

## **Bridget Waas**

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### **Education**

Ph.D. Candidate in Cell and Developmental Biology 8/2023  
University of Michigan Ann Arbor, MI  
Thesis Advisor: Benjamin Allen, Ph.D. 7/2016-8/2023

B.S. in Biology (concentration in Physiology) Marquette, MI  
Northern Michigan University 8/2012 – 5/2016  
Research Advisor: Robert Belton, Ph.D.

### **Research Experience**

Princeton University Princeton, NJ  
Postdoctoral Researcher with Celeste Nelson, Ph.D. 8/2023 – present  
*Branching morphogenesis in lung development*

University of Michigan Ann Arbor, MI  
Graduate Student Researcher with Benjamin Allen, Ph.D. 5/2017 – 8/2023  
*Kinesin-2 regulation of Hedgehog signaling during cerebellar development*

Genentech South San Francisco, CA  
Graduate Student Intern with Suzie Scales, Ph.D. 6/2019 – 9/2019  
*ApoL1 function in kidney disease*

University of Michigan Ann Arbor, MI  
Perrigo Research Fellow with Ivan Maillard, M.D./Ph.D. 6/2015 – 9/2015  
*DOT1L in steady state hematopoiesis and transplantation*

Northern Michigan University Marquette, MI  
Undergraduate Researcher with Robert Belton, Ph.D. 4/2013 – 5/2016  
*Basigin and MCT interaction in Glioblastoma multiforme cell lines*

### **Honors and Fellowships**

Post-Pandemic Research Recovery Award 10/2022  
University of Michigan

Training Program in Organogenesis 9/2020 – 9/2022  
University of Michigan (T32 HD007505)

Rackham Conference Travel Award 7/2021

University of Michigan

Rackham Conference Travel Award 12/2020  
University of Michigan

Training Program in Cellular Biotechnology 9/2018 – 9/2020  
University of Michigan (T32 GM008353)

Rackham Conference Travel Award 12/2018  
University of Michigan

Shelley Almburg Graduate Student Service Award 9/2018  
University of Michigan, Department of Cell and Developmental Biology

Bradley Merrill Patten Fellowship 9/2017  
University of Michigan, Department of Cell and Developmental Biology

Rackham Pre-Candidate Research Grant 7/2017  
University of Michigan

Perrigo Research Fellowship 6/2015  
University of Michigan, Life Sciences Institute

### **Teaching Experience**

University of Michigan Ann Arbor, MI  
Graduate Student Seminar Coordinator 9/2018 – 4/2020  
CDB 801 – Graduate Seminar

University of Michigan Ann Arbor, MI  
Graduate Student Instructor Summer 2018  
Medical Postdoctoral Research Training Program

University of Michigan Ann Arbor, MI  
Graduate Student Instructor Fall 2017  
CDB 581 – Developmental Genetics

### **Mentoring Experience**

Undergraduate Supervisor 5/2022 – current  
Victor Jia, Class of 2024

Undergraduate Supervisor 9/2018 – 5/2021  
Olivia Merchant, Class of 2021

Big Sib Program 2017-2020

University of Michigan, Cell and Developmental Biology Graduate Program

### Scientific Conferences

American Society for Cell Biology Virtual	December 2021
Society for Developmental Biology Virtual	July 2021
American Society for Cell Biology Virtual	December 2020
Cellular Biotechnology Symposium University of Michigan, Ann Arbor, MI	April 2019
American Society for Cell Biology San Diego, CA	December 2018
Michigan Physiology Society Annual Meeting Wayne State University, Detroit, MI	May 2016
National Conference on Undergraduate Research University of North Carolina, Asheville, NC	April 2016
Michigan Physiology Society Annual Meeting Boyne Mountain Resort, Boyne, MI	April 2015
National Conference on Undergraduate Research Eastern Washington University, Cheney, WA	April 2015

### Oral Scientific Presentations

**Waas, B.**, Carpenter, B.S., Merchant, O.Q., Allen, B.L., *Kinesin-2 motor, KIF17, has dual and opposing roles for Hedgehog-driven cerebellar development.* Illinois State University, Department of Neuroscience and Physiology Seminar.

**Waas, B.**, Carpenter B.S., Allen, B.L. *KIF17 regulates SHH in the developing cerebellum.* Developmental Genetics Group Meeting, January 2020.

**Waas, B.**, Carpenter B.S., Allen, B.L. *Novel Role for kinesin-2 motor, KIF17, in the Developing Cerebellum.* Developmental Genetics Group Meeting, February 2019.

**Waas, B.**, Gupta, N., Scales, S.J. *ApoL1 Splice Variant Expression and Localization in Kidney Podocytes.* Molecular Biology Group Meeting, August 2019.

**Waas, B.**, Carpenter B.S., Allen, B.L. *Novel Role for kinesin-2 motor, KIF17, in the Developing Cerebellum*. Developmental Genetics Group Meeting, April 2018.

**Waas, B.**, Flaherty, M., Lawrence, J., Belton, R. *Exploiting the Warburg Effect: Using CRISPR/CAS9 to Target Glioblastoma Multiforme Cells*. National Conference on Undergraduate Research, April 2016.

**Waas, B.**, Chase, J., Maillard I. *Elucidating the Role of Histone Methyltransferase, DOT1L, in Hematopoietic Homeostasis*. Perrigo Fellowship Symposium, August 2015.

### **Poster Scientific Presentations**

**Waas, B.**, Carpenter, B.S., Merchant, O.Q., Allen, B.L., *KIF17 plays dual and opposing roles in HH-driven cerebellar development*. American Society for Cell Biology, December 2021.

**Waas, B.**, Carpenter, B.S., Merchant, O.Q., Allen, B.L., *KIF17 plays dual and opposing roles in HH-driven cerebellar development*. Society for Developmental Biology, July 2021.

**Waas, B.**, Carpenter B.S., Allen, B.L. *A Novel Role for KIF17 in the Developing Cerebellum*. American Society for Cell Biology, December 2020.

**Waas, B.**, Carpenter B.S., Allen, B.L. *Novel Role for kinesin-2 motor, KIF17, in the Developing Cerebellum*. Cellular Biotechnology Symposium, April 2019.

**Waas, B.**, Carpenter B.S., Allen, B.L. *Novel Role for kinesin-2 motor, KIF17, in the Developing Cerebellum*. Cell and Developmental Biology Retreat, October 2019.

**Waas, B.**, Gupta, N., Scales, S.J. *ApoL1 Splice Variant Expression and Localization in Kidney Podocytes*. Genentech Intern Symposium, August 2019.

**Waas, B.**, Carpenter B.S., Allen, B.L. *Novel Role for kinesin-2 motor, KIF17, in the Developing Cerebellum*. American Society for Cell Biology, December 2018.

**Waas, B.**, Carpenter B.S., Allen, B.L. *Novel Role for kinesin-2 motor, KIF17, in the Developing Cerebellum*. Cell and Developmental Biology Retreat, October 2018.

**Waas, B.**, Carpenter B.S., Allen, B.L. *Novel Role for KIF17 in Cerebellar Development*. Cell and Developmental Biology Retreat, October 2017.

**Waas, B.**, Flaherty, M., Lawrence, J., Belton, R. *Exploiting the Warburg Effect: Using CRISPR/CAS9 to Target Glioblastoma Multiforme Cells*. Michigan Physiology Society Annual Meeting, May 2016.

Schafer D., Flaherty, M., **Waas, B.**, Shoemaker, H., Belton, R. Generation of Basigin-2 Mutations in Glioblastoma Multiforme Tumor Cells to Determine the Necessity for Basigin-2 in

MCT Function. National Conference on Undergraduate Research, April 2015. Michigan Physiology Society Annual Meeting, April 2015.

### Peer-Reviewed Publications

**Waas, B**, Carpenter BS, Merchant OQ, Verhey, KJ, Allen BL. Dual and Opposing Roles for the Kinesin-2 Motor, KIF17, in Hedgehog-dependent Cerebellar Development. *Under Review, Sci Adv.* bioRxiv 2022.08.06.502363; doi: <https://doi.org/10.1101/2022.08.06.502363>

Grigsby SM, Friedman A, Chase J, **Waas B**, Ropa J, Serio J, Shen C, Muntean AG, Maillard I, Nikolovska-Coleska Z. Elucidating the Importance of DOT1L Recruitment in MLL-AF9 Leukemia and Hematopoiesis. *Cancers (Basel)*. 2021 Feb 5;13(4):642. doi: 10.3390/cancers13040642. PMID: 33562706; PMCID: PMC7914713.

Engelke MF, **Waas B**, Kearns SE, Suber A, Boss A, Allen BL, Verhey KJ. Acute Inhibition of Heterotrimeric Kinesin-2 Function Reveals Mechanisms of Intraflagellar Transport in Mammalian Cilia. *Curr Biol*. 2019 Apr 1;29(7):1137-1148.e4. doi: 10.1016/j.cub.2019.02.043. Epub 2019 Mar 21. PMID: 30905605; PMCID: PMC6445692.

### Review and Preview Articles

**Waas B**, Maillard I. Fetal hematopoietic stem cells are making waves. *Stem Cell Investig*. 2017 Apr 7;4:25. doi: 10.21037/sci.2017.03.06. PMID: 28447040; PMCID: PMC5388679.

### Pending Publications

**Waas B**, Allen BL. KIF3C regulates Bergmann glia number and organization in the developing cerebella (*in preparation*).

### References

Benjamin Allen, Ph.D.  
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University of Michigan  
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University of Michigan  
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Sunny Wong, Ph.D.  
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*Additional references available upon request*