

CURRICULUM VITAE Dr. Jenny Tynyakov

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EDUCATION:

October 2016 – 2017: Postdoc at IUI. Research Title: “Effects of a habitat disturbance on behavioral patterns of coral reef fishes”.

2010 – 2015 - Ph.D. at Department of Life Sciences, Ben-Gurion University of the Negev. Thesis Title: “Molar Proteins in the Red Claw Crayfish *Cherax quadricarinatus*”. Supervisor: Prof. Amir Sagi.

2005 – 2008 -M.Sc. in Medical Science, Department of Clinical Immunology and Human Microbiology, Sackler Faculty of Medicine, Tel-Aviv University.

2001 – 2005 -B.Sc. in Life Science and Psychology, Faculty of Life Science and Social Sciences, Tel-Aviv University.

ACADEMIC AND PROFESSIONAL EXPERIENCE:

2017- Current: Developing vocational education training program in marine conservation for Australia.

2012 – 2013: Teaching Assistant at Ecology course, Ben-Gurion University.

2011 – 2014: Teaching Assistant at Vertebrate Zoology, Ben-Gurion University.

2010 – 2014: Teaching Assistant at Invertebrate Zoology, Ben-Gurion University.

2009 – 2010: Research Assistant at Weizmann Institute of Sciences.

2007– 2015 Laboratory worker, Blood Bank, Tel-Aviv Sourasky Medical Center.

2007 – Laboratory worker, Microbiology and Hematology Units, Tel-Aviv Sourasky Medical Center.

2005 – 2007: Research Assistant, Division of Neurology, Tel-Aviv Sourasky Medical Center, Tel-Aviv University.

FIELD AND RESEARCH EXPERIENCE:

- 2016 and 2017 – Teaching at a workshop on coral nurseries and coral fragments preparation for local NGOs in Honduras
- 2007 - to present – specialization in interdisciplinary approach, integrating physiological, molecular, biochemical, biomineralogical, taxonomy and oceanographic techniques.

SPECIAL SKILLS:

Languages: English (fluent), Hebrew (perfect), Spanish (basic), Russian/Ukrainian (mother tongues).

Diving skills: Advanced open water diver since 2008, Nitrox Diver since 2009, Dive Master since 2011, Technical diver since 2012.

Computer skills:

- Microsoft Office programs: Word, Excel, Power Point.
- Statistical analysis programs: RStudio, STATISTICA, ArcMap
- Computer graphics: Photoshop, GoPro studio.
- Ecological and environmental software: Ramas Ecolab, EcoBeaker.

Hobbies: Diving, underwater photography, invertebrate taxonomy and ecology, reading, biking and raising various animals.

NATIONAL AND INTERNATIONAL CONFERENCES:

- **Tynyakov J.** and Shashar N. 2016. Current reef conservation efforts on the Bay Islands of Honduras. VIII Nicaraguan Biotechnology Conference, Granada, Nicaragua.
- Abehsera S., Glazer L., **Tynyakov J.**, Plaschkes I., Chalifa-Caspi V., Khalaila I., Aflalalo E.D. and Sagi A. 2015. Binary patterning of chitin metabolism pathways in a crayfish: a tool for multi gene studies of the molt cycle in

arthropods. The Society for Integrative and Comparative Biology (SICB), West palm beach, Florida, U.S.A.

- **Tynyakov, J.**, Ben-Tov, S., Abehsera S., Khalaila I., Regev N, Aflalo E.D., Weil, S. and Sagi, A. 2014. A novel protein in the crayfish molar found to affect mandibular mineralization *in vivo*. Society for experimental biology (SEB) conference, Manchester, United Kingdom.
- **Tynyakov, J.**, Ben-Tov, S., Weil, S., Berman, A and Sagi, A. 2013. A novel multi-task protein from crayfish molar tooth with the capacity to bind chitin and enhance calcium carbonate precipitation and apatite crystallization. 13th International Congress on Invertebrate Reproduction and Development (ICIRD-2013), Detroit, MI, USA.
- **Tynyakov, J.**, Ben-Tov, S., Weil, S., Berman, A and Sagi, A. 2013. Toward understanding the mechanism behind biomineralization in the crayfish mandibular molar tooth. 9th Annual Conference of the Israeli Association of Aquatic Studies. Michmoret, Israel.
- **Tynyakov, J.**, Ben-Tov, S., Glazer, L., Weil, S., Berman, A. and Sagi, A. 2012. Proteins of the mandible molar tooth in the red claw crayfish *Cherax quadricarinatus*. Crustacean Society Summer Meeting and 10th Colloquium Crustacea Decapoda Mediterranea, Athens, Greece.
- **Tynyakov J.**, Ben-Tov S., Glazer L., Weil S., Berman A. and Sagi A. 2012. Proteins of the mandible molar tooth in the red claw crayfish *Cherax quadricarinatus*. The 12th Dan Popper Symposium, Eilat, Israel.
- **Tynyakov J.**, Barnea I., Starr A., Vexler A. and Ben Yosef R. The inhibitory effect of anti-ErbB-4 antibody *in vitro* and *in vivo* 2007. The Sixth Annual Meeting of Israeli Oncologists (ISCORT-6). Eilat, January 2007.

PUBLICATIONS:

1. **Tynyakov J.**, Rousseau M., Chen M., Figus O., Belhassen Y., and Shashar N. (2017). Artificial reefs as a means of spreading diving pressure in a coral reef environment. *Ocean & Coastal Management*. 149. 159–164 .<https://doi.org/10.1016/j.ocecoaman.2017.10.008>
2. Belhassen Y. Rousseau M., **Tynyakov J.** and Shashar N. (2017). Evaluating the attractiveness and effectiveness of artificial coral reefs as a recreational ecosystem service. *J. Environmental. Management*. 203(1): 448–456 .<https://doi.org/10.1016/j.jenvman.2017.08.020>
3. Abehsera S., Peles S., **Tynyakov J.**, Bentov S., Aflalo ED., Li S., Li F., Xiang J. and Sagi, A. (2017). MARS: A protein family involved in the formation of vertical skeletal elements. *Journal of Structural Biology*. <https://doi.org/10.1016/j.jsb.2017.04.003>.
4. Bentov S., Aflalo, E. D., **Tynyakov J.**, Glazer, L. and Sagi, A. Calcium phosphate mineralization is widely applied in crustacean mandibles. *Scientific Reports* 6. (2016). Article number: 22118. doi:10.1038/srep22118.
5. **Tynyakov J.**, Bentov S., Abehsera S., Khalaila, I., Manor R., Katzir Abilevich L., Weil S., Aflalo, E. D. and Sagi, A. (2015). A novel chitin binding crayfish molar tooth protein with elasticity properties. *PLoS ONE*. 10(15): e0127871- e0127871.
6. Abehsera, S., Glazer, L., **Tynyakov, J.**, Plaschkes, I., Chalifa-Caspi, V., Khalaila, I., Aflalo, E. D. and Sagi, A. (2015). Binary gene expression patterning of the molt cycle: The case of chitin metabolism. *PLoS ONE*, 10(15): e0130787.
7. **Tynyakov J.**, Bentov S., Abehsera S., Yehezkel G., Roth Z., Khalaila I., Weil S., Berman A., Plaschkes I., Tom M., and Sagi, A. A crayfish molar tooth protein with putative mineralized exoskeletal chitinous matrix c properties. *Journal of Experimental Biology* (2015): doi: 10.1242/jeb.123539
8. **Tynyakov Samra J.**, Auriel E, Levy-Amir Y. and Karni A. (2011). Reduced ErbB4 Expression in Immune Cells of Patients with Relapsing Remitting Multiple Sclerosis. *Multiple Sclerosis International*. Article ID 561262, doi:10.1155/2011/561262

PUBLICATIONS UNDER REVIEW:

Tynyakov J., Pertzalan A., Kheifets E. and Belmaker J. (2017). Tolerance of divers in a sedentary coral reef fish varies across sites with different diving regimes. *Marine pollution bulletin*.

ACADEMIC AND PROFESSIONAL AWARDS:

- Accommodations grant to participate in the VIII Nicaraguan Biotechnology Conference, Granada, Nicaragua 2016.
- A travel grant to participate in the Society for experimental biology (SEB) conference, Manchester, United Kingdom 2014.
- ASSEMBLE (Association of European Marine Biological Laboratories) travel grant to perform a research at Stazione Zoologica, Ischia, Italy, 2014.
- Best student oral presentation award in the 13th Congress of the International Society of Invertebrate Reproduction and Development, Detroit, MI, USA, 2013.
- A travel grant to participate in the 13th Congress of the International Society of Invertebrate Reproduction and Development, Detroit, MI, USA, 2013.
- Prize of Excellence in the Scientific Research. Tel-Aviv Sourasky Medical Center, Tel-Aviv University 2007.