



Tal Gordon

Postdoctoral Scholar, Stem Cell Biology and Regenerative Medicine

Bio

BIO

I am a zoologist and molecular biologist interested in the molecular basis of regeneration. My research focuses on stem cells and regeneration in ascidians, a group of marine invertebrates that represent the closest living relatives of the vertebrates. One of the main questions that motivate my research is whether regeneration capabilities lost during evolution can, at least to some extent, be re-acquired. As regeneration is not universal in the animal kingdom, I hypothesize that comparing regeneration in species with distinct regenerative capacities will lead to the discovery of key components of regeneration.

During my postdoc I intend to use comparative genomics to identify conserved cellular and molecular mechanisms that underlie ascidians' regeneration.

HONORS AND AWARDS

- Seal of Excellence, Marie Skłodowska-Curie Actions (2023-2025)
- Postdoctoral fellowship, The Zuckerman STEM Leadership (2023-2024)
- The Presidential postdoctoral scholarship, Tel Aviv University (2023-2024)
- Covid 19 emergency postdoctoral fellowship, Israel Academy of Sciences and Humanities (2021-2022)
- University Rector Postdoctoral Scholarships, Tel-Aviv University (2020-2021)

STANFORD ADVISORS

- Ayelet Voskoboynik, Postdoctoral Research Mentor
- Irving Weissman, Postdoctoral Faculty Sponsor

LINKS

- LinkedIn: https://www.linkedin.com/in/tal-gordon-289282211?lipi=urn%3Ali%3Apage%3Ad_flagship3_profile_view_base_contact_details%3BJHzeTACTSwuFao6qxjfMAA%3D%3D

Publications

PUBLICATIONS

- **Stemness Activity Underlying Whole Brain Regeneration in a Basal Chordate.** *Cells*
Gordon, T., Zaquin, T., Kowarsky, M. A., Voskoboynik, Y., Hendin, N., Wurtzel, O., Caicci, F., Manni, L., Voskoboynik, A., Shenkar, N.
2022; 11 (23)
- **Molecular characterization of the immediate wound response of the solitary ascidian *Polycarpa mytiligera*** *DEVELOPMENTAL DYNAMICS*
Hendin, N., Gordon, T., Shenkar, N., Wurtzel, O.
2022; 251 (12): 1968-1981
- **And Then There Were Three horizontal ellipsis : Extreme Regeneration Ability of the Solitary Chordate *Polycarpa mytiligera*** *FRONTIERS IN CELL AND DEVELOPMENTAL BIOLOGY*

Gordon, T., Upadhyay, A., Manni, L., Huchon, D., Shenkar, N.
2021; 9: 652466

● **Sexual and asexual development: two distinct programs producing the same tunicate.** *Cell reports*

Kowarsky, M. n., Anselmi, C. n., Hotta, K. n., Burighel, P. n., Zaniolo, G. n., Caicci, F. n., Rosental, B. n., Neff, N. F., Ishizuka, K. J., Palmeri, K. J., Okamoto, J. n., Gordon, T. n., Weissman, et al
2021; 34 (4): 108681

● **Spawning induction, development and culturing of the solitary ascidian *Polycarpa mytiligera*, an emerging model for regeneration studies** *FRONTIERS IN ZOOLOGY*

Gordon, T., Roth, L., Caicci, F., Manni, L., Shenkar, N.
2020; 17 (1): 19

● **Regeneration ability in four stolidobranch ascidians: Ecological and evolutionary implications** *JOURNAL OF EXPERIMENTAL MARINE BIOLOGY AND ECOLOGY*

Gordon, T., Manni, L., Shenkar, N.
2019; 519

● **Gut-spilling in chordates: Evisceration in the tropical ascidian *Polycarpa mytiligera*** *SCIENTIFIC REPORTS*

Shenkar, N., Gordon, T.
2015; 5: 9614