

Adam P. Williamson, Ph.D.

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Education

- 2012 University of California, Berkeley
 Ph.D., Molecular and Cell Biology
Mentor: Dr. Michael Rape
- 2006 Carleton College
 B.A., Biology

Research Appointments

- 2019- Assistant Professor, Department of Biology, Bryn Mawr College
- 2014 -2019 University of California, San Francisco
 Postdoctoral Fellow (Funding: CRI-Irvington Fellowship)
Mentor: Dr. Ron Vale
Mechanisms Underlying Phagocytosis
- 2012-2013 University of California, Berkeley
 Bridging Postdoc in Graduate Lab
Mentor: Dr. Michael Rape
- 2007-2012 University of California, Berkeley
Mentor: Dr. Michael Rape
Thesis title: "Mechanisms of Ubiquitin-Driven Cell Cycle Control"
- 2004 –2006 Carleton College
 Undergraduate Researcher
Mentor: Dr. Susan Singer
Identification and Characterization of Pisum sativum Developmental Genes

Publications

Peer-reviewed scholarship about phagocytosis and ubiquitin-driven cell cycle control

Britt, E.A. (BMC '21), Gitau, V. (BMC '22), Saha, A. (BMC '22), **Williamson, A.P.** *Modular Organization of Engulfment Receptors and Proximal Signaling Networks: Avenues to Reprogram Phagocytosis.* *Frontiers in Immunology.* 2021 (review)
<https://www.frontiersin.org/articles/10.3389/fimmu.2021.661974/full>

Williamson, A.P. and Vale, R.D. *Spatial Control of Draper Receptor Signaling Initiates Apoptotic Cell Engulfment.* *The Journal of Cell Biology.* 2018
<http://jcb.rupress.org/content/early/2018/08/22/jcb.201711175/>

Morrissey, M.A.*, **Williamson, A.P.***, Steinbach, A.M., Roberts, E.W., Kern, N., Headley, M.B., Vale R.D. *Chimeric Antigen Receptors that Trigger Phagocytosis.* *eLife.* 2018
<https://elifesciences.org/articles/36688>

Williamson, A.*, Werner, A., Rape, M. *The Colossus of ubiquitylation: decrypting a cellular code*. Molecular Cell. 2013 (review)

Wickliffe K.E., **Williamson, A.**, Meyer, H.J., Kelly, A., Rape, M. *K11-linked ubiquitin chains as novel regulators of cell division*. Trends in Cell Biology. 2011 (review)

Williamson, A.*, Banerjee, S.*, Zhu, X., Philipp, I., Iavarone, A.T., Rape, M. *Regulation of Ubiquitin Chain Initiation to Control the Timing of Substrate Degradation*. Molecular Cell. 2011

Williamson, A.*, Wickliffe, K.E.*, Mellone, B.G., Song, L., Karpen, G.H., Rape, M. *Identification of a Physiological E2 Module for the Human Anaphase-promoting complex*. PNAS. 2009

Wickliffe, K., **Williamson, A.**, Jin, L., Rape, M. *The multiple layers of ubiquitin-dependent cell cycle control*. Chemical Reviews. 2009 (review)

Williamson, A., Jin, L., Rape, M. Preparation of synchronized human cell extracts to study ubiquitination and degradation. Methods in Molecular Biology: Mitosis. 2009 (methods paper)

Jin, L.*, **Williamson, A.***, Banerjee, S., Phillip, I., Rape, M. *Mechanism of Ubiquitin-Chain Formation by the Human Anaphase-Promoting Complex*. Cell. 2008

* denotes equal contribution

Scholarship about pedagogy

Cook-Sather, A., Hong, E., Moss, T., **Williamson, A.P.** *Developing new faculty voice and agency through trustful, overlapping faculty-faculty and student-faculty conversations*. International Journal for Academic Development. 2021 (peer-reviewed).

<https://www.tandfonline.com/doi/full/10.1080/1360144X.2021.1947296>

Weiler, K. and **Williamson, A.P.** *Partnering to Build Responsive Learning Communities that Support Students in Crisis*. Teaching and Learning Together in Higher Education. 2020 (not peer-reviewed).

<https://repository.brynmawr.edu/tlthe/vol1/iss30/3/>

Selected Research Presentations since Starting at Bryn Mawr

05/2021 Invited seminar: CEMB Friday Seminar Series, CEMB (UPENN and WashU)
“Engineering phagocytosis to define mechanism and target disease”

09/2020 Invited seminar: Perelman School of Medicine, University of Pennsylvania
“Building designer phagocytes to define mechanism and target disease”

*Canceled (Covid-19) FASEB Immunoreceptors and Immunotherapy Conference, Nova Scotia, Canada
06/2020 “Cellular eating machines for therapy” poster and/or short talk

08/2019 Yale School of Medicine, Cell Biology Department
“Engineering phagocytes to clear corpses and eat cancer”

Courses Taught at Bryn Mawr

Spring 2022: BIOL B317 Evolution and Medicine (new course)

Spring 2022: BIOL B352 Immunology with Lab

Spring 2022: B400 Research (5 senior thesis research students)

Fall 2021: HLTH B115 Introduction to Health Studies

Fall 2021: B398 Biology Senior Seminar: Cancer Biology

Fall 2021: B400 Research (5 senior thesis research students)

Spring 2021: B400 Research (3 senior thesis research students)

Spring 2021: B398 Science and Society: Epidemics (10 senior thesis students)

Spring 2021: BIOL B352 Immunology with Lab (28 students)

Fall 2020: BIOL B110 Explorations in Biology I (97 students)

Fall 2020: HLTH B115 Introduction to Health Studies (69 students)

Spring 2020: B398 Science and Society: Drug Discovery (8 senior thesis students)

Spring 2020: HLTH115 Introduction to Health Studies (30 students)

Fall 2019: B352 Immunology with Lab (7 students) (new laboratory course)

Selected Professional Service since Starting at Bryn Mawr

2021-	Mentor, STEM in the Liberal Arts Program
2020, 2021	Instructor, STEM Posse Immersion Summer Program, Biology Module
2020-	Co-Director, Bi-Co Health Studies Program, Bryn Mawr and Haverford College
2020-	Member, Institutional Biosafety Committee, Bryn Mawr College
2019-	Faculty Committee, Mount Tamalpais College (College Program at San Quentin, a degree-granting college located inside a U.S. prison), San Quentin, CA
2019-	Education Partner, Center for Engineering Mechanobiology, NSF funded center centered at UPENN and Washington University, St. Louis
2020	External Reviewer, SUNY Press

Selected Fellowships and Awards

2014-2017	CRI-Irvington Postdoctoral Fellow (\$164,000 over three years)
2013	Weintraub Award for Outstanding Graduate Research
2006	Distinction on Comprehensive Exam (Senior Thesis), Carleton College