09075>
8. **Oren Moscovitz**, Gili Ben-Nissan, Irit Fainer, Dan Pollack, Limor Mizrahi & Michal Sharon*. The Parkinson's-associated protein DJ-1 regulates the 20S proteasome. **Nature Communications**, 6:6609 (2015). doi: 10.1038/ncomms7609 (2015)
9. Dror S. Chorev, **Oren Moscovitz**, Benjamin Geiger, Michal Sharon*. Regulation of focal adhesion formation by a vinculin-Arp2/3 hybrid complex. **Nature Communications**, 30(5):3578. (2014). doi: 10.1038/ncomms4758 (2014)
10. **Oren Moscovitz**, Peter Tsvetkov, Nimrod Hazan, Izhak Michaelievski, Hodaya Keisar, Gili Ben-Nissan, Yosef Shaul, Michal Sharon*. A mutual feedback loop between the 20S proteasome and its regulator, NQO1. **Molecular cell**, 13;47(1):76-86. doi: 10.1016/j.molcel.2012.05.049
11. Peter Tsvetkov, Nadav Myers, **Oren Moscovitz**, Michal Sharon*, Jaime Prilusky and Yosef Shaul. Thermo-resistant intrinsically disordered proteins are efficient 20S proteasome substrates. **Molecular BioSystems**. 8(1):368-73. (2012). <https://doi.org/10.1039/C1MB05283G>

Patents

- **SINGLE DOMAIN ANTIBODIES SPECIFICALLY BINDING GLOBO - SERIES GLYCANS** International Patent No. WO2021064227. Inventors: Seeberger, PH, **Moscovitz, O**.
- **CYSTEINE-ENGINEERED ANTIGEN-BINDING DOMAINS**. Patent Applicatio No. EPA-164116. Inventors: Seeberger, PH., Jost Lühle, Felix Goerdeler, **Moscovitz, O**.
- **CYSTEINE-ENGINEERED CHIMERIC ANTIGEN RECEPTORS**. Patent Applicatio No. EPA-163119. Inventors: Seeberger, PH., Jost Lühle, Felix Goerdeler, **Moscovitz, O**.

Funding

- 2025: MOST-DFG €241k CysCAR-T therapy against TNBC
- 2024: €748k (from a total of €3Mio for the "ENDO-PAIN" consortium (BMBF))
- 2024: €324k (from a total of €1.6Mio for the Deutsch-Israelische Projektkooperation (DIP) (DFG) "Targeting intratumoral bacteria for lung cancer detection and therapy")
- 2022: PhD student funding from the Berlin School of Integrative Oncology (BSIO), Berlin, Germany
- 2022: PhD student funding from the SFB1340 „Matrix in Vision“, Berlin, Germany

Other

- Since 2023: Co-founder of AGAS Theranostics, Berlin, Germany. Profiling anti-glycan antibodies (AGAs) for endometriosis and breast cancer detection and patient stratification. Part of the Max Planck Society accelerator “Maximize”
- Since 2019: Co-founder of TACALYX GmbH, Berlin, Germany. Developing anti-glycan antibodies for cancer therapy.