

Iris Grossman-Haham, Ph.D.

Curriculum Vitae

PERSONAL DETAILS

Date of birth: May 4th, 1985

Address: Department of Life Sciences, Ben-Gurion University of the Negev, P.O. Box 653, Beer-Sheva 8410501, Israel

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APPOINTMENTS

Senior Lecturer, Department of Life Sciences, Faculty of Natural Sciences, Ben-Gurion University of the Negev, Israel	2021 – present
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Postdoctoral Scholar, Laboratory of Ron Vale, University of California, San Francisco Research topic: Mechanisms of regulating cilia motility	2017 - 2021
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EDUCATION

Ph.D., Department of Structural Biology, Weizmann Institute of Science, Rehovot, Israel Thesis title: Mechanism and inhibition of the enzyme QSOX, catalyst of basement membrane modulation in cancer	2010 – 2016
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B.Sc. in Chemistry and Biology, The Hebrew University of Jerusalem, Jerusalem, Israel	2007 - 2010
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HONORS

YSSP (Young Scientists Support Program) Finalist, SHUIMU Cryo-EM & AI Drug Discovery Powerhouse	2022
The Hadassah and Sidney Musher Science Award, Ben-Gurion University of the Negev	2022
The Helen Hay Whitney Postdoctoral Research Fellowship, USA	2017 - 2020
Lonia and Jose Roth Memorial Prize for Ph.D. Thesis, Weizmann Institute of Science, Israel	2017
National Postdoctoral Award Program for Advancing Women in Science, Israel	2016
Student Poster Prize, The 40 th Lorne Conference on Protein Structure and Function, Australia	2015
Clifford Felder Prize for Excellent Ph.D. Students, The Weizmann Institute of Science, Israel	2014
Fellowship to participate in the 64th Lindau Nobel Laureate Meeting, Germany	2014
The Feinberg Graduate School Dean's Prize for M.Sc. Students, Israel	2013
International NRW Young Scientist Award in Structural Biology, Germany	2012
Dean's List for Academic Excellence, The Hebrew University of Jerusalem, Israel	2010
Fellowship for the Oscar and Emma Getz summer science program, The Weizmann Institute of Science, Israel	2009
Dean's List for Academic Excellence, The Hebrew University of Jerusalem, Israel	2008
Full Scholarship Based on Academic Excellence, The Hebrew University of Jerusalem, Israel	2007

PUBLICATIONS

Equally contributing authors; * Corresponding author

1. **Grossman-Haham, I.*** (2023). Towards an atomic model of a ciliary beating axoneme. *Curr. Opin. Struct. Biol.* 78, 102516.

2. **Grossman-Haham, I.**, Coudray, N., Yu, Z., Wang, F., Zhang, N., Bhabha, G. and Vale, R. D.* (2021). Structure of the radial spoke head and insights into its role in mechanoregulation of ciliary beating. *Nat. Struct. Mol. Biol.* 1, 20-28.
3. Feldman, T. **Grossman-Haham, I.**, Elkis, Y., Vilela, P., Moskovits, N., Barshack, I., Salame, T. M., Fass, D.* and Ilani, T.* (2020). Inhibition of fibroblast secreted QSOX1 perturbs extracellular matrix in the tumor microenvironment and decreases tumor growth and metastasis in murine cancer models. *Oncotarget* 11, 386-398.
4. Javiit, G.#, **Grossman-Haham, I.#**, Alon, A., Resnick, E., Mutsafi, Y., Ilani, T. and Fass, D.* (2019). cis-proline mutants of quiescin sulfhydryl oxidase 1 with altered redox properties undermine ECM integrity and cell adhesion in fibroblast cultures. *Protein Sci.* 28, 228-238.
5. **Grossman-Haham, I.**, Rosenblum, G., Namani, T., and Hofmann, H.* (2018). Slow domain reconfiguration causes power-law kinetics in a two-state enzyme. *Proc. Natl. Acad. Sci.* 115, 513-518.
6. **Grossman, I.**, Ilani, T., Fleishamn, S. J. and Fass, D.* (2016). Overcoming a species-specificity barrier in development of an inhibitory antibody targeting a modulator of tumor stroma. *Protein Eng. Des. Sel.* 29, 135-147.
7. **Grossman, I.***, Aviram, H. Y., Armony, G., Horovitz, A., Hofmann, H., Haran, G. and Fass, D. (2015). Single-molecule spectroscopy exposes hidden states in an enzymatic electron relay. *Nature Commun.* 6.
8. Gat, Y., Vardi-Kilshtain, A., **Grossman, I.**, Major, D. T.* and Fass, D.* (2014). Enzyme structure captures four cysteines aligned for disulfide relay. *Protein Sci.* 23, 1102-1112.
9. **Grossman, I.**, Alon, A., Ilani, T. and Fass, D.* (2013). An inhibitory antibody blocks the first step in the dithiol/disulfide relay mechanism of the enzyme QSOX1. *J. Mol. Biol.* 425, 4366-4378.
10. Ilani, T.* , Alon, A., **Grossman, I.**, Horowitz, B., Kartvelishvily, E., Cohen, S. and Fass, D.* (2013). A secreted disulfide catalyst controls extracellular matrix composition and function. *Science* 341, 74-76.
11. Alon, A., **Grossman, I.**, Gat, Y., Kodali, V. K., DiMaio, F., Mehlman, T., Haran, G., Baker, D., Thorpe, C. and Fass, D.* (2012). The dynamic disulphide relay of quiescin sulphhydryl oxidase. *Nature* 488, 414-418.

PATENTS

1. Fass, D., Fleishman, S. J., Warszawski, S., **Grossman, I.** and Khmelnsky, L. Chimeric quiescin sulfhydryl oxidase (QSOX1) antibodies and uses of same. U.S. Patent application PCT/IL2019/050914, filed August 14, 2019.
2. Fass, D., **Grossman, I.**, Ilani, T. and Alon, A. Compositions for inhibition of quiescin sulfhydryl oxidase (QSOX1) and uses of same. Patent application PCT/IL2013/050209, issued April 25, 2017.

SELECTED TALKS

EMBO Cilia Meeting, Cologne, Germany	October 2022
Institute of Molecular Genetics of the Czech Academy of Sciences, Prague, Czech Republic	June 2022
Israel Crystallography Association (ICA) Meeting, via Zoom	May 2021
Bay Area Cytoskeleton Meeting, via Zoom	September 2020
UCSF cryo-EM seminar series, via Zoom	September 2020
Science Bio-abroad Biochemistry, via Zoom	May 2020
New York University cryo-EM seminar series, via Zoom	May 2020
The Helen Hay Whitney Foundation Annual Meeting, Boston, MA	November 2019
Israel Chemical Society (ICS) Meeting, Tel-Aviv, Israel	February 2015
La Trobe Institute for Molecular Science, Melbourne, Australia	February 2015
NRW Research School BioStruct, Heinrich-Heine-University, Düsseldorf, Germany	November 2012
Israel Crystallography Association (ICA) Meeting, Jerusalem, Israel	May 2012