

JENNIFER BESHEL, Ph.D.

POSITIONS

Loyola University Chicago

Assistant Professor, Department of Biology, Molecular/Cellular Neuroscience, 2018-2021

Cold Spring Harbor Laboratory and Stony Brook University

Senior Research Scientist, Departments of Neuroscience/Neurobiology and Behavior, 2015-2018

Laboratory affiliation: Josh Dubnau

Cold Spring Harbor Laboratory

Postdoctoral Fellow, Department of Neuroscience, 2008-2015

Laboratory affiliation: Yi Zhong

EDUCATION

The University of Chicago

Ph.D., Department of Psychology (Biopsychology), 2008

Advisor: Leslie Kay

National University of Ireland, Galway

B.A. (Hons), Department of Psychology, 2000

HONORS AND AWARDS

Loyola Langerbeck Award for Undergraduate Research Mentor *Nominee*, 2020

St. Ignatius Loyola Award for Excellence in Teaching *Nominee*, 2019

Polak Young Investigator Award (Association for Chemoreception Sciences), 2015

R01DC013071 NIH Research Project Grant, 2014-2018

(Beschel conceived/wrote, awarded to Zhong as PI, transferred to Dubnau 09/2015)

\$250,000 annually plus indirect costs

F31DC008467 Ruth L. Kirschstein NIH Pre-doctoral NRSA (NIDCD), 2006-2009

\$50,000 annually

Institute for Mind and Biology Travel Grant, 2007

\$1,500 per award

Doolittle-Harrison Fellowship, 2005
\$1,000

Century Fellowship for Graduate Study, 2002-2006
\$50,000 annually

PUBLICATIONS

Dryer, A.P., Martin, M.M., Fulgham, C.V., Jabr, D.A., Bai, L., **Beshel, J.** and Cavanaugh, D.J. (2019) A Circadian Output Center Controlling Feeding: Fasting Rhythms in *Drosophila*. *PLoS Genetics*, 15(11):e1008478.

Beshel, J. • Dubnau, J. and Zhong, Y. (2017) A leptin analog locally produced in the brain acts via a conserved neural circuit to modulate obesity-linked behaviors in *Drosophila*. *Cell Metabolism*, 25:208-217.

• **J. Beshel is the corresponding author**

Sachse, S. and **Beshel, J.** • (2016) The good, the bad, and the hungry: How the central brain codes odor valence to facilitate food approach in *Drosophila*. *Current Opinion in Neurobiology*, 40:53-58.

• **J. Beshel is the corresponding author**

Beshel, J. and Zhong, Y. (2013) Graded encoding of food odor value in the *Drosophila* brain. *The Journal of Neuroscience*, 33: 15693-704. **Featured Article.**

Kay, L.M. and **Beshel, J.** (2010) A beta oscillation network in the rat olfactory system during a 2-alternative choice odor discrimination task. *The Journal of Neurophysiology*. 104:829-839.

Kay, L.M., **Beshel, J.**, Brea, J.N., Martin, C., Rojas-Libano, D. & Kopell, N. (2009) Olfactory oscillations: the what, how and what for. *Trends in Neurosciences*. 32: 207-214.

Mamiya, A., **Beshel, J.**, Xu, C., and Zhong, Y. (2008) Neural representations of airflow in *Drosophila* mushroom body. *PLoS ONE* 3(12):e4063.

Beshel, J., Kopell, N. and Kay, L.M. (2007) Olfactory bulb gamma oscillations are enhanced with odor processing demands. *The Journal of Neuroscience* 27: 8358-8365.

Martin, C.M., **Beshel, J.** and Kay, L.M. (2007) An olfacto-hippocampal network is dynamically involved in odor discrimination learning. *The Journal of Neurophysiology* 98: 2196-2205.

Kay, L.M., **Beshel, J.** and Martin, C.M. (2006) When good enough is best. *Neuron* 51: 1-2.

PRESENTATIONS

Talks at International Meetings

The Allied Genetics Conference. Orlando, Florida (July 2016)
EMBO Neural Control of Metabolism and Eating Behavior Workshop. Cascais, Portugal (May 2016)
Nutritional Homeostasis Workshop. Bonn, Germany (May 2016)
Workshop on Fly Feeding and Metabolism. Cold Spring Harbor, NY (October 2015)
Bi-annual CSHL Neurobiology of Drosophila Conference. Cold Spring Harbor, NY (October 2015)
Bi-annual European Symposium on Insect Taste and Olfaction. Sardinia, Italy (September 2015)
Association for Chemoreception Sciences Annual Meeting. Bonita Springs, FL (April 2015)
New York Area Sense to Synapse Symposium. New York, NY (April 2013)
The International Behavioral and Neural Genetics Society Annual Meeting. Boulder, CO (May 2012)
Bi-annual CSHL Neurobiology of Drosophila Conference. Cold Spring Harbor, NY (October 2011)
Association for Chemoreception Sciences Annual Meeting. Sarasota, FL (April 2007)

Departmental Seminars

The University of Pennsylvania, Department of Physiology. Philadelphia, PA (March 2018)
Loyola University Chicago, Department of Biology. Chicago, IL (February 2018)
Monell Chemical Senses Center. Philadelphia, PA (January 2018)
Monell Chemical Senses Center. Philadelphia, PA (January 2016)
The Rockefeller University (Friedman Lab). New York, NY (October 2013)
Yale University, MCD Biology (Carlson/Emonet Labs). New Haven, CT (September 2013)

Posters at International Meetings

Society for Neuroscience Annual Meeting. Chicago, IL (2015)
European Chemoreception Research Organization Annual Meeting. Leuven, Belgium (2013)
Society for Neuroscience Annual Meeting. Washington DC (2011)
Society for Neuroscience Annual Meeting. Chicago, IL (2009)
Society for Neuroscience Annual Meeting. San Diego, CA (2007)
Society for Neuroscience Annual Meeting. Atlanta, GA (2006)
Society for Neuroscience Annual Meeting. Washington DC (2005)
Computation and Neural Systems (CNS) Annual Meeting. Madison, WI (2005)

TEACHING EXPERIENCE

Courses

Sole Instructor

BIOL395/352 "Neurobiology of feeding in health and disease" (Department of Biology, Loyola University Chicago), 2020-2021

Sole Instructor

BIOL296/396 "Introduction to Research Methods" (Department of Biology, Loyola University Chicago), 2019-2021

Sole Instructor

BIO202/NEUR101 "Introduction to Neuroscience" (Department of Biology, Loyola University Chicago), 2018-2020

Sole Instructor

BIO334/NEU534 "Principles of Neurobiology" (Department of Undergraduate Biology, Stony Brook University), 2016

Graduate teaching assistant

PSYC20300 "Biological Psychology" (Department of Psychology, The University of Chicago), 2005-2006

Graduate teaching assistant

PSYC20700 "Sensation and Perception" (Department of Psychology, The University of Chicago), 2005

Beshel Lab at Loyola University Chicago Undergraduate Researcher

Lizzie Longtine, Spring 2020-Summer 2021

Karan Patel, Spring 2020- Summer 2021

Sunny Patel, Spring 2020- Summer 2021

Taylor Wilson, Spring 2020- Summer 2021

Derek Wagner, Fall 2019-Spring 2020

Molly Klug^{•^}, Spring 2019- Summer 2021 (University of Southern California, Dept. of Neuroscience)

Maryam Butt[^], Spring 2019-Spring 2020 (Chicago College of Osteopathic Medicine)

Jason Jesse[^], Spring 2019-Spring 2020

Austin Mansfield^{•^}, Spring 2019-Spring 2020

Joelle Robinson[^], Spring 2019-Fall 2019

Loyola internal competitive research fellowships:

• 2019 Biology Summer Research Fellowship recipient

[^]2019 Mulcahy Fellowship recipient

M.S. Thesis Committee Member at Loyola University Chicago

Annemiek Doedens, Burns Lab, Fall 2020- Summer 2021

Lilyan Mather, Cavanaugh Lab, Fall 2020- Summer 2021

Research Advisee at Cold Spring Harbor Laboratory

Emily Sprecht (Vanderbilt), Summer 2013

Ryan Lee (University of California, San Bernardino), Summer 2012

Nikil Kumar (Stony Brook University), Winter 2011-Summer 2012

Madeline Abuelafiya (Cold Spring Harbor High School), Spring 2011

Kim Goidell (Hamilton College), Summer 2011

Lynn Zhong (Tulane University), Summer 2011

SERVICE

Editorial

Ad hoc reviewer for *Current Biology*, *The Journal of Neuroscience*, *Nature*, *Nature Neuroscience*, *PLoS Biology*, *Science*, *Behavioral Processes*, *Neuroscience*

University

Department of Biology/Neuroscience Faculty Search Committee, 2020- Summer 2021

Department of Biology Grievance Committee, 2018- Summer 2021

Department of Biology Alumni Relations Committee, 2018- Summer 2021

Loyola's Weekend of Excellence Undergraduate Research & Engagement Symposium Evaluator, 2019

Community

After School Matters, Senn High School Summer Science Intern Mentor, 2019

PROFESSIONAL AFFILIATIONS

Society for Neuroscience

Association for Chemoreception Sciences

International Behavioral and Neural Genetics Society