

Kyle J. Card

CONTACT INFORMATION	6140 Biomedical Physical Sciences Department of Microbiology & Molecular Genetics Michigan State University East Lansing, Michigan 48824 USA	Email: cardkyle@msu.edu
EDUCATION	PhD Candidate, Microbiology & Molecular Genetics and Ecology, Evolutionary Biology, & Behavior Research Topic: Evolution of antibiotic resistance in a long-term experiment with <i>Escherichia coli</i> Advisor: Richard Lenski Michigan State University, East Lansing, Michigan USA Bachelor of Science with honor, Microbiology Michigan State University, East Lansing, Michigan USA Graduation: May 2013	
JOURNAL PUBLICATIONS	Lenski, R.E., Wisser, M.J., Blount, Z.D., Nahum, J.R., Morris, J.J., Zaman, L., Turner, C.B., Wade, B.D., Madamsetti, R., Burmeister, A.R., Baird, E.J., Bundy, J., Grant, N.A., Card, K.J. , Rowles, M., Weatherspoon, K., Papoulis, S.E., Sullivan, R., Clark, C., Mulka, J.S., & Hajela, N. (2015). Sustained fitness gains and variability in fitness trajectories in the long-term evolution experiment with <i>Escherichia coli</i> . <i>Proceedings of the Royal Society London B</i> , 282(1821), 20152292 Ji, Z., Card, K.J. , & Dazzo, F.B. (2015). CMEIAS JFrad: A digital computing tool to discriminate the fractal geometry of landscape architectures and spatial patterns of individual cells in microbial biofilms. <i>Microbial Ecology</i> , 69(3), 710-720	
MANUSCRIPTS IN PREPARATION	Card, K.J. , LaBar, T., Gomez, J.B., & Lenski, R.E. Predictability and contingency in the evolution of antibiotic resistance after multiple decades of relaxed selection.	
FELLOWSHIPS & AWARDS	Howard Hughes Medical Institute (HHMI) Gilliam Fellowship , 2017 - Rudolf Hugh Scholarship Award , Department of Microbiology & Molecular Genetics, Michigan State University, 2017 William S. Sayer Award , Department of Microbiology & Molecular Genetics, Michigan State University, 2013	
GRANTS	NSF BEACON Center Internal Grant , Correlated Responses in Metabolism and Antibiotic Resistance in the LTEE. N. Grant, K. Card , R. Lenski, M. Thomas, & J. Graves. (Funded: 2018-2019, \$94,583) NSF BEACON Center Internal Grant , An Empirical Test of the Evolution of Cooperation by the Hankshaw Effect. B. Connolly, K. Card , B. Kerr, R. Lenski, & L. Zaman. (Funded: 2016-2017, \$79,791)	
CONTRIBUTED PRESENTATIONS	Conference Talks The Evolution of Antibiotic Resistance in a Long-Term Experiment with <i>E. coli</i> , 2018 BEACON Congress, Michigan State University, August, 2018.	

Maintenance of Antibiotic Resistance Traits During a Long-Term Experiment with *E. coli*, 2018 Midwest Ecology & Evolution Conference, Michigan State University, April, 2018.

Maintenance and Evolvability of Antibiotic Resistance Traits During a Long-Term Experiment with *Escherichia coli*, BEACON 2017 NSF Site Visit, Invited Talk, Michigan State University, December, 2017.

The Effect of Relaxed Selection and Gene Interactions on the Evolution of Antibiotic Resistance in a Long-Term Experiment with *Escherichia coli*, 2017 Midwest Ecology & Evolution Conference, University of Illinois Urbana-Champaign, March, 2017.

Posters

Card, K.J., LaBar, T., Gomez, J.B., & Lenski, R.E. Predictability and contingency in the evolution of antibiotic resistance after multiple decades of relaxed selection. BEACON 2018 NSF Site Visit, Michigan State University, East Lansing, MI, December, 2018.

Card, K.J., LaBar, T., Gomez, J.B., & Lenski, R.E. The evolution of antibiotic resistance in a long-term experiment with *Escherichia coli*. 2018 Gilliam Annual Fellows Meeting, Howard Hughes Medical Institute, Ashburn, Virginia, September, 2018.

Card, K.J., LaBar, T., Gomez, J.B., & Lenski, R.E. The evolution of antibiotic resistance in a long-term experiment with *Escherichia coli*. 2018 Population, Evolution, and Quantitative Genetics Conference, Madison, Wisconsin. May, 2018.

Card, K.J., Gomez, J.B., LaBar, T., & Lenski, R.E. The evolution of antibiotic resistance in a long-term experiment with *Escherichia coli*. 2017 Gilliam Annual Fellows Meeting, Howard Hughes Medical Institute, Chevy Chase, Maryland. September, 2017.

Card, K.J., Kauth, M.R., Grant, N.A., Blount, Z.D., & Lenski, R.E. Determination of the genes essential for aerobic citrate metabolism. 2015 BEACON Congress, Michigan State University, East Lansing, Michigan. August, 2015.

Card, K.J., & Dazzo, F.B. Discrimination of natural biofilm architectures using CMEIAS landscape ecology metrics. University Undergraduate Research and Arts Forum, Michigan State University, East Lansing, Michigan. April, 2013.

TEACHING EXPERIENCE

Teaching Assistant, Fundamentals of Microbiology, Michigan State University, Spring 2016.

Teaching Assistant, Advanced Microbiology Laboratory, Michigan State University, Fall 2015.

MENTORSHIP

Undergraduate Research Assistant

Jalin Jordan (Chemistry), February, 2019 -

Jasper Gomez (Biomedical Laboratory Diagnostics Program), May, 2016 -

Tanush Jagdish (visiting from Kalamazoo College), December, 2015.

Lucas Werner (Biochemistry & Molecular Biology), March, 2015.

Jacob Wright (Zoology), December, 2014.

Doctoral Student

Thomas LaBar (Microbiology & Molecular Genetics), October, 2016 - August, 2017.

PROFESSIONAL DEVELOPMENT

Internship at the Michigan Department of Health & Human Services - Infectious Dis-

ease Division, September, 2018 -

Broadening Experiences in Scientific Training (BEST) Trainee, October, 2017 -

SERVICE

Journal Peer Review, mSystems

Ad hoc Review, NSF BEACON Center Internal Grants, 2016 - 2019.

Department of Microbiology & Molecular Genetics Host for Seminar Speaker, Adam Lauring, October, 2018.

Department of Microbiology & Molecular Genetics Host for Seminar Speaker, Michael Baym, February, 2018.

Department of Microbiology & Molecular Genetics Escort for Faculty Candidate, Daria Van Tyne, February, 2018.

BioMolecular Science Gateway Program Recruitment, 2015 - 2019.

Department of Microbiology & Molecular Genetics Escort and Student Coordinator for Faculty Candidate, Jeffrey Barrick, December, 2017.

Department of Microbiology & Molecular Genetics Retreat Committee, October, 2016.

Microbiology & Molecular Genetics Faculty Meeting Representative, August, 2015 - May, 2016.

Poster Evaluator: Undergraduate Research & Arts Forum, Michigan State University, 2015, 2016, 2018; Mid-Michigan Symposium for Undergraduate Research Experiences, Michigan State University, 2016, 2018.

Science Outreach: Darwin Discovery Day Volunteer, 2017 - 2019; *Matter with Curiosity* Blog, used to promote evolution and disability advocacy in STEM fields, 2014 - ; Microbiology Day Volunteer, 2015.

SOCIETY

MEMBERSHIPS

American Society for Microbiology, 2015 -

American Association for the Advancement of Science, 2014 -