

# JONATHAN T. FINGERUT

---

Saint Joseph's University • 5600 City Avenue, Philadelphia, PA 19131  
(610) 660-1830 • [jfingeru@sju.edu](mailto:jfingeru@sju.edu)

## EDUCATION:

Ph.D. Biology	2003	University of California, Los Angeles, CA
B.A. Biology	1994	Cornell University, Ithaca, NY

## RESEARCH AND TEACHING EXPERIENCE

Saint Joseph's University, Associate Professor	2012 - present
Saint Joseph's University, Assistant Professor	2006 - 2012
Philadelphia University, Adjunct Assistant Professor	2005 – 2006
Academy of Natural Sciences of Philadelphia, Research Associate	2003 – 2006
University of California, Teaching Assistant	1997 – 2002

## COURSES TAUGHT (9 contact hours per semester)

Organismic Biology	Invertebrate Zoology	Biomechanics*
Field Research Techniques*	The Environment (Non-Major)	Graduate Seminar
Exploring the Earth (Non-Major)*	Oceanography (PLS)	Biology of Insects* (Grad)

(\* denotes new courses developed for Saint Joseph's University)

## RESEARCH INTERESTS

### Topic areas

- Invertebrate Biology
- Marine, Estuarine and Freshwater Ecology
- Organism-Flow Interactions/Biomechanics
- Animal Behavior

### Major ongoing research projects

#### *Role of behavior and flow in dispersal and population distributions*

Examination of the physical and behavioral mechanisms responsible for the dispersal and spatial distribution of larval black flies and diatoms in freshwater streams and fruit flies in terrestrial environments.

#### *Ecology of the invasive fruit fly Drosophila suzukii*

Investigation of the dispersal and feeding ecology of this economically important introduced species with the applied goal of developing ecological sensitive control methods.

*Factors controlling the transmission of estuarine trematode parasite infection*

Investigation of the biotic and abiotic factors controlling parasite transmission in an estuarine environment with an emphasis on larval behavior, dispersal, and population dynamics.

**PUBLICATIONS:** (\* denotes Saint Joseph's University students or faculty co-authors)

**Published while at Saint Joseph's University**

- Brannin M.\*, O'Donnell M.K.\*, Fingerut J.T. 2014 Effects of ontogeny and hydrodynamics on the growth rates of the black fly *Simulium tribulatum*. *Integrative Zoology* 9:61-69
- Fingerut J.T., Orbe K. \*, McRobert S.\* 2013 Fluorescein dye as a tagging agent for *Drosophila* dispersal studies. *Drosophila Information Service* 95
- Fingerut J.T., Orbe K.\*, Flynn D.\*, Habdas P.\* 2013 Creating a better bone: A biomechanics laboratory exercise. *Bioscene* 39: 10-15
- Fingerut J.T., and Simmen L.\* 2012 Silk use by benthic macroinvertebrates. In *Silk: properties, production and uses*. NOVA Scientific Publishers
- Habdas P.\*, Mawhinney M.\*, O'Donnell M.K.\*, Fingerut J.T. 2012 Measuring drag force in Newtonian liquids in the introductory laboratory. *The Physics Teacher* 97
- Oates J.\*, Fingerut J.T. 2011 Internal movement of estuarine digenetic trematodes through their intermediate snail host *Cerithidea californica*. *Journal of Parasitology* 97:1181-1183
- Fingerut J.T., Hart D.D., Thomson J. 2011 Larval settlement in benthic environments: The effects of velocity and bed element geometry. *Freshwater Biology*, 56:904-915
- Fingerut J., Schamel L.\*, Faugno A.\*, Mestrinaro M.\*, Habdas P.\* 2009 Role of silk threads in the dispersal of larvae through stream pools. *Journal of Zoology*, 279:137-143
- Zimmer R.K., Fingerut J.T., Zimmer C.A. 2009 Dispersal pathways, seed rains, and the dynamics of larval behavior. *Ecology*, 90:1933-1974

**Published previous to joining Saint Joseph's University**

- Fingerut J.T., Hart D.D., McNair, J. 2006 Silk use enhances benthic invertebrate settlement. *Oecologia*, 150:202-212
- Thomson J.R., Clark B.D., Fingerut J.T., Hart D.D. 2004 Local modification of benthic flow environments by suspension-feeding stream insects. *Oecologia*, 140:533-542

- Fingerut, J.T., Zimmer, C.A., Zimmer R.K. 2003 Larval swimming overpowers turbulent mixing and facilitates transmission of a marine parasite. *Ecology*, 84:2502-2515
- Fingerut J.T., Zimmer C.A., Zimmer R.K. 2003 Patterns and processes of larval emergence in an estuarine parasite system. *Biological Bulletin*, 205:110-120

## CONFERENCE PRESENTATIONS WHILE AT SAINT JOSEPH'S UNIVERSITY

(\* denotes Saint Joseph's University students or faculty co-authors)

- 2010 Ecological Society of America, Pittsburgh, PA  
*Effects of stream flow and larval age on black fly growth rates*  
 Brannin M.\*, O'Donnell M.K.\*, Fingerut J.T.
- 2009 Society for Integrative and Comparative Biology, Boston, MA  
*Silk filaments facilitate larval dispersal through freshwater stream pools*  
 Fingerut J.T., Schamel L.\*, Faugno A.\*, Mestrinaro M.\*, Haddas P.\*
- North American Black Fly Association, Valencia, FL  
*Recent advances in understanding organism-flow interaction for the dispersal of Simulium tribulatum larvae*  
 Fingerut J.T., Hart D., Thomson J., Schamel L.\*, Faugno A.\*, Mestrinaro M.\*, Haddas P.\*
- 2008 Society for Integrative and Comparative Biology, San Antonio, TX  
*Larval settlement in benthic environments: The effects of velocity and bed geometry*  
 Fingerut J.T., Thomson J., Hart D.
- National Conference on Undergraduate Research, Salisbury, MD  
*A quantitative analysis of the forces on black fly larvae with and without silk during resuspension*  
 Faugno, A.\*, Fingerut J.T.

## INVITED TALKS

- 2010 Saint Joseph's University, Dean's Colloquium
- 2008 Shoals Marine Laboratory: Sustainability 2008  
 Academy of Natural Sciences China Exchange Program at Saint Joseph's University
- 2007 Shoals Marine Laboratory: Sustainability 2007
- 2006 University of Pennsylvania, Department of Earth and Environmental Science

## GRANTS AND AWARDS

2012	Saint Joseph's University Award for Teaching Excellence
2011	Member of the writing committee for a \$1,600,000 HHMI grant (in review)
2007, 2011	Saint Joseph's University Summer Research Fellowship \$8,000
2008	Member of the writing committee for a \$1,000,000 HHMI grant (funded)
2006	Academy of Natural Sciences SEDG Award \$500
2002	National Sea Grant World Ocean Conf. Student Presentation Award UCLA Excellence in Life Sciences Teaching Award
2001	UCLA Departmental Fellowship \$3,800
1998, 1999, 2001	UCLA Departmental Research Grant \$1,000 / year
1999-2001	Pre-doctoral Research Fellow (Sea Grant National Biotechnology Initiative)
1998-1999	National Science Foundation Research Fellowship

## GRADUATE STUDENTS MENTORED

(Students for whom I am the primary mentor are in bold, dates are graduation)

2015	Allison Blansfield (expected) Nelson Melendez (expected) Kaitlyn Kimmel (expected)
2014	<b>Jonathan English</b> <i>The effect of flow on the growth of benthic freshwater diatoms</i> Greg Way (expected) David Kay (expected)
2012	<b>Briena Healey</b> <i>The effect of conspecific density and physical conditions on the behavior and settlement patterns of the black fly <u>Simulium tribulatum</u></i> Tim Paciorek Megan Inayoshi
2011	Mark Reynolds
2010	<b>Jessica Oates</b> <i>The internal movement of estuarine trematodes through their intermediate host <u>Cerithidea californica</u></i> Alex Collins Bob Podlinksi
2009	<b>Michelle Brannin</b> <i>The effect of ontogeny on the growth rates of the black fly <u>Simulium tribulatum</u></i> Paula Roy
2008	<b>Lindsay Schamel</b> <i>Do stream pools act as sinks to drifting larvae of the black fly <u>Simulium tribulatum</u></i> Carrie Blakesley
2006	Erin Graham

## UNDERGRADUATE RESEARCHERS MENTORED

2013	Marissa Misiura '15, Kristina Orbe'14
2011,12	Kristina Orbe '14
2010	Jacqui Fritsch '11 and Mary Kate O'Donnell '11, Kristina Orbe'14
2009	Jacqui Fritsch '11 and Mary Kate O'Donnell '11
2008	Laura Depman '09, Amie Porcelli '08 and Spencer Whealon '10
2007	T.J. Faugno '08 and Matthew Keuny '08

## PROFESSIONAL SERVICE

*Reviewed papers for:* Journal of the North American Benthological Society, Freshwater Biology, Aquatic Ecology, Marine Biology, Biological Bulletin, Limnology and Oceanography: Fluids and Environments and Freshwater Science

*Reviewed grants for:* Massachusetts Sea Grant, Danish Research Agency and the National Science Foundation

## ACADEMIC SERVICE

### *University Level*

Current	Member, Faculty Senate Executive Committee + APP/FPP Liaison Member, University Council Chair, Greenspace Subcommittee of the University Sustainability Committee
2011-Present	Member, Faculty Senate Executive Council Member, Academic Technology Advisory Council, Classroom Committee
2009-Present	Member, Energy and Greenspace Subcommittees of the University Sustainability Committee
2007-2009	Member, Faculty Policies and Procedures
2006-2009	Saint Joseph's University Representative to Pennsylvania Environmental Research Consortium

### *College Level*

2008-2010	Member, College of Arts and Sciences College Council Executive Council
2008-2009	President, Saint Joseph's University Chapter of Sigma Xi

### *Departmental Level: Environmental Science*

2007-Present	Member, Environmental Science Program Advisory Board
--------------	--

*Departmental Level: Biology*

2012	Member, Departmental Assessment Committee
2011-Present	Departmental Coordinator
2009-Present	Member, Departmental Curriculum Committee (Chair 2012)
2009-Present	Participant, B.E.A.G.L.E program
2008-2011	Faculty Advisor to the Student A.I.B.S. chapter
2008-Present	Co-Chair, Subcommittee on Curriculum for HHMI grant
2006-Present	Academic advisor to Biology majors. ~25 students per semester

**OTHER EXPERIENCE**

Research Associate	1996-1997	Weinberg Consulting Group, Environmental Division
Research Associate	1995	National Council for Science and the Environment
Policy Analyst	1994-1995	The Wildlife Society