

Melissa S. Maginnis, Ph.D.

Associate Professor of Microbiology
Department of Molecular and Biomedical Sciences
The University of Maine
5735 Hitchner Hall
Orono, Maine 04469
Phone: (207) 581-2806
Email: melissa.maginnis@maine.edu
Website: [Maginnis Lab](#)

Faculty and Professional Appointments

- 2020 - present Associate Professor of Microbiology (*with tenure*)
Department of Molecular and Biomedical Sciences (MBS)
The University of Maine, Orono, ME
- 2020 – 2022 Scientific Lead, COVID-19 Science Advisory Board, University of Maine
System (UMS)
- 2020 - 2022 Associate Director of The Center for Undergraduate Research (CUGR)
The University of Maine, Orono, ME
- 2014 - 2020 Assistant Professor of Microbiology
Department of Molecular and Biomedical Sciences
The University of Maine, Orono, ME
- 2013 - 2014 Investigator
Brown University, Providence, RI
Research area: JC Polyomavirus Attachment and Entry
Research Advisor: Walter J. Atwood, Ph.D.

Education and Research Training

- 2007 - 2013 Postdoctoral Research Fellow/Associate
Brown University, Providence, RI
Research area: JC Polyomavirus Attachment and Entry
Research Advisor: Walter J. Atwood, Ph.D.
- 2001 - 2007 Doctor of Philosophy, Microbiology and Immunology
Vanderbilt University, Nashville, TN
Research area: Cellular Determinants of Reovirus Cell Entry
Research Advisor: Terence S. Dermody, M.D.
- 1997 - 2001 Bachelor of Science, *summa cum laude*
Neumann College, Aston, PA
Major: Biological Sciences

External Grant Awards – Project Leader/PI

- 2022 - 2028 Center of Biomedical Research Excellence (COBRE)

- NIH/NIGMS P20 GM144265-01
Role: Research Project Leader
- 2019 - 2025 Academic Research Enhancement Award
NIH/NIAID R15 AI144686-01, 2R15 AI144686-02
Role: Principal Investigator
- 2014 - 2019 Comparative Functional Genomics INBRE in Maine
NIH/NIGMS P20 GM103423
Role: Project leader/Investigator
- 2009 - 2012 Ruth L. Kirschstein National Research Service Award
NIH/NINDS F32NS064870
- 2003 - 2005 Molecular Microbial Pathogenesis Training Program
NIH/NIAID T32AI007281

External Grant Awards – Co-PI

- 2020 - 2021 NSF 2029378
EAGER: Collaborative Research: Detection and Analysis of Airborne
Coronavirus with Bioinspired Membranes
Role: Co-PI

Internal Grant Awards

- 2019 - 2021 Biomedical Sciences Accelerator Fund Award, Cluster Funding, College
of Natural Sciences, Forestry, and Agriculture, The University of Maine,
Orono, ME
Role: Co-Principal Investigator
- 2018 NIH Incentive Grant, Office of the Vice President for Research, The
University of Maine, Orono, ME
Role: Principal Investigator

Research Publications

1. **Maginnis, M.S.** + (2023). β -arrestin and G protein-coupled receptor kinases in viral entry: A graphical review. *Cellular Signaling*, 102: 110558. *, **Corresponding author.**
2. Mehmood, K., Wilczek, M.P., DuShane, J.K., Parent, M.T., Mayberry, C.L., Wallace, J.N., Levasseur, F.L., Fong, T.M., Hess, S.T.+, and **Maginnis, M.S.** + (2022). Dynamics and Patterning of 5-Hydroxytryptamine 2 Subtype Receptors in Response to Ligand JC Polyomavirus. *Viruses*, 14(12), 2597. *, **Corresponding author. [Selected as Highlight Paper].**
3. Regan, D., Fong, C., Bond, A.C.S., Desjardins, C., Hardcastle, J., Hung, S.H., Holmes, A.P., Schiffman, J.D., **Maginnis, M.S.**, and Howell, C. (2022). Improved Recovery of Captured Airborne Bacteria and Viruses with Liquid-coated Air Filters. *ACS Applied Materials & Interfaces*, 14(45):50543-50556.

4. Wilczek, M.P., Pike, A.C.M., Craig, S., **Maginnis, M.S.**⁺, and King, B.L. ⁺ (2022). Rearrangement in the Hypervariable Region of JC Polyomavirus Genomes Isolated from Patient Samples and Impact on Transcription Factor-Binding Sites and Disease Outcomes. *IMJS*, 23(10):5699. ⁺, **Corresponding authors**.
5. Wilczek, M.P., Armstrong, F.A., Mayberry, C.L., King, B.L. and **Maginnis, M.S.** ⁺ (2021). PI3K/AKT/mTOR Signaling Pathway is Required for JCPyV Infection in Primary Astrocytes. *Cells*, 10(11): 3218. ⁺, **Corresponding author**.
6. Wilczek, M.P., Armstrong, F.A., Geohegan, R.P., Mayberry, C.L., DuShane, J.K., King, B.L., and **Maginnis, M.S.**⁺ (2021). The MAPK/ERK Pathway and the Role of DUSPI in JCPyV Infection of Primary Astrocytes. *Viruses*,13(9):1834. ⁺, **Corresponding author**.
7. Mayberry, C.L., Bond, C.S., Wilczek, M.P., Mehmood, K., and **Maginnis, M.S.**⁺ (2021). Sending Mixed Signals: Polyomavirus Entry and Trafficking. *Current Opinion in Virology*, 47:95-105. **[Invited review]**. ⁺, **Corresponding author**.
8. Mayberry, C.L., Wilczek, M.P., Fong, T.M., Nichols, S.L., and **Maginnis, M.S.**⁺ (2021). GRK2 Mediates β -arrestin Interactions with 5-HT₂ Receptors for JC Polyomavirus Endocytosis. *In press, Journal of Virology*, 95(7): e02139-20. **[Spotlight Article]**. ⁺, **Corresponding author**.
9. Mayberry, C.L. and **Maginnis, M.S.**⁺ (2020). Taking the Scenic Route: Polyomaviruses Utilize Multiple Pathways to Reach the Same Destination. *Viruses*, 12(10):1168. **[Invited Review]**. ⁺, **Corresponding author**.
10. Wilczek, M.P., DuShane, J.K., Armstrong, F.A., and **Maginnis, M.S.**⁺ (2020). JC Polyomavirus Infection Reveals Delayed Progression of the Infectious Cycle in Normal Human Astrocytes. *Journal of Virology*, 94(5):e01331-19. **[Cover Illustration]**. ⁺, **Corresponding author**.
11. DuShane, J.K., Mayberry, C.L., Wilczek, M.P., Nichols, S.L., and **Maginnis, M.S.**⁺ (2019). JCPyV-Induced MAPK Signaling Activates Transcription Factors during Infection. *International Journal of Molecular Sciences*, 20(19):4779. ⁺, **Corresponding author**.
12. DuShane, J.K. and **Maginnis, M.S.**⁺ (2019). DNA Virus Exploitation of the MAPK-ERK Cascade. *International Journal of Molecular Sciences*, 20(14):3427. **[Invited Review]**. ⁺, **Corresponding author**.
13. Assetta, B., Morris-Love, J., Gee, G.V., Atkinson, A., O'Hara, B.A., **Maginnis, M.S.**, Haley, S.A., and Atwood, W.J. (2019). Genetic and Functional Dissection of the Role of Individual 5-HT₂ Receptors as Entry Receptors for JC Polyomavirus. *Cell Reports*, 27(7):1960-1966.e6.
14. DuShane, J.K., Wilczek, M.P., Crocker, M.A., **Maginnis, M.S.**⁺ (2019). High-Throughput Characterization of Viral and Cellular Protein Expression Patterns during JC Polyomavirus Infection. *Frontiers in Microbiology*, 10:783. ⁺, **Corresponding author**.
15. Curthoys, N.M., Mlodzianoski, M.J., Parent, M., Butler, M.B., Raut, P., Wallace, J., Lilieholm, J., Mehmood, K., **Maginnis, M.S.**, Waters, H., Busse, B., Zimmerberg, J., and Hess ST.

- (2019). Influenza Hemagglutinin Modulates Phosphatidylinositol 4,5-Bisphosphate Membrane Clustering. *Biophysical Journal*, 116(5):893-909.
16. Mayberry, C.L., Soucy, A.N., Lajoie, C.R., DuShane, J.K., and **Maginnis, M.S.*** (2019). JC Polyomavirus Entry by Clathrin-Mediated Endocytosis is Driven by β -arrestin. *Journal of Virology*, 93(8): e01948-18. [**Spotlight Article**]. *, **Corresponding author**.
 17. **Maginnis, M.S.*** (2018). Virus-Receptor Interactions: The Key to Cellular Invasion. *Journal of Molecular Biology*, 430(17):2590-2611. [**Invited Review**]. *, **Corresponding author**.
 18. DuShane, J.K., Wilczek, M.P., Mayberry, C.L., and **Maginnis, M.S.*** (2018). ERK is a Critical Regulator of JCPyV Infection. *Journal of Virology*, 92(7):e01529-17. *, **Corresponding author**.
 19. Mayberry, C.L., Nelson, C.D.S., and **Maginnis, M.S.*** (2017). JC Polyomavirus Attachment and Entry: Potential Sites for PML Therapeutics. *Current Clinical Microbiology Reports*, 4(3):132-141. [**Invited Review**]. *, **Corresponding author**.
 20. Dimitriadi, M., Derdowski, A., Kalloo, G., **Maginnis, M.S.**, Bliska, B., O' Hern, P., Nguyen, K.C.Q., Cook, S.J., Poulogiannis, G., Atwood, W.J., Hall, D.H., and Hart, A.C. (2016). Decreased Function of Survival Motor Neuron Protein Impairs Endocytic Pathways. *PNAS*, 113(30):E4377-86.
 21. Ströh, L.J.* , **Maginnis, M.S.***, Blaum, B.S., Nelson, C.D., Neu, U., Gee, G.V., O'Hara, B.A., Motamedi, N., DiMaio, D., Atwood, W.J., and Stehle, T. (2015). The Greater Affinity of JC Polyomavirus Capsid for α 2,6-Linked Lactoseries Tetrasaccharide c than for Other Sialylated Glycans Is a Major Determinant of Infectivity. *Journal of Virology*, 89(12):6364-75. *, **Denotes equal contribution**.
 22. **Maginnis, M.S.**, Nelson, C.D.S., and Atwood, W.J. (2014). JC Polyomavirus Attachment, Entry, and Trafficking: Unlocking the Keys to a Fatal Infection. *Journal of Neurovirology*, 21(6):601-13.
 23. Bouley, S.J., **Maginnis, M.S.**, Derdowski, A., Gee, G.V., O'Hara, B.A., Nelson, C.D., Bara, A.M, Atwood W.J., and Dugan, A.S. (2014). Host Cell Autophagy Promotes BK Virus Infection. *Virology*, 456–457:87-95.
 24. Zins, S.R., Nelson, C.D., **Maginnis, M.S.**, Banerjee, R., O'Hara, B.A., and Atwood, W.J. (2014). The Human Alpha Defensin HD5 Neutralizes JC Polyomavirus Infection by Reducing ER Traffic and Stabilizing the Viral Capsid. *Journal of Virology*, 88(2):948-60.
 25. Assetta, B., **Maginnis, M.S.**, Gracia Ahufinger, I., Haley, S.A., Gee, G.V., Nelson, C.D., O'Hara, B.A., Allen-Ramdial, S.A., and Atwood, W.J. (2013). 5-HT₂ Receptors Facilitate JC Polyomavirus Entry. *Journal of Virology*, 87(24):13490-8.
 26. **Maginnis, M.S.**, Ströh, L.J., Gee, G.V., O'Hara, B.A., Derdowski, A., Stehle, T., and Atwood, W.J. (2013). PML-associated Mutations in the JC Polyomavirus Capsid Disrupt LSTc Binding. *mBio*, 4(3):e00247-13.
 27. Nelson, C.D., Derdowski, A., **Maginnis, M.S.**, O'Hara, B., and Atwood, W.J. (2012). The VP1 Subunit of JC Polyomavirus Recapitulates Early Events in Viral Trafficking and is a

Novel Tool to Study Polyomavirus Entry. *Virology*, 428(1):30-40.

28. Neu, U.*, **Maginnis, M.S.***, Palma, A.S., Ströh, L.J., Nelson, C.D., Feizi, T., Atwood, W.J., and Stehle, T. (2010). Structure-Function Analysis of the Human JC Polyomavirus Establishes the LSTc Pentasaccharide as a Functional Receptor Motif. *Cell Host & Microbe*, 8(4):309-19. [**Feature Article, Cover Illustration**]. *, **Denotes equal contribution.**
29. **Maginnis, M.S.**, Haley S.A., Gee, G.V., and Atwood, W.J. (2010). Role of N-linked Glycosylation of the 5-HT_{2A} Receptor in JC Virus Infection. *Journal of Virology*, 84(19):9677-84.
30. Gasparovic, M.L., **Maginnis, M.S.**, O'Hara, B.A., Dugan, A.S., and Atwood, W.J. (2009). Modulation of PML Protein Expression Regulates JCV Infection. *Virology*, 390(2):279-88.
31. **Maginnis, M.S.** and Atwood, W.J. (2009). JC Virus: An Oncogenic Virus in Animals and Humans? *Seminars in Cancer Biology*, 19(4):261-9.
32. Cseke, G.*, **Maginnis, M.S.***, Cox, R.G.*, Tollefson, S.J., Podsiad, A.B., Wright, D.W., Dermody, T.S., and Williams, J.W. (2009). Integrin $\alpha v \beta 1$ Promotes Infection by Human Metapneumovirus. *PNAS*, 106(5):1566-71. *, **Denotes equal contribution.**
33. Dugan, A.S., **Maginnis, M.S.**, Jordan, J.A., Gasparovic, M.L., Manley, K., Page, R., Williams, G., Porter, E., O'Hara, B.A., and Atwood, W.J. (2008). Human α -Defensins Inhibit BK Virus Infection by Aggregating Virions and Blocking Binding to Host Cells. *The Journal of Biological Chemistry*, 283(45):31125-32.
34. **Maginnis, M.S.**, Mainou, B.A., Derdowski, A., Johnson, E.M., Zent, R., and Dermody, T.S. (2008). NPXY Motifs in the $\beta 1$ Integrin Cytoplasmic Domain Are Required for Functional Reovirus Entry. *Journal of Virology*, 82:3181-3191.
35. Kobayashi, T., Antar, A.A.R., Boehme, K.W., Danthi, P., Eby, E.A., Guglielmi, K.M., Holm, G.H., Johnson, E.M., **Maginnis, M.S.**, Naik, S., Skelton, W.B., Wetzel, J.D., Wilson, G.J., Chappell, J.D., and Dermody, T.S. (2007). A Plasmid-Based Reverse Genetics for Animal Double-Stranded RNA Viruses. *Cell Host & Microbe*, 1:147-157.
36. **Maginnis, M.S.**, Forrest, J.C., Dickeson, S.K., Santoro, S.A., Zutter, M.M., Nemerow, G.R., Bergelson, J.M., and Dermody, T.S. (2006). $\beta 1$ Integrin Mediates Internalization of Mammalian Reovirus. *Journal of Virology*, 80:2760-2770. [**Cover Illustration**].

Education-Related Publications

1. Abedi, A., Ferrini-Mundy, J., Maginnis, M.S., Molloy, S., Olsen, B., Pereira da Cunha, M., Sissoko, A, and Volin, J. Fostering Career Development Through Research Learning Experiences. *In preparation for submission to SPUR.*
2. *Kushner, D.B., Cline, T.D., Danthi, P., Debbink, K.M., Ferran, M.C., Flenniken, M., Johnson, D.M., Mehle, A., Morales, D.A., Mukhopadhyay, S., Parker, J.S.L., Spriggs, C.C., *O'Donnell, L.A., and ***Maginnis, M.S.** (2022) Curriculum Guidelines for Graduate and Undergraduate Virology Courses. *Journal of Virology*, 96(18):e01305-22. *, **Co-corresponding authors.**

Teaching-Related Publications

1. Ashby, S. Bressette, G., Brown, S., Charles, S., **Maginnis, M.**, Molloy, S.D., and Neely, M.N. (2022). Genome Sequence of Singleton *Gordonia terrae* Bacteriophage Finkle. *Microbiology Resource Announcements, Bacteriophages*, 11(9):e0069322.
2. Curtis, B., Ganbaatar, B., Lawrence, G., Oglesby, W., Rice, J., Tremblay, E., **Maginnis, M.**, Molloy, S.D., and Neely, M.N. (2022). Genome Sequence of the Cluster CD Gordonia Phage Widow. *Microbiology Resource Announcements, Bacteriophages*, 11(10):e0069522.

Other Scholarly Work

Chapter: Human Polyomaviruses. Author: Melissa S. Maginnis. *Encyclopedia of Virology, 4th edition (Elsevier)*, edited by Dennis Bamford and Mark Zuckerman, Section: Human and Animal Viruses, (Section Editor: Eric Hunter, Ph.D.), *Elsevier*, March 2020.

Invited Seminar and Conference Presentations

- 2022 *Receptor Dynamics and Signaling Pathway Regulation in JC Polyomavirus Entry and Infection*, August 2022, Vera I. Heinz Chair and Affiliates Symposium, University of Pittsburgh, Pittsburgh, PA
- Receptor Dynamics and Signaling Pathway Regulation in JC Polyomavirus Entry and Infection*, June 2022, Emerging Issues in Oncogenic Virus Research 2022, San Pietro in Bevagna, Italy.
- 2020 *Cellular and Molecular Determinants of a Fatal Viral Infection*, Fall 2020 Colloquium Series, Biology Department, Rhode Island College, Providence, RI, *Virtual seminar*.
- Cellular and Molecular Determinants of a Fatal Viral Infection*, UMaine Medicine Seminar Series, The University of Maine, Orono, ME, *Virtual seminar*.
- Proper ID Required: Defining How Viruses Recognize and Invade Target Cells*, Indiana University Microbiology Seminar Series, Indiana University Bloomington, *Virtual seminar*.
- Going Viral: Stealthy but deadly virus with a serious sweet tooth*, Science Lecture Series, Emera Astronomy Center and M.F. Jordan Planetarium in partnership with the Maine Science Festival.
- 2019 *Microscopy-based Approaches to Define the Cellular and Molecular Basis of Viral Disease*, Biological Imaging and Microscopy Symposium, UMaine Medicine, The University of Maine, Orono, ME.
- Cellular and Molecular Determinants of a Fatal Viral Infection*, Wake Forest University, Department of Biology Seminar Series, Winston-Salem, NC.

- Cellular and Molecular Determinants of a Fatal Viral Infection*, Maine Medical Center Research Institute Career Development Association Seminar Series, Scarborough, ME.
- Unlocking the Keys to JC Polyomavirus Infection*, Colgate University, Biology Department Seminar Series, Hamilton, NY.
- 2016 *JC Polyomavirus and PML – a Concern with Immunosuppressants*, Husson University, School of Pharmacy Seminar Series, Bangor, ME.
- How a Virus Invades Host Cells*, Colby College, Biology Seminar Series, Waterville, ME.
- Cellular Determinants of Viral Infection: Proper ID Required*, Bowdoin College, Department of Biology Seminar Series, Brunswick, ME.
- Cellular Determinants of Viral Infection: Proper ID Required*, University of New England, Department of Biology Seminar Series, Biddeford, ME.
- 2015 *Cellular Determinants of Viral Infection: Proper ID Required*, Bates College, Department of Biological Chemistry Seminar Series. Lewiston, ME.
- 2014 *Cellular Determinants of Viral Attachment: Proper ID Required*, MDIBL Seminar Series, Mount Desert Island Biological Laboratory, Bar Harbor, ME.
- Zebrafish Model of JCPyV Infection*, Zebrafish Club Symposium, University of Maine.
- 2013 *Determinants of JC Polyomavirus Infection*, Department of Molecular & Biomedical Sciences, University of Maine, Orono, ME.
- Virus Cell Entry: Proper ID Required*, Natural Sciences Department Seminar Series, Assumption College, Worcester, MA.
- Molecular Determinants of JC Polyomavirus Infection*, Department of Pathology, Microbiology, and Immunology, Vanderbilt University, Nashville, TN.
- 2012 *Molecular Determinants of JC Polyomavirus Infection*, Virginia Tech Research Institute, Roanoke, VA.
- Molecular Determinants of JC Polyomavirus Infection*, Baker Institute, Cornell University, Ithaca, NY.
- 2011 *Molecular Mechanisms of JC Virus Attachment and Entry*, Department of Medical Microbiology and Immunology, University of Wisconsin, Madison, WI.

2010 *Molecular Mechanisms of JC Virus Attachment*, 25th Anniversary of The Lamb Center for Pediatric Research, Vanderbilt University, Nashville, TN.

Invited Professional Development Presentations

2023 Women in BioScience Panel, Biosciences Association of Maine, Portland, ME

2022 Podcast for Vanderbilt's Beyond the Lab series: Faculty at a State University

2022 Careers in Biomedical Sciences Presentation, Undergraduate WiSTEMM, The University of Maine, *virtual presentation*

2021 Library Staff Development Day, Folger Library, The University of Maine, *virtual presentation*

2020 *BioME Virtual Coffee Hour*, Presenter and panelist, BioME

Perspectives on COVID-19, Sit & Sip Virtual Workshop, Health Professions Club, The University of Maine, Orono, ME

2019 *Imposter Syndrome in Graduate School and Career Achievement*, Wake Forest University, Winston-Salem, NC

2016 *My Career in Virology*, Special Seminar: Department of Biological Sciences, Neumann University, Aston, PA

2015 *Careers in Virology*, Health Professions Club, The University of Maine, Orono, ME

Conference Presentations (Presenting author only, full list includes >175 senior-author presentations)

1. **Maginnis, M.S.**, Wilczek, M.P., Armstrong, F.J., Mayberry, C.L., and King, B.L. Cell-type Dependent Differences in JC Polyomavirus Signaling Pathway Regulation. Northeast Regional IDeA Conference, Wilmington, DE, 2023.
2. **Maginnis, M.S.**, Wilczek, M.P., Armstrong, F.J., Mayberry, C.L., and King, B.L. Cell-type Dependent Differences in JC Polyomavirus Signaling Pathway Regulation. First Annual Maine Research Symposium on Biomedical Science and Engineering, University of New England, Portland, ME, 2022.
3. **Maginnis, M.S.**, Mayberry, C.L., Mehmood, K., Parent, M., Hess, S. Characterization of JC Polyomavirus Entry by Serotonin Receptors. *Viruses 2020: Novel Concepts in Virology*, Barcelona, Spain. 2020.
4. **Maginnis, M.S.**, Mayberry, C.L., and DuShane, J.K. Characterization of Cellular Factors Required for JC Polyomavirus Invasion of Host Cells. The 7th Northeast Regional IDeA Conference, Burlington, VT, 2017.

3. **Maginnis, M.S.**, DuShane, J., Mayberry, C., and Soucy, A.N. Cellular and Molecular Determinants of JC Polyomavirus Entry and Infection. 6th Biennial National IDeA Symposium of Biomedical Research Excellence. Washington, D.C, 2016.
4. **Maginnis, M.S.**, DuShane, J.K., Soucy, A.N., and Mayberry, C.L. Molecular Determinants of JC Polyomavirus Entry and Infection. 35th Annual American Society for Virology Conference. Virginia Tech, Blacksburg, VA, 2016.
5. **Maginnis, M.S.**, Simard, A.R., Soucy, A.N., and Price, J.K. Defining the Host-Pathogen Interactions of JC Polyomavirus Infection. The 6th Northeast Regional IDeA Conference, Bar Harbor, ME, 2015.
6. **Maginnis, M.S.**, Ströh, L.J., Neu, L., Stehle, T. and Atwood, W.J. Molecular Determinants of JC Polyomavirus Attachment and Entry. 42nd Maine Biological and Medical Sciences Symposium. Mount Desert Island Biological Laboratory, Bar Harbor, ME, 2015.
7. **Maginnis, M.S.**, Ströh, L.J., Blaum, B.S., Nelson, C.D.S., Neu, U., Gee, G.V., Stehle, T., and Atwood, W.J. Structure-function analysis of human JC polyomavirus attachment to sialic-acid containing receptors. XVIth International Congress of Virology Conference. Montreal, Quebec, Canada, 2014. **State of the Art Lecture.**
8. **Maginnis, M.S.**, Ströh, L., Gee, G.V., O'Hara, B.A., Derdowski, A., Stehle, T., and Atwood, W.J. PML-Associated Mutations in the JC Polyomavirus Capsid Disrupt LSTc Binding. Progressive Multifocal Leukoencephalopathy Conference, NYAS, New York, NY, 2013.
9. **Maginnis, M.S.**, Ströh, L., Neu, U., Stehle, T., and Atwood, W.J. Structure-function Analysis of the Human JC Polyomavirus with Sialic Acid-Containing Receptors. ASV 31st Annual Meeting, University of Wisconsin Madison, Madison, WI, 2012.
10. **Maginnis, M.S.** and Atwood, W.J. Serotonin Receptor Signaling in JC Virus Infection. Annual Meeting of the American Society for Cell Biology. Denver, CO, 2011.
11. **Maginnis, M.S.**, Neu, U., Palma, A.S., Ströh, L.J., Feizi, T., Stehle, T., and Atwood, W.J. Structure-Function Analysis of the Human JC Polyomavirus with the LSTc Pentasaccharide. FASEB Summer Research Conference: Virus Structure and Assembly. Saxtons River, VT, 2010.
12. **Maginnis, M.S.**, Haley, S.A., and Atwood, W.J. The Role of 5-HT_{2A}R N-linked Glycosylation Sites in JC Virus Infection. The DNA Tumor Virus Meeting, St. Catherine's College, Oxford, England, UK, 2009.
13. **Maginnis, M.S.**, Haley, S.A., Dugan, A.S., Gasparovic, M.L., and Atwood, W.J. Molecular Mechanisms of JC Virus Entry. ASV 27th Annual Meeting, Cornell University, Ithaca, NY, 2008.
14. **Maginnis, M.S.**, Derdowski, A.M., Johnson, E.M., and Dermody, T.S. Tyrosine-Based Signaling Motifs in the β 1 Integrin Cytoplasmic Tail Are Required for Functional Reovirus Entry. Gordon Research Conference: Viruses and Cells, Tilton, NH, 2007.

15. **Maginnis, M.S.**, Forrest, J.C., Santoro, S.A., Zutter, M.M., Nemerow, G.R., Bergelson, J.M., and Dermody, T.S. β 1 Integrin Mediates Internalization of Reovirus. 9th Southeast Regional Virology Conference, Atlanta, GA, 2006.
16. **Maginnis, M.S.**, Forrest, J.C., Santoro, S.A., Zutter, M.M., Nemerow, G.R., Bergelson, J.M., and Dermody, T.S. α 2 β 1 Integrin Mediates Reovirus Entry. ASV 23rd Annual Meeting, McGill University, Montreal, Canada, 2004.
17. **Maginnis, M.S.**, Forrest, J.C., Santoro, S.A., Zutter, M.M., Nemerow, G.R., Bergelson, J.M., and Dermody, T.S. α 2 β 1 Integrin Mediates Reovirus Entry. 8th Southeast Regional Virology Conference, Atlanta, GA, 2004.
18. **Maginnis, M.S.**, Forrest, J.C., Santoro, S.A., Zutter, M.M., Nemerow, G.R., Bergelson, J.M., and Dermody, T.S. α 2 β 1 Integrin Mediates Reovirus Entry. 8th International Symposium on dsRNA Viruses, Lucca, Italy, 2003.

Conference Presentations – Teaching and Professional Development

1. Ferrini-Mundy, J., Abedi, A., Pereira da Cunha, M., **Maginnis, M.**, and Molloy, S. Fostering Career Development through Research Learning Experiences. Career Workshop. AAAS 2021 Annual Meeting (Virtual). Co-presenter.
2. Kushner, D., Cline, T., Danthi, P., Debbink, K., Ferran, M., Flenniken, M., Johnson, D., Mehle, A., Morales, D., Mukhopadhyay, S., Parker, J., Spriggs, C., O'Donnell, L.A., and **Maginnis, M.S.** Curriculum guidelines for undergraduate and graduate virology courses. 41st Annual American Society for Virology Conference, University of Wisconsin, Madison, WI, 2022.
3. Kushner, D., Breitbart, M., Cline, T., Debbink, K., Ferran, M., Johnson, D., Maginnis, M.S., Mukhopadhyay, S., Newcomb, L., O'Donnell, L.A., Parker, J., Visalli, R.J. Lower- and higher-order learning outcomes, and lab curriculum guidelines, for virology courses. 42nd Annual American Society for Virology Conference, University of Georgia, GA, 2023.

Honors and Awards

2022	The Vera L. Heinz Selected Speaker Travel Award, The Vera L. Heinz and Affiliates Symposium, University of Pittsburgh, Pittsburgh, PA
2022	Faculty Mentor Impact Award, Office of the Vice President for Research, The University of Maine
2021	Inducted to Phi Kappa Phi Honor Society
2019	American Society for Virology (ASV) Teacher of Undergraduate Students Travel Award The Bangor Savings Bank Faculty Development Fund and The Lyndon Paul LoRusso Memorial Faculty Development Fund Faculty Travel Award
2018	Graduate Mentor Award, Graduate Student Government, The University of Maine, Orono, ME

- 2016 John Neumann Alumni Award, Alumni Association, Neumann (College) University, Aston, PA
- 2013 Early Career Investigator Travel Fellowship
Progressive Multifocal Leukoencephalopathy Conference, New York Academy of Sciences, New York, NY
- 2008 Postdoctoral Fellow Travel Grant Award for Presentation, ASV 27th Annual Meeting, Cornell University, Ithaca, NY
- 2006 Dissertation Enhancement Grant, Graduate School, Vanderbilt University
- 2004 Student Travel Award, ASV 23rd Annual Meeting, McGill University, Montreal, Quebec, Canada
- Student Travel Grant Award for Presentation, Graduate School, Vanderbilt University, 8th Southeast Regional Virology Conference, Atlanta, GA
- 2003 Student Travel Grant Award for Presentation, Graduate School, Vanderbilt University, 8th International Symposium on dsRNA Viruses, Lucca, Italy
- Outstanding Poster Presentation, Vanderbilt Ingram Cancer Center Retreat, Vanderbilt University
- 2003 Travel Award for Presentation, 8th International Symposium on dsRNA Viruses, Lucca, Italy
- 2001 Camin Award for Excellence in Biology, Neumann College
- 1998 International Studies Association Scholarship
- 1998 - 2001 Neumann College Honors Program
- Ursula Herring Memorial Scholarship
- 1997 - 2001 National Dean's List
- Neumann College Merit Scholarship
- Neumann College Vice-President's List
- 1997 Ridley Township Business Association Scholarship

Professional Service

American Society for Virology (ASV)

- 2018 - present American Society for Virology Education and Career Development Committee
- Co-chair, 2020-2023**
- Represent and advocate for trainees to ASV Council
 - Plan ASV Education and Career Development workshops and trainee activities for annual ASV meetings:
 - Education Workshops
 - Career Workshops
 - Careers in Industry Workshop
 - Assistant Professor Bootcamp Workshop
 - Navigating the NIH Workshop
 - Trainee Professional Development Activities
 - Co-led ASV initiative for Virology curriculum guideline development
 - Co-chair of Graduate Virology Curriculum Guideline Committee
 - Co-coordinated and -developed proposal for ASV Student Chapters and launched pilot program

2019 Latin American Scholar Travel Award Reviewer, American Society for Virology

ASV Education and Career Development Workshop Organizer and Convener: "I Don't Belong Here: Understanding the Role of Imposter Syndrome in Career Development," 38th Annual American Society for Virology (ASV) Conference. University of Minnesota, Minneapolis, MN.

Grant Review

- 2023 Grant Reviewer for German Research Foundation Deutsche Forschungsgemeinschaft (DFG)
- 2022 NIH Study Section, AREA/REAP: Infectious Diseases and Immunology – ZRG1 AIDC (80)
- 2021 Czech Science Foundation Research Grant Reviewer, Czech Republic
- 2020 - present Grant Reviewer for Rhode Island IDeA Network of Biomedical Research Excellence (RI-INBRE) Program
- 2017, 2021 Grant Reviewer for Instituto Pasteur Italia, Rome, Italy

Workshop Session Chair

- 2023 Adeno-, Papilloma-, and Polyomaviruses Workshop, 42nd Annual American Society for Virology Conference, University of Georgia, Athens, GA.

2022	Adeno-, Papilloma-, and Polyomaviruses Workshop, 41 st Annual American Society for Virology Conference, University of Wisconsin-Madison, Madison, WI.
2022	Virus-host Interaction II Workshop, Emerging Issues in Oncogenic Virus Research 2022, San Pietro in Bevagna, Italy
2021	48 th Annual Maine Biological and Medical Sciences Symposium (Virtual) 40 th Annual American Society for Virology (ASV) Conference (Virtual) Convener: Rethinking Equity in Higher Education.
2020	Virology Session Moderator, MDI Biological Laboratory Summer Student Virtual Symposium. ASV 2020 Virtual Workshop Co-Chair, Replication and Gene Expression I and Replication and Gene Expression II.
2019	Gene Networks and Regulation/Data Science Workshop, 46 th Annual Maine Biological and Medical Sciences Symposium. Mount Desert Island Biological Laboratory, Salisbury Cove, ME.
2018	Neuroscience, Physiology, & Immunology Workshop, 45 th Annual MBMSS Conference
2017	Virus Receptors and Entry I Workshop, 36 th Annual American Society for Virology Conference, University of Wisconsin-Madison, Madison, WI.
2016	Virus Receptors and Entry I Workshop, 35 th Annual American Society for Virology Conference, Virginia Tech, Blacksburg, VA.
2014	Small DNA Viruses Workshop, XVI th International Congress of Virology Conference. Montreal, Quebec, Canada.

External Positions Held

2022 - present	External Mentoring Consultant, Rhode Island IDeA Network of Biomedical Research Excellence (RI-INBRE) Program
----------------	---

External Poster Judge

2022	Abstract reviewer and poster judge, First Annual Maine Research Symposium on Biomedical Science and Engineering, University of New England, Portland, ME
2020	Poster judge, Maine Biological and Medical Sciences Symposium (MBMSS) Virtual Symposium

Ad hoc Reviewer for 16 Journals:

- *Cell Reports*

- *Critical Reviews in Microbiology*
- *eLIFE*
- *FEBS Journal*
- *Frontiers in Cellular and Infection Microbiology*
- *Frontiers in Microbiology (Virology)*
- *Journal of General Virology*
- *Journal of Virology*
- *Journal of Virological Methods*
- *Microorganisms*
- *PLoS ONE*
- *PLoS Pathogens*
- *Scientific Reports*
- *Virology*
- *Viruses*
- *Virus Research*

Professional Organizations

2021 - present	Phi Kappa Phi Honor Society
2018 - present	World Society for Virology, Full Member
2015 - present	American Society for Microbiology
2009 - 2013	National Postdoctoral Association
2003 - present	American Society for Virology (Full Member since 2015)
2002 - 2007	Vanderbilt University Microbes and Defense Academic Society
1999	Delta Epsilon Sigma Honor Society

Professional Development

2021	Navigating the NIH Workshop, 40 th Annual American Society for Virology (ASV) Conference (Virtual) Centering on Diversity, Equity, and Inclusion Conference in Undergraduate Research and Creative Activity, Council on Undergraduate Research (Virtual).
2019	Advancing Women in Academia: 8 th Annual Networking Conference, ADVANCE Rising Tide, Bangor, ME.
2018	Advancing Women in Academia: 7 th Annual Networking Conference, ADVANCE Rising Tide, Bangor, ME. Safe Zone Training, The University of Maine, Orono ME

- 2017 Advancing Women in Academia: 6th Annual Networking Conference, ADVANCE Rising Tide, The University of Maine, Bangor, ME
- 2016 Mentoring Practices for Junior Faculty Workshop, 6th Annual National IDeA Symposium of Biomedical Research Excellence Conference, Washington, D.C.
- Advancing Women in Academia: 5th Annual Networking Conference, ADVANCE Rising Tide, The University of Maine, Bangor, ME
- 2015 New Research Investigator Orientation, Office of Research and Sponsored Programs, The University of Maine
- Women in Leadership Panel, Discussion on “Centered Leadership”. The University of Maine
- Advancing Women in Academia: 4th Annual Networking Conference, ADVANCE Rising Tide, The University of Maine, Bangor, ME
- Laboratory Management Workshop, Maine INBRE, University of Maine
- 2014 Advancing Women in Academia: 3rd Annual Networking Conference, ADVANCE Rising Tide, The University of Maine, Bangor, ME
- SACNAS Inspiring Women in STEM, Brown University
- 2013 Best Practices for Careers in Academic Medicine and Science, Professional Development Conference, Office of Women in Medicine and Science, Brown University
- 2009 National Postdoctoral Association Conference, Houston, TX

Teaching Experience

The University of Maine, Orono, ME

- 2023 Guest Lecturer, NFA117: presented on the importance of research experiences, planned student research panel, and hosted the Health Professions Office
- 2023 - present Course Instructor, Virus-Host Cell Interactions Discovery Laboratory (BMB475), developed and taught the first inquiry-based, research-intensive virology lab course with focus on cell culture, virology, and immunology
- 2023 Guest Lecturer, Honors 391: Thesis Research Experiences
- 2022 Guest Lecturer, Grant Writing (BMS650), Crafting a Story, Crafting a Grant lecture

- 2022 Guest Lecturer, NFA117: presented on the importance of research experiences, hosted the Health Professions Office
- 2022 Guest Lecturer, Honors Civilization Series (HON212) on Angels in American (exploring the 80s AIDS crisis in the US)
- 2021 Co-Instructor, RLE: Rage of the Phage: taught and supported 4-hour laboratory sessions across bridge week course for first- and second-year students
- 2021 Course Instructor, EPIC (INT125) Course, developed and led a 3-hour lecture on CUGR and Science Communication in a team-taught course to prepare undergraduate students for research (Fall and Spring)
- 2021 Guest Lecturer, Honors Civilization Series (HON212) on Angels in American (exploring the 80s AIDS crisis in the US)
- 2020 - present Course Instructor, Undergraduate Seminar in Microbiology (BMB580/BMB480)
- 2017 - present Course Instructor, Undergraduate Virology (BMB455), redesigned and taught an undergraduate-level course in human molecular virology and viral pathogenesis focused on virologic concepts, methods, and scientific communication
- 2016 - present Course Instructor, Genome Discovery I (BMB150), taught an inquiry-based research-intensive laboratory for first-year undergraduates, Sponsored by HHMI SEA-PHAGES
- Course Instructor, Graduate Virology (BMB598), designed and executed new graduate-level course in human molecular virology and viral pathogenesis with a focus on critical discussion of peer-reviewed literature
- Guest Lecturer, Microbiology (BMB300)
- Honors Research Advisor (HON498, HON499)
- 2015 - present Course Instructor, Graduate Seminar in Microbiology (BMB580)
- 2015 Curriculum development of inquiry-based laboratory course in Cell Culture, Virology, and Immunology
- Guest Lecturer, Virology (BMB455), 2 lectures
- 2014 - present Capstone Undergraduate Research Advisor (BMB491)
- Graduate Thesis Research Advisor (BMB699)

Teaching Experience, Other Institutions

- 2013 Lecturer and Laboratory Preceptor
Viruses: Ancient Machines in a Modern World
Brown University Summer @ Brown Pre-College Program
- 2012 Lecturer, Virology
Salve Regina University, Newport, RI
- Lecturer, Microbiology
Assumption College, Worcester, MA
- 2009 Course Instructor, Infectious Diseases
Brown University Summer @ Brown Pre-College Program
- 2005 Course Director, Methodology
Vanderbilt University Interdisciplinary Graduate Program
- Discussion Leader, Virology Group
Vanderbilt University Interdisciplinary Graduate Program
- Workshop Instructor
Vanderbilt University Center for Teaching
- 2005 - 2006 Lecturer, Molecular Virology
Vanderbilt University
- 2004 - 2006 Lecturer, Methodology
Vanderbilt University Interdisciplinary Graduate Program
- 2004 - 2005 Laboratory Preceptor, Medical Microbiology and Immunology
Vanderbilt University Medical School
- 2002 - 2004 Instructor, AIDS Outreach Educational Program
Vanderbilt University
- 1998 Undergraduate Teaching Assistant, Ecology Laboratory
Neumann College

Teaching and Faculty Development

The University of Maine, Orono, ME

- 2023 Why and How you Should Collect Mid-semester Feedback on your
Teaching, Center for Innovation in Teaching and Learning
- 2022 RLE Instructor Workshop, RLE Program and Center for Innovation in
Teaching and Learning
- A Time for Reflection: Next Steps Towards Inclusive Instruction, with Dr.
Tracie Addy, Center for Innovation in Teaching and Learning

- 2021
Brightspace Intro Session, Center for Innovation in Teaching and Learning

Brightspace: Setting up your Gradebook, Center for Innovation in Teaching and Learning

Student Accommodations and Course Accessibility Information Session, Center for Innovation in Teaching and Learning and Student Accessibility Services
- 2018
Building Reflection into your Teaching Practice, Center for Innovation in Teaching and Learning

Using Zoom in your Classroom, Center for Innovation in Teaching and Learning

Seeing your Syllabus through your Students' Eyes: Shaping your Syllabus to Improve Student Performance and Engagement, Center for Innovation in Teaching and Learning
- 2017
G-Suite for Education Training, Center for Innovation in Teaching and Learning

STEM University Classroom Observation Program, The University of Maine, The Maine Center for Research in STEM Education (RiSE Center)
- 2015
Faculty Development session, "Supporting In-class Group Work", The Maine Center for Research in STEM Education (RiSE Center)
- 2014
Faculty Development session, "Using Peer Discussion to Promote Student Participation", The Maine Center for Research in STEM Education (RiSE Center)

Faculty Development session "Active Learning Strategies for Large Enrollment STEM Courses", The Maine Center for Research in STEM Education (RiSE Center)

Blackboard for Beginners Workshop, Faculty Development Center

Other Teaching and Faculty Development

- 2021
Virology Teaching Workshop, "Rethinking Equity in Higher Education," 40th Annual American Society for Virology Conference, virtual.
- 2019
Virology Teaching Workshop, "Effective Team Projects and Student Teams: Why, What, and How," 38th Annual American Society for Virology Conference. University of Minnesota, Minneapolis, MN.
- 2018
Virology Teaching Workshop, "A Learner-Centered Course Design to Enhance Significant Learning," 37th Annual American Society for Virology Conference. University of Maryland, College Park, MD.

- 2017 Virology Teaching Workshop, “Enhancing Learning in Virology Through Better Assessments,” 36th Annual American Society for Virology Conference. University of Wisconsin-Madison, Madison, WI.
- 2016 Interdisciplinary STEM Undergraduate Research Curricula, 6th Annual National IDeA Symposium of Biomedical Research Excellence Conference, Washington, D.C.
- Virology Teaching Workshop, “Transforming How We Teach is Good but Transforming What We Expect Students to Learn is Better,” 35th Annual American Society for Virology Conference. Virginia Tech, Blacksburg, VA.
- 2004 - 2006 Future Faculty Preparation Program (F2P2)
Vanderbilt University Center for Teaching, Nashville, TN

Laboratory Student Advisees

Current Graduate Students:

- 2020 - present Avery Bond, M.S./Ph.D. student, Microbiology, Molecular and Biomedical Sciences
- 2022 – present Lucas Bennett, Ph.D. student, Biochemistry, Molecular and Biomedical Sciences
- 2022 – present Sophie Craig, Ph.D. student, GSBSE Program
- 2022 – present Amanda Sandberg, M.S. student, Microbiology, Molecular and Biomedical Sciences

Previous Graduate Students:

- 2016 - 2021 Michael Wilczek, Ph.D. student, Microbiology, Molecular and Biomedical Sciences
Thesis defended: June 2021
Research Awards: Edith M. Patch Outstanding Ph.D. Student Award, Outstanding Service Award, College of Natural Sciences, Forestry and Agriculture; Outstanding Graduate Student Award, Department of Molecular and Biomedical Sciences; Undergraduate Mentor Impact Award, Graduate Student Government, University of Maine
Current position: Assistant Teaching Professor | Bioinformatics and Biotechnology, The Roux Institute at Northeastern University
- 2015 - 2020 Colleen Mayberry, M.S./Ph.D. student, Microbiology, Molecular and Biomedical Sciences
Thesis defended: November 2020
Research Awards: Graduate Research Excellence Award, College of Natural Sciences, Forestry and Agriculture; Outstanding Graduate Student Award, Department of Molecular and Biomedical Sciences
Current position: Postdoctoral Researcher, The Jackson Laboratory

- 2016 - 2020 Kashif Mehmood, Ph.D. student, Microbiology, Molecular and Biomedical Sciences, Fulbright Scholar
Thesis defended: November 2020
Current position: Assistant Professor, Department of Biotechnology, Institute of Integrative Biosciences, CECOS University Peshawar, Pakistan
- 2018 - 2020 Mason Crocker, M.S. student, Microbiology, Molecular and Biomedical Sciences
Thesis defended: April 2020
Current position: Tufts University School of Medicine, Maine Track Program
- 2014 - 2019 Jeanne (Price) DuShane, Ph.D., Biochemistry, Molecular and Biomedical Sciences
Thesis defended: August 2019
Research Awards: Graduate Research Excellence Award, College of Natural Sciences, Forestry and Agriculture and Outstanding Graduate Student Award, Department of Molecular and Biomedical Sciences
Current position: Scientist, Bristol Myers Squibb

Current Undergraduate Research Students:

- 2023 - present Elizabeth (Becca) Takagaki, UMaine '24
- 2022 - present Sydney Brown, UMaine '25
Gabriella Giftos, UMaine '26
Kristina Kelly, UMaine '24
Abby Kraemer, UMaine '25
Jasper Makowski, UMaine '26

Previous Undergraduate Research Students:

- 2022 – present Olivia Brunetti, UMaine, '23, *Current position: State of New Hampshire Public Health Laboratory*
- Nate Jordan, UMaine, '23, *Current position: Vericel*
- 2022 - 2023 Gavin Sychterz, Bowdoin, '25, Bowdoin College Summer Intern
- 2020 - 2023 Lauren Cusson, UMaine, '23, *Current position: Wentworth Douglass Hospital*
- Aiden Pike, UMaine Honors College, '23, *Current position: 4+1 Program, UMaine/Roux Institute*
- Stephen Rezack, UMaine, '23, *Current position: Northern Light Hospital*
- 2021 - 2022 Jaylee Rice, UMaine, '24

- 2020 - 2022 Amanda Sandberg, UMaine, '23, *Current position: MS Program in Microbiology, University of Maine*
- 2020 - 2021 Paige Giffault, UMaine Honors College, '21, *Current position: University of New England College of Osteopathic Medicine (UNECOM)*
- Nicholas Leclerc, UMaine, '21, *Current position: PhD Program in Microbiology, University of Maine*
- 2019 - 2022 Remi Geohegan, UMaine, '22, *Current position: PhD Program in GSBSE, University of Maine*
- 2019 - 2020 François Levasseur, UMaine, '20, *Current position: Strand Therapeutics*
- 2020 summer Linda Line, SMCC, '21, MDIBL INBRE Summer Student Fellowship Program, *Current position: Abbott Inc.*
- 2018 - 2020 Tristan Fong, UMaine, '20, *Current position: Tufts University School of Medicine, Maine Track Program*
- 2017 - 2020 Francesca Armstrong, UMaine, '20, *Current position: Northern Light AR Gould Hospital*
- Sarah Nichols, UMaine, '20, *Current position: Ph.D. program, Wake Forest University*
- 2017 - 2018 Mason Crocker, UMaine, '18, *Current position: Tufts University School of Medicine, Maine Track Program*
- 2016 - 2017 Laura Horowitz, UMaine, '17, *Current position: Medical Student, University of New England College of Osteopathic Medicine (UNECOM)*
- Will Petterson, UMaine, '20, *Current Position: Research Technician at Coriell Institute for Medical Research*
- 2016 summer Trevor Lyford, Brown University, summer intern, *Current position: EVMS Medical School*
- 2015 - 2016 Tyler Lang, M.D., UMaine, '18, MBS, Microbiology major, *Current position: Resident Physician, University of Rochester Medical Center*
- 2015 - 2017 Conner Lajoie, UMaine '17, Honors College, *Current position: UNECOM; Previous position: Broad Institute of MIT and Harvard*
- 2014 - 2018 Ashley Soucy, Ph.D., UMaine '18, Honors College, Biochemistry major *Current position: Postdoctoral Research Associate, Maine Health Institute for Research*
- 2014 - 2015 Adam Simard, UMaine '15, *Current position: Ph.D. program in Cellular and Molecular Biology, Dartmouth College*

2014 summer Kyle Holyoke, UMaine, Summer Work-study Program

Thesis Committees

Graduate Students:

Ph.D. Candidates:

2014 - 2019	Erin Carter, GSBSE (Henry Laboratory)
2014 - 2019	Jeanne DuShane, MBS (Maginnis Laboratory), Advisor/Chair
2015	Linda Archambault, MBS (Wheeler Laboratory) (for qualifying exam only)
2015 - 2020	Colleen Mayberry, MBS (Maginnis Laboratory), Advisor/Chair
2015 - 2020	Kashif Mehmood, MBS (Maginnis Laboratory), Advisor/Chair
2017 - 2020	Sarah Alrowaished, SBE (Henry Laboratory), Qualifying Exam Chair
2020	Matthew Parent, Physics (Hess Laboratory)
2015 - 2021	Michael Wilczek, MBS (Maginnis Laboratory), Advisor/Chair
2016 - present	Ethel Champaco, SBE (de los Reyes Laboratory)
2018 - 2022	Atefeh Rajaei, MBS (Neely Laboratory)
2018 - present	Bailey Blair, MBS (Wheeler Laboratory)
2019 - 2023	Siham Hattab, MBS (Wheeler Laboratory)
2017 - 2021	Sari Mayhue, MBS (Sullivan/Kelley Laboratory)
2019 - 2021	Prakash Raut, Physics (Hess Laboratory)
2020 - 2022	Cory Johnson, MBS (Kelley Laboratory)
2021 - present	Gursimran Dhillon, MBS (Wheeler Laboratory)
2021 - present	Avery Bond, MBS (Maginnis Laboratory), Advisor/Chair
2021 - present	Bright Obeng, MBS (Gosse Laboratory)
2022 - present	Lucas Bennett, MBS (Maginnis Laboratory), Advisor/Chair
2022 - present	Sophie Craig, GSBSE (Maginnis Laboratory), Advisor/Chair
2022 - present	Nick Leclerc, MBS (Kelley Laboratory)
2022 - present	Sudati Shrestha, MBS (Kelley Laboratory)
2022 - present	Omodasola Adekeye, GSBSE (Drummond Laboratory)
2022 - present	Carolina Cora, GSBSE (Liaw/Lynes Laboratory)
2022 - present	David Winski, Physics (Hess Laboratory)
2023 - present	Dylan Wagner, MBS (Gosse Laboratory)

Master's Candidates:

2014 - 2016	Denise Jurczynszak, MBS (Kim Laboratory)
2014 - 2016	Tyler McGathey, MBS (Sher Laboratory)
2014 - 2016	Campbell Miller, MBS (Kim Laboratory), <i>graduated with MPS</i>
2014 - 2017	Jacob Longfellow, MBS (Kim Laboratory)
2018 - 2020	Mason Crocker, MBS (Maginnis Laboratory), Advisor/Chair
2020 - 2021	Marc St. Pierre (MPS)
2021 - present	Sarah McCallister, MBS (Molloy Laboratory)
2022 - present	Amanda Sandberg, MBS (Maginnis Laboratory), Advisor/Chair

Undergraduate Honors Students:

The University of Maine, Honors College:

2023 - 2024	Amy Hardy, MBS, (Molloy Laboratory)
2022 - 2023	Aiden Pike, MBS, (Maginnis Laboratory), Advisor/Chair

	Logan Christian, MBS (Neely Laboratory)
2021 - 2022	Victoria Mayers, MBS, (Gundersen Laboratory)
2020 - 2021	Paige Giffault, MBS, (Maginnis Laboratory), Advisor/Chair Bailey West, MBS, (Gosse Laboratory) Josh Passarelli, SBE, (Townsend Laboratory)
2019 - 2020	Alan Baez, MBS, (Gosse Laboratory)
2018 - 2019	Fazeel Hashmi, MBS (Neely Laboratory) Klarissa Klier, SBE (Neely Laboratory) Anna Struba, MBS (Neely Laboratory) Ben Tero, MBS (Neely laboratory)
2017 - 2018	Audrey Hoyle, MBS (Sullivan Laboratory) Taaniel Kiidli, MBS (Neely Laboratory) Ashley Soucy, MBS (Maginnis Laboratory), Advisor/Chair
2016 - 2017	Conner Lajoie, MBS (Maginnis Laboratory), Advisor/Chair Erica Sewell, MBS (Hutchison Laboratory)
2015 - 2016	Campbell Belisle Haley, MBS (Molloy Laboratory) Elizabeth Pflugradt, MBS (Sher Lab) Spencer Traxler, COE (Kim Laboratory)

Outside Expert Examiner:

2015	Joshua Zimmer, Bates College, T. Glen Lawson Laboratory, <i>Evaluation of the ubiquitin-protein ligases UBE3A and DTX3L as mediators of EMCV 3C protease concentration.</i>
------	---

Top Scholars Mentor:

2022 - present	Gabriella Giftos (MBS)
2021 - 2022	Jaylee Rice (MLS)
2021 - present	Abi McNally (MBS)
2019 - 2023	Marcus Ratz (MBS, Honors College)
2018 - 2022	Jacob Cote (MBS), Goldwater Scholar Awardee
2017 - 2021	Bailey West (MBS, Honors College), UMaine 2021 Valedictorian

Service to The University of Maine, Orono, ME

2023 – present	Planning Committee, Maine Research Symposium on Biomedical Science and Engineering
2022 - present	Goldwater Scholar Committee, Office of Major Scholarships
2022 - present	Faculty Advisor, Undergraduate Women in STEMM
2022 - present	Center for Undergraduate Research Fellowship Review Panel
2022	Search Committee for Graduate Assistant, Office of Major Scholarships

2020 - present	COVID-19 Safe Planning Committee, Scientific Advisory Board (Lead Scientist) (<i>Detailed summary of COVID-19-related service listed below</i>)
2020 - 2022	Center for Undergraduate Research Advisory Committee
2020 - 2022	University of Maine Student Symposium Executive Committee
2021, 2023	Pew Biomedical Scholar Program Nomination Committee
2020	Search Committee for Microscopy Laboratory Manager
2019 - present	Institutional Biosafety Committee (Chair 2022 - present)
2019	Presenter for NIH/NIGMS site visit, Maine INBRE grant, Mount Desert Island Biological Laboratory, Salisbury Cove, ME
	Led tour and discussion for Research and Development, Workforce and Economic Development Tour for UMaine Board of Trustees, President of UMaine, and staff
	Led tour and discussion for R&D Tour for Chancellor of the UMS, President and VPR of UMaine, and staff
	Representative for Biomedical Sciences and GSBSE Graduate Program for Institute for Digital Engineering and Life Sciences (IDEALS) visit to UMaine
	UMaine Medicine Seed Grant Review Panel, Grant Reviewer
	Career Perspectives Panel Chair, WiSTEMM Days
2018 - present	Churchill Scholarship Committee, Office of Major Scholarships
2017 - present	Office of Major Scholarships Advisory Council
2017 - present	Maine State Science Fair, Scholarship Selection Committee for UMaine STEM Top Scholars Program
2017 - 2021	WiSTEMM Oversight Committee
2016	Committee for Life Sciences Building: Teaching Labs Working Group
2015 - present	UMaine Student Research Symposium Judge
2015 - 2019	GSBSE Annual Retreat Poster and Oral Presentation Judge
2016 - 2017	GSBSE Student Rotation Committee

2014 - 2020 ADVANCE Rising Tide Annual Networking Conference Planning Committee, University of Maine

2014 - 2017 Honors College INBRE Fellowship Review Committee

Service to the College of Natural Sciences, Forestry, and Agriculture

2020 College of NSFA Committee on Diversity, Inclusion, and Equity

2018 Natural Sciences, Forestry, and Agriculture Research Mission and Vision Statement Writing Committee **(Co-chair)**

2016 - 2018 Geddes Simpson Memorial Lecture Committee **(Chair, 2018)**

Service to the Department of Molecular & Biomedical Sciences

2023 - present Search Committee for Microbiology Faculty Position (Chair)

2022 - 2023 Search Committee for Teaching Postdoctoral Position, Molecular and Biomedical Sciences

2021 Department Chair, Search Committee (Chair)

2021 Co-Presenter, NSFA Unlocked

2021 Search Committee for Molecular Biology Faculty Position (Co-Chair)

2020 - present Molecular and Biomedical Sciences Peer Committee **(Chair, 2022 - present)**

2019 Presenter for College of Natural Sciences, Forestry, and Agriculture Presidential Showcase, Biomedical Disease Investigations

2016 - 2019 Student-Invited Speaker Committee, Faculty Advisor

2016 - 2018 Hitchner Hall Shared Resource Committee

2014 - present Frederick Radke Undergraduate Research Fellowship Committee

2014 - 2016, 2023 MBS Graduate Admissions Committee

2014 - 2015 Undergraduate Program Assessment, Office of Assessment

2014 - 2015 MBS New Laboratory Course Design Committee

2014 - 2015 MBS Undergraduate Curriculum Change Committee

Service to Brown University

2013 Panel member, "The Making of Scientist", Women in Science and Engineering (WISE), Brown University

- 2012 - 2013 Provost's Childcare Committee, Brown University
- 2008 - 2014 Graduate Student and Postdoc Parent Network, cofounder, Brown University
- 2007 - 2012 BioMed Postdoc Advisory Panel, Brown University

Outreach and Professional Service to the Community

- 2022 Volunteer for BioME Bioscience Day, visited James F. Doughty Middle School and presented to 6 middle school classes
Developed laboratory video and interview for BioME Bioscience Day 2022
- 2021 Maine Science Olympiad, developed, executed, and scored two divisions of Disease Detectives
- 2019 Invited Presenter, Maine Science Festival, "Viruses and Bacteria, Oh My!", Pop-up Event, Science on Tap Hits the Road, Lewiston Maine

Video-conferenced with two AP Biology classes at Chuckey-Doak High School in Tusculum, TN
- 2018 Presenter for Maine Bioscience Day 2018, visited James F. Doughty middle school and presented to two middle school classes
- 2018 Participated in Skype a Scientist Program with two 10th Grade AP Biology classes at Chuckey-Doak High School in Tusculum, TN

Maine Career Connect Workforce Development, Connector
- 2017 Mentor for two Upward Bound High School Summer Research Students, Upward Bound Math/Science Program, The University of Maine

Visited Old Town High School and presented to high school students in the STEM Leaders Diploma Program
- 2016 Maine Career Connect Workforce Development Summit Panel Presenter
- 2015 Hosted Maine School of Science and Mathematics High School students for tour of laboratory

Led and organized a department-wide tours for Leonard Middle School (Old Town) 6th grade class with 90 people in four biomedical research labs

COVID-19 Pandemic Response-Related Service to the University of Maine System:

- 2020 - present University of Maine (UMS) System, Science Advisory Board (SAB), **Lead Scientist**

COVID-Related Support to UMS:

- Led a team of faculty to provide science-based guidance for public safety practices during COVID-19 pandemic to UMS leadership
- Provided regular briefings for the UMS Chancellor and UMaine President throughout the COVID-19 pandemic on fast-breaking science and medical developments to shape policies and practices for the UMS
- Provided updates and advice regarding 2022 monkeypox virus outbreak
- Met regularly with the UMS Safe Planning Team
- Played integral role in establishing testing strategies for the UMS population of ~25,000 faculty, staff, and students
- Played integral role in developing testing partnerships with COVID-19 testing providers: The Jackson Laboratory, Convenient M.D., Vault Health Inc., and Shield T3
- Contributed to the development of Together for Maine Return to UMS Fall 2020 guide and policies
- Led and represented the SAB in meetings and presentations with: UMS President's Council, UMS Chancellor's Staff, State Legislature, UMS Board of Trustees, UM and UMaine at Machias Town Halls, Associated Faculties of the Universities of Maine (AFUM), Faculty Senate, UMaine Emergency Operations Committee, UMaine Facilities Management, Dining Services, Residential Life, Student Life, University Research Committees, Symptomatic/Asymptomatic Testing Leaders, Unit Leaders/Deans, and other groups
- Worked closely with Marketing and Communications Division on COVID-19-related announcements and information dissemination
- Developed COVID-19 syllabi statement for faculty
- Developed a comprehensive public health campaign for COVID-19 vaccination for the UMS including planning of an expert-led webinar in collaboration with the UMaine Institute of Medicine
- Co-led the development of a UMS-wide COVID-19 vaccine survey
- Met with higher education leaders to discuss testing and public safety strategies at Vanderbilt University, University of Wisconsin, University of Connecticut, and Arizona State University
- Developed, distributed, and analyzed UMS-wide survey of -80-degree Celsius freezer space for storage of Pfizer-BioNTech vaccine and offered storage space to the state of Maine

COVID-Related UMS Support, Recordings, and Articles:

- Science Advisory Board article in [UMaine Today](#)
- [Maginnis Together for Maine Video](#) for UMS Safe Campus Return in Fall 2020
- Wrote the script and worked with UMaine Marketing and Communications to develop [a video with UMaine mascot Bananas](#) to educate students, faculty, and staff about COVID-19 safety practices
- [UMaine Fall 2020 Thank you video](#)
- Led COVID-19 Vaccine Education Planning – planned/hosted an educational [webinar](#), initiated system-wide survey, and organized educators across UMS to inform vaccine education and outreach

COVID-Related Seminars and Speaking Engagements Open to the Public:

- Panelist, [BioME Webinar: The Science of COVID-19](#), May 2020

- Invited Speaker, *The Science Behind COVID-19*, University of Maine Student Symposium 2020 (UMSS20), October 2020
- Invited Panelist, with President Joan Ferrini-Mundy and UMS Chancellor Dannel Malloy, to present in *National Academies of Sciences, Engineering, and Medicine COVID-19 Testing Strategies at Colleges and Universities Webinar*, October 2020
- Presenter, 2021 Maine Science Festival, COVID-19 and Maine: The Science Story of Our Times: Forum: Overview of COVID-19 Virus and podcast

COVID-19 Outreach and Professional Service to the Community:

- Presentation to the State Legislature
- Presentation to the State Legislature's Health and Human Services Committee
- Co-led, UMaine COVID-19 Science and Medicine Task Force to communicate COVID-19 updates to Bangor Public Health
- Planned and hosted, vaccination educational webinar, offered by the UMaine Institute of Medicine and UMaine's Innovative Media Research and Commercialization Center, and Northern Light Health
- Panelist, COVID-19: Vaccine Hesitancy: Myths, Misinformation and What We Know Now, Northern Light Health, Business to Business Zoom Conference Series
- Met with ME CDC officials and Maine State HETL Testing Lab during COVID-19 pandemic to discuss testing and surveillance
- Provided outreach to local K-12 schools in Bangor regarding COVID-safe practices
- Town Hall Panelist on COVID-19 Testing and Public Health Measures, The University of Maine and University of Maine at Machias, open to public in local communities
- Town Hall Panelist on COVID-19 Testing and Public Health Measures with local communities of Orono, Old Town, Veazie, and Penobscot Nation
- Co-Presenter, Information and Answers to COVID-19 Concerns and Questions, Virtual Alumni Session for Homecoming Fall 2020
- BioME Virtual Coffee Hour, Presenter and panelist, Bioscience Association of Maine
- Presented at Fogler Library Staff Professional Development Day, The University of Maine, Orono, ME
- Presented, Perspectives on COVID-19, Sit & Sip Virtual Workshop, Health Professions Club, The University of Maine, Orono, ME
- Co-Presenter, Expanding Your Horizons Conference, COVID-19 presentation, virtual conference for 7th and 8th grade girls interested in careers in STEM, Cooperative Extension, The University of Maine, Orono, ME

COVID-19 Related Television/ Newspaper/Podcast appearances and quotes:

National news interviews and television appearances:

- Maginnis speaks to Wall Street Journal about COVID BA.2 variant
- Maginnis on Delta surge in the Boston Globe
- Appearance on Jimmy Kimmel Live!
- Yahoo news on Maginnis Kimmel appearance
- Digital Trends interview on COVID treatments
- Yahoo news on COVID treatments

Local newspaper stories:

- Maginnis on teaching kids about COVID-19

- [Maginnis speaking on Maine's approach to COVID-19 safety](#)
- [Maginnis quoted on UMS testing plans 2nd round](#)
- [Research collaboration to study spread of coronavirus droplets](#)

Local TV news interviews and mentions:

- [Maginnis explaining COVID naming on FoxBangor COVID naming](#)
- [Maginnis and Townsend on Bangor Public Health COVID-19 Education Initiatives](#)
- [Maginnis quoted on UMS testing plans](#)
- [Maginnis explaining scientific reasoning on local sports protocols](#)

Podcast Presentations:

- Podcast Presenter, The Maine Question, [S2E7: Why do viruses go viral?](#)
- Podcast Presenter with the SAB, The Maine Question [S2E16: What can we learn from UMS experts about coronavirus?](#)
- Maine Science Festival: [Overview on COVID-19 Virus](#)