



Dr. Özlem GÖNÜLKIRMAZ ÇANÇALAR

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Education

Ph.D. in Ecology, Evolution and Behavior **2018-2023**

Hebrew University of Jerusalem, Israel

Marie-Sklodowska Curie Grant, Comparative Insect Chronobiology (CINCHRON) Program

Dissertation: “The Influence of Clock Genes on Complex Behaviors in the Bumble Bee *Bombus terrestris*”

M.Sc. in Biology **2013-2015**

Middle East Technical University, Natural and Applied Sciences, Ankara, Turkey

Dissertation: “Investigation of the effects of long-term nocturnal feeding on blood leptin and lipids values, weight management, and behavior, in elderly Wistar rats”

B.Sc. in Biology **2006-2011**

Hacettepe University, Faculty of Science, Ankara, Turkey

Minor Degree in Anthropology Department **2008-2011**

Hacettepe University, Faculty of Literature, Ankara, Turkey

Work Experience

- Pan Biotechnology Corporated Company, Founder/General Manager, May 2015-2018
- Hebrew University of Jerusalem, Israel, Marie-Curie Research Fellow, December 2018-Present.

Research Experience

- **Ph.D. project** funded by the European Union’s Horizon 2020 research and innovation program under the Marie Skłodowska-Curie grant agreement No 765937
“Bumblebee Clock: CRISPR/Cas9 editing of circadian clock genes in a social bumblebee”
Advisor: Prof. Guy Bloch
- **Secondment** in Marie-Curie program, University of Wurzburg, Germany, Immunocytochemistry and neuroanatomy in honey bee brain. Advisor: Prof. Charlotte Forster, 2019
- **Secondment** in Marie-Curie program, BCAS, Czech Republic, CRISPR/Cas9 techniques in insects. Advisor: Dr. David Dolezel, 2019

- **Graduate student**, Middle East Technical University, Turkey, “Investigation of the effects of long-term nocturnal feeding on blood leptin and lipids values, weight management, and behavior, in elderly Wistar rats”, Advisor: Prof. Ewa Dogru, 2015
- **Graduate student**, Middle East Technical University, Turkey, “Investigation of the cellular mechanisms of the role of Carboxypeptidase-E (CPE) at neuroprotection”, supported by The Scientific and Technological Research Council of Turkey (TUBİTAK), 2013.
- **Summer Internship**, University of California, San Diego, Salk Institute, USA. Drug-free obesity treatment: Time-restricted feeding, Advisor: Prof. Satchin Panda, 2012
- **Erasmus Summer Internship**, University of Modena and Reggio Emilia, Italy, Archaeobotanical studies in Italy, Advisor: Prof. Anna Marie Mercuri, 2010

Awards

- Poster Merit Award and travel grant, European Biological Rhythms Society Conference in Zurich, Switzerland, 2022, “Time-memory in the bumble bee *Bombus terrestris*”
- World Sustainable Energy Forum, Sustainable Woman Entrepreneur of the Year Award, 2016, Vienna, Austria
- Istanbul International Invention Fair, Silver Medal (2016)
- Ministry of Science, Industry and Technology, 100.000 TL Entrepreneurship prize (2015)
- Special Award of Energy Productivity at Hacettepe University, Faculty of Science and Faculty of Engineering, Project Market Exhibition and Competition (2011)

Abstracts

- European Biological Rhythms Society Conference in Zurich, Switzerland, 2022, “Time-memory in the bumble bee *Bombus terrestris*” (Posterblitz speaker)
- Zoological Society of Israel Conference in TelAviv, Israel, 2022, “Time-sensing in the social bumble bee *Bombus terrestris*” (Oral presentation)
- Virtual Poster in Animal Behaviour Live Seminar Series 2021, “Time-sensing in the social bumble bee *Bombus terrestris*”
- “CRISPR/Cas9 editing of circadian clock genes in a social bumblebee”, Poster presentation in JBC (Jerusalem Brain Community) conference, Israel, May-2019.
- 13. National Neuroscience Congress, Konya-Turkey, poster publication with “Investigation of the effects of long-term night-time-restricted feeding on the blood biochemistry and behavior in old overweight rats” (April 30-May 3, 2015)

Publications

Gonulkirmaz-Cancalar, O.; Shertzer, O.; Bloch, G. Bumble Bees (*Bombus terrestris*) Use Time-Memory to Associate Reward with Color and Time of Day. *Insects* 2023, 14, 707.

<https://doi.org/10.3390/insects14080707> (highlighted on the front page of *Insects* Journal)

Gonulkirmaz-Cancalar, O. and Bloch, G. Sex-Related Variation in Circadian Rhythms in the Bumble Bee *Bombus terrestris*. *Journal of Biological Rhythms* 2024,

<https://doi.org/10.1177/07487304241283863>