Allison E. Hall, PhD

Curriculum Vitae

Regis University Department of Biology Phone: (303)964-6298 Email: ahall013@regis.edu

EDUCATION

Ph.D. Molecular Biology, Princeton University, Princeton, NJ, 2018
Dissertation in the laboratory of Mark Rose, PhD, Department of Molecular Biology
M.S. Molecular Biology, Princeton University, Princeton, NJ, 2014
B.S. with honors Biology, Dickinson College, Carlisle, PA, 2010

RESEARCH EXPERIENCE

Postdoctoral Fellowship, Jeremy Nance Laboratory, NYU School of Medicine, 2018-2023 Contact mediated polarization in the early *C. elegans* embryo

Graduate Research, Mark Rose Laboratory, Princeton University, 2012-2018 Positive and negative regulation of cell fusion in *S. cerevisiae*

Laboratory Coordinator, Georgetown University, 2010-2012

Determining if resveratrol can induce muscle fiber type switching by regulating PGC1 α levels in *Rhesus macaques*

Characterizing trafficking of GPNMB, a transmembrane protein implicated in invasive cancers

Undergraduate Research, Scott Boback Laboratory, Dickinson College, 2007-2010 Investigating whether snakes can sense the beating heart of their prey and respond in a physiologically relevant manner

INDIVIDUAL FELLOWSHIPS

Postdoctoral National Research Service Award Fellow (NRSA), NICHD, Individual, F32, 2020-2023

American Cancer Society Postdoctoral Fellowship, Declined in favor of F32, 2020

TEACHING EXPERIENCE

Assistant Professor, Biology, Regis University, August 2023-present Courses: Medical Microbiology Lecture and Lab, Organismic Biology Lab

Adjunct Instructor of Biology, Developmental Biology, Yeshiva College, Spring 2023 Sole instructor for the Yeshiva College Developmental Biology course

Visiting Instructor of January Programs, Course title "Techniques in fluorescence microscopy using *C. elegans*," Colby College, January 2022

Fully designed and taught a January term lecture and laboratory intensive course for undergraduates. Course involved six lecture and six laboratory contact hours a week for four weeks. Students read primary literature, presented their research weekly, and culminated in individual poster presentations.

Visiting Lecturer, Undergraduate Cell and Developmental Biology, Princeton University, Spring 2021 Lectured in a course of ~70 undergraduates, ran weekly precepts (hour long smaller group lectures ~15 students), assessment design, grading weekly homework assignments, and exam review.

Guest lecturer, Biology of Cancer course, Title: Using Model Organisms to Study Human Cancer, Dickinson College, Fall 2020 and 2021

Graduate course lecturer, Fundamentals in Biology course, Title: "Protein Translocation/Translational Control", NYU School of Medicine, Fall 2020 and 2021

Teaching Assistant, Undergraduate Genetics, Princeton University, Spring 2016

Ran weekly precepts of ~15 students, graded problem sets and exam, proctored exams, and provided exam review.

Teaching Assistant Undergraduate Introduction to Cellular and Molecular Biology, Princeton University, Spring 2014

Instructed weekly lab sessions of \sim 25 students, graded lab notebooks and exams, proctored exams and provided exam review.

Teaching Assistant Undergraduate Human Biology, Genetics, Molecular and Cellular Biology and Microbiology, Georgetown University, 2010-2012

Performed all set up for each laboratory session for each course and aided in instructed of each lab.

MENTORING EXPERIENCE

Graduate student rotation mentor, NYU School of Medicine, Spring 2021

Research mentor for Summer Undergraduate Research Program, NYU School of Medicine, Summer 2018

Research mentor for Summer Undergraduate Research Program, Princeton University, Summer 2014

Co-leader of the Molecular Biology Undergraduate Thesis Writing Workshops, Princeton University, 2015- 2016

TEACHING SEMINARS AND AWARDS

Colby, Bates, Bowdoin Course Design Experience, Colby College, 2021

3- day intensive pedagogy course focused on course design, assessment, inclusive and antiracist teaching, and student success

Thomas J. Silhavy Award for outstanding dedication and service to the Graduate

Program in Molecular Biology, in graduate teaching, mentoring of other graduate students, recruiting of new graduate students and advocacy for graduate student issues, in academics and quality-of-life, Princeton University, 2016

Teagle Teaching Seminar: Year-long inter-departmental seminar on pedagogy, Princeton University, 2014-2015

Received the McGraw Center Teaching Transcript

Outstanding Achievement in Teaching, Princeton University Molecular Biology Program, 2014

ACADEMIC HONORS

Francis Boyer Fellowship in the Life Sciences, Princeton University, Molecular Biology, 2012

Spencer Fullerton Baird Prize for Excellence in Biology and Promise for Future Achievement, Dickinson College, 2010

Magna Cum Laude, 2010

PUBLICATIONS

Hall AE, Lisci M*, Rose MD. (2021). Differential requirement for the cell wall integrity sensor Wsc1p in diploids versus haploids. *Journal of Fungi.* 7(12) 1049.

*undergraduate researcher

Maniscalco C, **Hall**, **AE**, Nance J. (2020). An interphase contractile ring reshapes primordial germ cells to allow bulk cytoplasmic remodeling. *J. Cell Biol*. 219(2).

Frey TA, Somers DJ, Lehman HL, **Hall AE**, Hwang EK, Yarden RI. (2019). The ACTN3 polymorphism: Applications in genetics and physiology teaching laboratories. *CourseSource*.

Hall AE and Rose MD. (2019). Cell fusion in yeast is negatively regulated by components of the cell wall integrity pathway. *Mol. Biol. Cell.* 30:441-452.

Smith JA*, **Hall AE***, Rose MD. (2017). Membrane curvature directs the localization of Cdc42p to novel foci required for cell-cell fusion. *J. Cell Biol.* 216:3971-3980.

*These authors contributed equally to this work

Hyatt JP, Nguyen L, **Hall AE**, Huber AM, Kocan JC, Mattison JA, de Cabo R, LaRocque JR, Talmadge R. (2016). Muscle-specific myosin heavy chain shifts in response to a long-term high fat/high sugar diet and resveratrol treatment in nonhuman primates. *Front Physiol*. 2;7:77.

Boback SM, **Hall AE**, McCann KJ, Hayes AW, Forrester JS, Zwemer CF. (2012). Snake modulates constriction in response to prey's heartbeat. *Biol. Lett.* 23:473-476.

SELECTED PRESENTATIONS

Dynamics of Cell Polarity Gordon Research Conference, New London, NH, Summer 2022 poster presentation

American Society for Cell Biology EMBO Meeting Philadelphia, PA, Winter 2017, poster presentation

American Society for Cell Biology Annual Meeting San Francisco, CA, Winter 2016 poster presentation

The Allied Genetics Conference, Yeast Genetics Meeting Orlando, FL, Summer 2016 *oral presentation* Invited speaker, Dickinson College, Carlisle, PA, Spring 2015 *oral presentation*

Cell Biology of Yeasts Meeting, Cold Spring Harbor Laboratory, NY, Spring 2015 oral presentation

Princeton Molecular Biology Department Retreat, Fall 2015 oral presentation

Princeton Molecular Biology Department Retreat, Fall 2014 poster presentation

Joint Meeting of Ichthyologists and Herpetologists, Providence, RI, Fall 2014 oral presentation

RELATED EXPERIENCE AND SERVICE

Co-organizer of KIDS (Kickstarting Interest in Degrees in Science), volunteer help within a middle school classroom in Harlem, NY, Summer 2019- 2022

Co-organizer of Polarity Club, joint meeting of labs studying polarity, Fall 2015 – Spring 2018

Co-director of the Molecular Biology Graduate Colloquium, Fall 2014 - Spring 2015

Member of the doctoral student recruitment committee, Fall 2012 – Spring 2018

Princeton Graduate MolBio Outreach Program committee member, Fall 2012 - Fall 2016