

Paola Bardetti, Ph.D.

Email: paola.bardetti@nyu.edu

Phone: (917) 609-6239

Website: www.paolabardetti.com

Education

- o **Ph.D. Molecular Biology**, 2018
Institute of Functional Biology and Genomics/ University of Salamanca, Salamanca, Spain
Ph.D. Thesis Advisor: Prof. Dr. José Pérez-Martín
- o **M.S. Molecular Biology of the Cell**, 2011
University of Milan, Milan, Italy
- o **B.S. Biology**, 2010
University of Milan, Milan, Italy

Employment

- o 2019 - **present** | Postdoctoral Researcher
Biology Department, New York University, New York City, NY
Postdoc advisor: Asst Prof. Enrique Rojas
- o 07/2012 – 02/2014 | Quality Management and Assurance
Bayer Manufacturing Healthcare, Milan, Italy

Other Research Experience

- o 05/2016 – 07/2016 | Visiting student at the Molecular Microbiology and Genetics Department at the University of Göttingen in the lab of Prof. Gerard Braus, performing Mass Spectrometry experiments to find new interactors of a cell cycle regulator in *Ustilago maydis*.
- o 01/2011 – 01/2012 | Research in the laboratory of Prof. Lucia Colombo, Bioscience Department, University of Milan, investigating the function of the MADS-box and bHLH transcription factors, CESTA, SEEDSTICK, and ALCATRAZ during flower development in *Arabidopsis thaliana*.
- o 11/2009 - 02/2010 | Research in the laboratory of Prof. Dario DiFrancesco, Bioscience Department, University of Milan, Milan, Italy. Investigating HCN4 and MCM channels in mice.

Fellowships

- o Marie Curie Fellowship, Actions “Marie Curie” Research Training Networks. Project name: “Sensing and Integration of signals governing cell polarity and tropism in fungi”. PITN-GA-2013-607963. PI: Prof. Dr. José Pérez-Martín.

Publications

- o **Paola Bardetti** and Enrique Rojas. A finger-trap mechanism controls bacteria cell width. (In preparation).
- o **Paola Bardetti**, Sónia Marisa Castanheira, Oliver Valerius, Gerhard H Braus, José Pérez-Martín. Cytoplasmic retention and degradation of a mitotic inducer enable plant infection by a pathogenic fungus. *eLife* 2019;8: e48943.
- o Irma Roig Villanova, MauriZio Di Marzo, Eva Zanchetti, **Paola Bardetti**, Francesca Caselli, Veronica Gregis, Andrea Guazzotti, Piero Morandini, Marta A Mendes, Lucia Colombo, and Martin M Kate. MADS-box and bHLH transcription factors coordinate transmitting tract development in *Arabidopsis thaliana*. *Front Plant Sci* 2020 May 6;11:526.

- o Pérez-Martín J., **Bardetti P.**, Castanheira S., de la Torre A., Tenorio-Gómez M. Virulence - specific cell cycle and morphogenesis connections in pathogenic fungi. *Semin Cell Dev Biol.* 2016 Sep; 57:93-99.

Contribution to conferences

Contributed talks

- o Paola Bardetti, Enrique Rojas. A mechanical finger-trap enables bacterial cell width. Subtillery, September 2022, Virtual conference.
- o Paola Bardetti Enrique Rojas. A Sensitivity Analysis of Growth Rate to Perturbation in Essential Gene Expression. American Physical Society, March 2020, Denver, Colorado.
- o Paola Bardetti, José Pérez-Martín. The role of Cdk5 and Crk1 kinases in polar growth during the pheromone-dependent cell cycle arrest in *Ustilago maydis*. Marie Curie Symposium December 2017. Cordoba, Spain.

Contributed posters

- o Paola Bardetti, Enrique Rojas. Turgor pressure-mediated growth is essential to regulate width in *Bacillus subtilis*. American Society for Microbiology, June 2022, Washington D.C.
- o Paola Bardetti. Sonia Castanheira Dias, José Pérez-Martín. Cdk-dependent mechanism involved in the regulation of the induction of hyperpolarized growth in pathogenic fungi: *Ustilago maydis* as a model. Young Life Scientists Symposium. December 2015. Salamanca, Spain.
- o Irma Roig - Villanova, Paola Bardetti, Eva Zanchetti, Daniela Greggio, Martin M. Kater, Lucia Colombo. Functional analysis of the transcription factors SEEDS-TICK and CESTA during ovule development in *Arabidopsis thaliana*. The EMBO Fellows Meeting, June 2012. Heidelberg, Germany.

Teaching Experience

- o 07/2020 - 08/2020 | Instructor, NYU summer course “Essential Molecular Biology: Dissecting the Cellular Machinery” for Master, Bachelor, and High School students, New York University, New York City.
- o 11/2019 | Lectured a class in the Frontiers in Microbiology course for Master and Ph.D. students. Biology Department, New York University.

Community Outreach

- o 2023 – present | Weekly volunteer for the Bowery Mission, New York City. Preparing and serving food for people experiencing homelessness and marginalization.
- o 2022 – present | Volunteering for American Association University Women (AAUW). Social media co-director for the NYC branch and organizer of the Girls for STEM, an hands-on workshops for middle school young women from the NYC metropolitan area.
- o 2022 | Terra NYC STEM Judge, New York City. Evaluating research projects conducted by high school students from the NYC metropolitan area.