

**Anna Delprato, PhD.
Curriculum Vitae**

Contact

BioScience Project
P.O. Box 3266
Wakefield, MA 01880 US
Email: delprato@bioscienceproject.org
Tel: (877) 339-5703 Office
Tel: +33 (0)5 8900-4000 Lab

Citizenship United States

Formal Education

1990-1995 BS, Biology, Worcester State College, Worcester, MA US
1996-2001 PhD, Biology, Clark University, Worcester, MA US

Supplemental Education

2014-2015 Python Data Science and Machine Learning Bootcamp
Thinkful, 3 month online course
<https://github.com/annadelprato/datascience>

Professional Experience

Research

1996-2001 Graduate Research Thesis, Clark University, Worcester, MA US
Mentor: Professor Timothy Lyerla, PhD.
<http://www.clarku.edu/>
Thesis title: *Cellular Characterization of the Light Ear Mouse: An Animal Model for Hermansky Pudlak Syndrome*

2001-2006 Postdoctoral Fellow, Program in Molecular Medicine
UMASS Medical School, Worcester, MA US
PI: Professor David Lambright, PhD.
<http://www.umassmed.edu/pmm/>
Structural, biophysical, and cell biological analyses of Rab GTPase activation by guanine nucleotide exchange factors

2006-2007 Junior Faculty, Program in Molecular Medicine
UMASS Medical School, Worcester, MA US
<http://www.umassmed.edu/pmm/>
Regulatory properties of guanine nucleotide exchange factors

2007-2008 Franco-American Fulbright Research Scholar Award
<http://www.fulbright.org/>

- Laboratoire de Enzymologie et Biochimie Structurales, CNRS Gif-sur-Yvette, FR
<http://www.lebs.cnrs-gif.fr/en.html>
Design of small molecule inhibitors for GTPases and regulators
- 2008-2009 Scientist, Laboratoire de Enzymologie et Biochimie Structurales, CNRS Gif-sur-Yvette, FR
<http://www.lebs.cnrs-gif.fr/en.html>
Analysis of GTPase regulation through lipid interactions
- 2009-present Academic Editor, PLoS ONE
<http://www.plosone.org/>
- 2009-2010 Scientist, European Institute of Chemistry and Biology
INSERM Pessac, FR
<http://www.iecb.u-bordeaux.fr/>
Structural and biochemical analysis of GTPases and regulatory factors involved in ribosomal biogenesis
- 2011-present Director, BioScience Project
Wakefield, MA US
<http://bioscienceproject.org/>.
Non-profit teaching and research organization
- 2012-present Associate Editor, BMC Research Notes
<http://www.biomedcentral.com/bmcresearchnotes/>
Structural Biology section
- 2013-present Visiting Scientist
The Aquitaine Institute for Cognitive and Integrative Neuroscience
University of Bordeaux and Centre National de la Recherche Scientifique
Allée Geoffroy St Hilaire, CS 50023
33615 Pessac, France
www.incia.u-bordeaux1.fr
Molecular basis of behavior
- 2016-present Membership Committee
The International Behavioural and Neural Genetics Society
<http://www.ibangqs.com/>

Publications

Delprato A, Raghavan S, Lyerla TA. An established *light ear* mutant (C57BL/6J-*pdeb^{rd1} le*) mouse cell line exhibits a block to secretion of lysosomal enzymes. (2000) *Experimental Cell Research* 256: 315-320.

Delprato A, Samadani A, Kudrolli A, Tsimring LS. Swarming ring patterns in bacterial colonies exposed to ultraviolet radiation (2001). *Physical Review Letters* 87: 158102-1-158102-2.

Zhu Z, **Delprato A**, Merithew E, Dumas, JJ. Lambright DG. Determinants for broad recognition of exocytic Rab family GTPases by Mss4 (2001). *Biochemistry* 40: 15699-15706

Delprato A, Merithew E, Lambright DG. Structure, exchange determinants, and family-wide Rab specificity of the tandem helical bundle and Vps9 domains of Rabex-5 (2004). *Cell* 118: 607-617.

Murata T, **Delprato A**, Ingmundson A, Toomre DK, Lambright DG, Roy C. Effectors of the Legionella Dot/Icm system that target Rab GTPases (2006). *Nature Cell Biology* 8: 971-977.

Delprato A and Lambright DG Structural basis of Vps9 domain recognition of Rab GTPases (2007). *Nature Structural and Molecular Biology* 14: 406-412.

Dinitto J, **Delprato A**, Lee MT, Cronin TC, Huang S, Guilherme A, Czech MP and Lambright DG. Structure and mechanism of auto-inhibition and activation in 3-Phosphoinositide dependant Arf GTPase exchange factors (2007). *Molecular Cell*. 28: 569-583.

Ingmundson A, **Delprato A**, Lambright DG, Roy C. *Legionella pneumophila* proteins that regulate Rab1 membrane cycling (2007). *Nature*. 450: 365-369.

Fang Z, Takizawa N, Wilson KA, Smith TC, **Delprato A**, Davidson MW, Lambright DG, Luna EJ. The membrane-associated protein, Supervillin, accelerates F-actin-dependent rapid Integrin recycling and cell motility (2010). *Traffic*. 11: 782-799.

Delprato A. Topological and functional properties of the small GTPases protein interaction network (2012.) *PLoS ONE*. 7: e44882.

Alix E, Chesnel L, Bowzard BJ, Tucker AM, **Delprato A**, Cherfils J, Wood DO, Kahn RA, Roy CR. The capping domain in RalF regulates effector functions (2012). *PLoS Pathogen* 8: e1003012.

Delprato A, Aransay AM, SYSGENET consortium, Kollmus H, Schughart K, Falcon-Perez JM. Meeting report of the European mouse complex genetics network SYSGENET (2013). *Mammalian Genome* 24: 190-197.

Folly-Klan M, Alix E, Stalder D, Ray P, Duarte LV, **Delprato A**, Zeghouf M, Antony B, Campanacci V, Roy CR, Cherfils J. A novel membrane sensor controls the localization and ArfGEF activity of bacterial RalF (2013). *PLoS Pathogen* 9: e1003747.

Delprato A, Al Kadri Y, Pérébaskine N, Monfoulet C, Henry Y, Henras AK, Fribourg S. Crucial role of the Rcl1p-Bms1p interaction for yeast pre-ribosomal RNA processing (2014). *Nucleic Acids Res*. 42: 10161-72.

Ashbrook DG, **Delprato A**, Grellmann C, Klein M, Wetzel R, Overall RW, Badea A. Transcript co-variance with Nestin in two mouse genetic reference populations identifies Lef1 as a novel candidate regulator of neural precursor cell proliferation in the adult hippocampus (2014). *Front Neurosci*, 8:00418.

Delprato A, Bonheur B, Algéo, Rosay P, Lu L, Williams RW, Crusio WE. Systems genetic analysis of hippocampal neuroanatomy and spatial learning in mice. Submitted June 14, 2015 to *Genes Brain and Behavior*.

Crusio WE, Dhawan E, Chesler EJ and **Delprato A**. Analysis of morphine responses in mice reveals a QTL on Chromosome 7. *F1000Research* 2016, 5:2156 doi:10.12688/f1000research.9484.2

Crusio WE, Rubino C and **Delprato A**. Engaging high school students in systems biology through an e-internship program *F1000Research* 2017, 6:20 doi:10.12688/f1000research.10570.1

Delprato A, Crusio WE Genetic Dissection of Variation in Hippocampal Intra- and Infrapiramideal Mossy Fibers in the Mouse *Methods Mol Biol.* 2017;1488:419-430 doi: 10.1007/978-1-4939-6427-7_19

Teaching

1996 (Summer)	Laboratory Coordinator, Frontiers Program/Molecular Biology Worcester Polytechnic Institute, Worcester, MA US
1996-2000	Lecturer and Laboratory Coordinator, Cell Biology, Genetics, Microbiology, and General Biology. Clark University, Worcester, MA US
1997 (Summer)	Course Instructor, Introduction to General, Organic, and Biochemistry. Becker College, Worcester, MA US
2000 (Summer)	Laboratory Coordinator, Frontiers Program/Molecular Biology Worcester Polytechnic Institute, Worcester, MA US
2011-2012	Project Designer and Coordinator, Science and Social Media (Course Instructor: IJsbrand Kramer "Signalisation Cellulaire") University of Bordeaux 1/IECB Talence, FR
2015-present	Project Coordinator and Instructor, Neuroinformatics Internships BioScience Project, Wakefield, MA US