

Yair Barnatan

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EDUCATION

UNIVERSITY OF BUENOS AIRES

Nov 2017-present: Ph.D. in Biological Sciences

- Research areas: neuroethology – crustacean visual system – optic flow - optomotor response
- Advisors: Dr. Julieta Sztarker & Dr. Daniel Tomsic
- Recipient of 3-year scholarship from the National Agency for Scientific and Technological Promotion and 2-year scholarship from National Research Council (Ministry of Science).

2011-2017: Licenciatura in biological sciences

- Degree equivalent to BA+MA (7-year degree length)
- GPA: 7.54/10.0
- Thesis: “Optomotor response of the crab *Neohelice granulata*: characterizing the optimal triggering stimulus, monocular vision analysis and inter-specific approach”. Advisors: Dr. Julieta Sztarker & Dr. Daniel Tomsic.

JOURNAL PUBLICATIONS

- **2022:** Barnatan, Y., Tomsic, D., Camera, A. & Sztarker, J. (2022) Matched function of the neuropil processing optic flow in flies and crabs: the lobula plate mediates optomotor responses in *Neohelice granulata*. Proceedings of the Royal Society B.
- **2019:** Barnatan, Y., Tomsic, D., & Sztarker, J. Unidirectional optomotor responses and eye dominance in two species of crabs. Frontiers in Physiology.

INTERNATIONAL TRAINING EXPERIENCE

NEWCASTLE UNIVERSITY, UK

Nov 2017-Mar 2018: Training internship in Electron Microscopy

- Supervisor: Dr. Claire Rind
- Conducted research studying the synapse structure of the lobula giant neuron of the crab *Neohelice granulata* using TEM and SBF-SEM.

CONGRESS PRESENTATIONS

2021: Animal Behavior Live Annual Online Conference

Barnatan, Y., Tomsic, D., & Sztarker, J. Climbing the arthropod phylogenetic tree to find the optic flow processing centers in crabs. Virtual poster presentation, international venue.

2020: Sociedad Argentina de Neurociencias

Barnatan, Y., Tomsic, D., & Sztarker, J. “Functional evidence of the crustacean lobula plate as optic flow processing center”. Virtual poster presentation, national venue.

2017: 1º Reunión de Biología del Comportamiento del Cono Sur

Barnatan, Y., Tomsic, D., & Sztarker J. “Estudio de la respuesta optomotora en diversas condiciones de estimulación utilizando dos especies de cangrejos semiterrestres”. Poster presentation, international venue.

2016: 2º Federation of Latin-American and Caribbean Societies for Neuroscience Congress

Barnatan, Y., Tomsic, D., & Sztarker J. “Searching for the optic flow processing center in crabs”. Poster presentation, international venue.

TEACHING EXPERIENCE

UNIVERSITY OF BUENOS AIRES

2016-2018: Undergraduate Teaching Assistant

Subjects: biochemistry, toxicology (Department of Biological chemistry); evolution (Department of Department of Ecology, Genetics and Evolution).

- Instructed and guided bench work with undergraduate students
- Assisted students in projects and seminars

ECOS SCHOOL

2017: High school biology teacher

Biology as a curricular subject for high-school students as well as biology for pre-university level

SCIENCE DISSEMINATION AND OUTREACH

2016: Ciencia Hoy magazine

Article titled “divide et impera”, about brain regions activated coordinately when playing games. Ciencia Hoy (science popularization magazine) Vol: 25, Num: 150, pag: 9 (July-August 2016)

Presenter at outreach events: Guided experiments, interactive stands and games

- **2016-2017:** International book fair of Buenos Aires
- **2015:** Tecnópolis science and art fair
- **2014-2016:** Biology week, University of Buenos Aires
- **2013-2016:** Night of museums of the city of Buenos Aires

LANGUAGES

English (professional working proficiency)