

MATTHEW J. WARGO, Ph.D.

308B STAFFORD HALL

DEPARTMENT OF MICROBIOLOGY & MOLECULAR GENETICS

UNIVERSITY OF VERMONT LARNER COLLEGE OF MEDICINE

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WORK 802-656-1115 / CELL 603-236-1555 / MWARGO@UVM.EDU

ACADEMIC POSITIONS

<i>PROFESSOR WITH TENURE</i>	Dept. of Microbiology & Molecular Genetics, UVM	2025-present
<i>ASSOCIATE PROFESSOR WITH TENURE</i>	Dept. of Microbiology & Molecular Genetics, UVM	2017-2025
<i>ASSISTANT PROFESSOR</i>	Dept. of Microbiology & Molecular Genetics, UVM	2009-2017
<i>GRADUATE FACULTY</i>	Cellular, Molecular, and Biomedical Sciences Graduate Program	2009-present
<i>2^o APPOINTMENT</i>	MMG, College of Agriculture and Life Sciences, UVM	2009-present

ADMINISTRATIVE POSITIONS

<i>SCIENCE OFFICER</i> for the UVM A/BSL-3 Facility (0.2 FTE)	2021-2022
<i>DIRECTOR</i> Cellular, Molecular, and Biomedical Sciences Ph.D. Program (0.25 FTE)	2025-present

POSTDOCTORAL TRAINING

<i>POSTDOCTORAL ASSOCIATE</i> with Deborah A. Hogan, Ph.D.	2005-2009
Dept. of Microbiology & Immunology, Geisel School of Medicine at Dartmouth, Hanover, NH	
<i>POSTDOCTORAL ASSOCIATE/FELLOW</i> with Laurie W. LeClair (Whittaker), M.D.	2007-2009
Dept. of Medicine, Div. Pulmonary & Critical Care, UVM Larner College of Medicine, Burlington, VT	

EDUCATION

B.S.	Biology, Department of Biology, Susquehanna University, Selinsgrove, PA Research Advisor: Jack R. Holt, Ph.D.	1994-1998
M.S.	Botany, Department of Biology, Texas A&M University, College Station, TX Advisor: Peter J. Rizzo, Ph.D.	1998-2000
Ph.D.	Biology, Department of Biological Sciences, Dartmouth College, Hanover, NH Advisor: Elizabeth F. Smith, Ph.D.	2000-2005

AWARDS AND HONORS

Dean's Excellence in Research Award – Mid-Career Investigator	2022
Outstanding Faculty Advisor, UVM Graduate Student Senate	2013
Cystic Fibrosis Foundation Postdoctoral Fellow	2009
Young Investigator Award, National IDeA Symposium for Biomedical Excellence	2008
Hannah T. Croasdale Graduate Scholar Award, Dartmouth College	2005
Ryan Fellow, Dartmouth College	2004
Pre-doctoral Student Travel Award, American Society of Cell Biology	2003
Filene Graduate Teaching Award, Dartmouth College	2003
Award for Teaching Excellence, Department of Biology, Texas A&M University	2000
Summa Cum Laude and Departmental Honors, Susquehanna University	1998
Biology Department Research Award, Susquehanna University	1998
Biology Department Academic Achievement Award, Susquehanna University	1998

RESEARCH SUPPORT

CURRENT RESEARCH SUPPORT

CYSTIC FIBROSIS FOUNDATION WARGO24G0 (Wargo, MJ PI, 15% effort)

Title: *Pseudomonas aeruginosa* sphingosine metabolism: role in microbial communities and identification of inhibitors

Project Period: 6/1/2024-5/31/2027

Direct Costs: \$450,000 total DC

The goals of this project are to determine the role of sphingosine metabolism in microbial communities in the CF lung and identify inhibitors of *P. aeruginosa* sphingosine metabolism

NIH NIGMS P20GM125498 (Wargo MJ, Senior Mentor, 3% effort)

Title: Translational research to prevent and control global infectious diseases (Translational Global Infectious Diseases Research Center, TIGR)

Project Period: 08/01/2019 – 7/31/2028

Direct Costs: \$1,442,783 direct/year (only effort for me)

The goals of this project are to bolster research infrastructure in global infectious disease and recruit and mentor junior faculty at UVM to strengthen this work. My roles have been as a senior mentor to E. Ross Colgate, Ph.D. from Jan 2020-Jul 2022, and as a senior mentor to David Bernstein, Ph.D. from Jan 2023 until he completes his support period on this grant.

NIH NIGMS R01GM143370-01A1 (Jianing Li, PI – Wargo Co-I 4% effort)

Title: Precision Design of Antimicrobial Peptides Against Bacterial Infections

Project Period: 9/23/2022-8/31/2026

Direct Costs: \$800,000 (UVM subcontract \$329,953; \$75,064 to my lab and personnel)

The goal of the Wargo Lab for the UVM subcontract of this award is to test computationally predicted and chemically synthesized antimicrobial peptides against classic ESKAPE pathogens in vitro.

COMPLETED RESEARCH SUPPORT (ENDED WITHIN LAST 3 YEARS)

NIH NIAID R56AI173006 (Wargo MJ, PI – 35% effort)

Title: Regulation of the virulence factor PlcH in *Pseudomonas aeruginosa*

Project Period: 8/18/2023-7/31/2024

Direct Costs: \$250,000

The goal of this grant is to characterize novel transcriptional and post-translational mechanism regulating PlcH production and determine the impact of regulatory mutations that arise during infection in cystic fibrosis.

NASA EPSCoR 80NSSC21M0325 (Wargo MJ, Co-I, 12% effort)

Title: Diagnostics and Mitigation of Life Support System Biofilms Using Magnetic Nanoparticles

Project Period: 8/1/2021-7/31/2024 (NCE until 12/31/2025)

Direct Costs: \$750,000 total

The goal of Dr. Wargo's part of this project is to construct genetically manipulated *Klebsiella pneumoniae* strains to tunably alter biofilm the biofilm components capsule and fimbriae to provide an experimental system for nanoparticle interaction measures and computational modeling.

NASA 80NSSC23K0368 (Wargo MJ, PI, 8% effort)

Title: Molecular mechanisms in a hypervirulent *Klebsiella pneumoniae* strain isolated from ISS that subdues host defences and promotes virulence

Project Period: 1/11/2023-1/10/2024 (NCE until 11/2024)

Direct Costs: \$114,079 total DC

The goal of this NASA HERO short duration award is to measure virulence in a biocide-resistant *Klebsiella pneumoniae* isolated from the International Space Station using mouse models and tissue culture. Assessments of virulence will be conducted in normal and simulated microgravity conditions.

CYSTIC FIBROSIS FOUNDATION WARGO20G0 (Wargo, MJ PI, 12% effort)

Title: *Stenotrophomonas* nitrate reductase in CF

Project Period: 5/1/2020-4/30/2022 (NCE until 4/30/2023)

Direct Costs: \$249,349 total DC

The goals of this project are to determine the impact and regulation of nitrate reduction in *Stenotrophomonas maltophilia* in CF including effects on antibiotic susceptibility and interaction with other CF bacterial pathogens.

INVITED SPEAKER AND SESSION LEADERSHIP

October 2026	North American Cystic Fibrosis Conference	Co-Chair: Env Infl on Host-Path Intx
January 2025	NASA Human Research Program Conference	Co-Chair: Infection-Host
February 2024	NASA Human Research Program Conference	Invited Speaker
March 2023	MGH/HMS (Host C. Faherty)	MIBRC Invited Seminar (v)
October 2022	Univ Wyoming (Host J. Gigley)	Molecular Biology Invited Speaker
April 2022	NYSDH-Wadsworth Center(Host J. Paczkowski)	Microbiology Invited Seminar (v)
March 2022	Univ Alabama-Birmingham (Host S. Birket)	CF Center Invited Seminar (v)
February 2022	Dartmouth Molecular Pathogenesis Retreat	Invited Speaker
October 2021	North American Cystic Fibrosis Conference	Co-Chair: Pathogenesis of Infection (v)
October 2020	North American Cystic Fibrosis Conference	Co-Chair: Year in Review CF Micro (v)
August 2020	Northern New England CF Consortium	Invited Speaker (v)
December 2019	University of New Hampshire (Host B. Barth)	MCBS Dept Seminar
March 2019	Dartmouth Cystic Fibrosis Retreat	Invited Speaker
January 2019	Northwestern University (Host A. Hauser)	Micro & Immuno Seminar
October 2018	Susquehanna University (Host P. Peeler)	Biology Department Seminar
February 2018	Dartmouth Molecular Pathogenesis Retreat	Invited Speaker
November 2017	North American Cystic Fibrosis Conference	Infection/Microbiology Session Speaker
June 2017	NEMPET conference	Invited Speaker
June 2017	ASM Microbe (R. Dutton-session chair)	Selected Abstract Speaker
March 2017	Dartmouth Cystic Fibrosis Retreat	Invited Speaker
December 2017	Univ. of Maryland (Host A. Oglesby)	Pharm. Sciences Dept. Seminar
September 2016	Molecule Medicine of Sphingolipids	Invited Speaker
April 2016	University of Pittsburgh (Host J. Bomberger)	MMG Department Seminar
April 2016	University of Delaware (Host F. Boyd)	Biology Department Seminar
January 2016	Gordon Research Conference (Kirby/Zhulin)	Signal Transduction in Microbes
November 2015	Castleton State College (Host P. Garcia)	Natural Sciences Seminar
October 2015	University of Iowa (Host T. Yahr)	Microbiology Department Seminar
September 2015	Pseudomonas Conference 2015 (ASM)	Co-chair - Host-Pathogen Intx Session
August 2015	Telluride Research Science Conference	Cystic Fibrosis-Lung Environment
July 2015	Gordon Research Conference (Parsek/Vogel)	Microbial adhesion
June 2015	Universität Würzburg (Host E. Gulbins)	Sphingolipids in Infection & Beyond
May 2015	University of Virginia (Host M. Kendall)	Division of Infectious Diseases Seminar
May 2015	Mass. General Hospital (Host S. Moskowitz)	Monthly Host-Pathogen Meeting
March 2014	Université Laval, Quebec (Host R. Levesque)	IBIS Institute Seminar
October 2013	North American Cystic Fibrosis Conference	Infection/Microbiology Session
August 2011	Albert J. Ryan Foundation Conference	Alumni Speaker
January 2011	Middlebury College (Host R. Cluss)	Biochemistry Department Seminar
October 2010	North American Cystic Fibrosis Conference	Infection/Microbiology Session
October 2008	North American Cystic Fibrosis Conference	Infection/Microbiology Session
August 2007	University of Vermont (Host L. Whittaker)	Vermont Lung Center Seminar
June 2007	Boston Bacteriology Meeting	Selected Abstract Speaker
June 2006	Mycological Society of America	Bacterial-Fungal Interaction Session
October 2001	Susquehanna University (Host D. Richards)	Biological Sciences Department Seminar

PROFESSIONAL SOCIETIES

2005-Present American Society for Microbiology

PEER REVIEW

ACADEMIC EDITOR for PLoS Water	2021-2025
Invited Academic Editor for PLoS Pathogens	2024
Invited Academic Editor for mBio	2024

2009, 2011-18, 21-	<i>Environmental Microbiology</i>
2010-16, 18-	<i>Journal of Bacteriology</i>
2010-12, 15-16,	<i>Current Microbiology</i>
2010-2019, 2024, 2026-	<i>Applied and Environmental Microbiology</i>
2010,	<i>American Journal of Infection Control</i>
2011,	<i>AJP-Lung Cellular and Molecular Physiology</i>
2011, 2013-18, 22	<i>PLoS One</i>
2011-2013	<i>Microbiological Research</i>
2012, 2014-2020	<i>Frontiers in Microbiology</i>
2012-2019,	<i>Microbiology (SGM)</i>
2013-2014	<i>Nature Chemical Biology</i>
2013-2018, 21-	<i>PLoS Pathogens</i>
2013-2014, 2017-20	<i>PNAS</i>
2014	<i>International Immunopharmacology</i>
2014	<i>Journal of Biological Sciences</i>
2014	<i>Respiratory Research</i>
2014	<i>Environmental Technology and Innovation</i>
2014, 2017-2019	<i>Nature Communications</i>
2015	<i>Research in Microbiology</i>
2016	<i>Journal of Cellular Biochemistry</i>
2016, 2019, 2024	<i>Scientific Reports (NPJ)</i>
2016-2019, 2021-	<i>Infection & Immunity</i>
2016-	<i>mSphere</i>
2017	<i>Antimicrobial Agents & Chemotherapy</i>
2017-	<i>mBio</i>
2018-2019	<i>Nature Microbiology</i>
2019	<i>Biochimie</i>
2019	<i>Microbial Genomics (SGM)</i>
2020	<i>Biofilms and Microbiomes (NPJ)</i>
2022	<i>Extremophiles</i>
2022	<i>eLife</i>
2023	<i>Microgravity (NPJ)</i>
2023-24	<i>Microbiology Spectrum</i>
2023	<i>Microbiology and Molecular Biology Reviews (ASM)</i>
2024-25	<i>FEMS Microbiology Letters</i>
2026	<i>Mycobacteria (Springer-Nature)</i>
2026	<i>Gut Microbes</i>

GRANT REVIEW

AD HOC

2011-2012	Meningitis Research Foundation (UK)
2012-2013	Medical Research Council (MRC, UK)
2013, 2020, 2024	Biotechnology and Biological Sciences Research Council (BBSRC, UK)
2013, 2015, 2016	NIH CSR Special Emphasis Panel IDM-B 80 <i>Topics in Bacterial Pathogenesis</i>
2014-2016	Vermont Genetics Network, NIH INBRE Pilot Grants
2015-2017	New Hampshire NIH INBRE Pilot Grants
2016	UVM LCCRO Internal Grant Review

2016	The Einstein Foundation, Berlin, Germany
2016	NSF Integrative and Organismal Physiology
2017	NSF Systems and Synthetic Biology
2018	UK Research and Innovation Future Leaders Fellowship
2019, 2025	UVM Summer Undergraduate Research Fellowships
2019-2020	Cystic Fibrosis Foundation Infection Research Initiative (IRI) Panel
2019	NIH CSR Special Emphasis Panel IDM S 83 <i>Topics in Infection and Microbiology</i>
2020-2021	VT Space Grant NASA Undergraduate Fellowships
2021	NIH CSR Bacterial Pathogenesis (BACP) Study Section
2022	VT Space Grant NASA Graduate Fellowships
2024	Co-chair – Cystic Fibrosis Foundation Research Development Program Panel
2024, 2025	NIH NIGMS COBRE Phase I review ZGM1 RCB-X (C1)
2024	Swiss National Science Foundation (SNSF) Ambizione
2025, 2026	die Deutsche Forschungsgemeinschaft (German Research Foundation)

STANDING

2019-current	Cystic Fibrosis Foundation Research & Research Training Review Panel (twice/year)
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PUBLICATIONS

PEER-REVIEWED RESEARCH ARTICLES

- 1- Cope-Arguello, M., Li, J., Konkell, Z., Aoun, N., Cowell, T., Wagner, N., Chan, A.L.H., Thanh Chu, L., Wang, S., Carter, M.D., Allen, C., Caverly, L., Bui, L., DeAngelis, K., **Wargo, M.J.**, Tran, T.M., Jacobs, J.M., Manikantan, H., Lowe-Power, T.M. 2026. The EPS-I exopolysaccharide transforms *Ralstonia* wilt pathogen biofilms into viscoelastic fluids for rapid dissemination in planta. *PNAS* 123(4): e2512757123
- 2- Sarkar, S., Barnaby, R., Faber, Z., Taub, L., Roche, C., Vietje, B., Taatjes, D.J., **Wargo, M.J.**, Weiss, D.J., Bonfield, T.L., Kelley, T.J., Stanton, B.A. Extracellular Vesicles Derived from Mesenchymal Stromal Cells Reduce *Pseudomonas aeruginosa* Lung Infection and Inflammation in Mice *Journal of Extracellular Vesicles* (accepted 15Jan2026)
- 3- Sarkar, S., Barnaby, R., Nymon, A., Charpentier, L., Taub, L., **Wargo, M.J.**, Weiss, D.J., Bonfield, T.L. and Stanton, B.A. 2025. Mesenchymal Stromal Cell Extracellular Vesicles Reduce *Pseudomonas* Biofilm Formation, and let-7b-5p Loading Confers Additional Anti-Inflammatory Effects. accepted *AJPLung* 1 Sep 2025.
- 4- Hardman, M., Hanson, L., Schutz, K., **Wargo, M.J.**, Teneback, C.C., Daniels, T.W.V., van der Gast, C., and Rivett, D.W. 2025. Non-tuberculosis mycobacteria remodel infectious communities in cystic fibrosis associated respiratory infections. *Microbiology Spectrum* e0038225 (PMCID in progress)
- 5- DiGianivittorio, P.A., Schutz, K., Hinkel, L.A., and **Wargo, M.J.** 2025. Sphingosylphosphorylcholine (SPC) is a substrate for the *Pseudomonas aeruginosa* phospholipase C/sphingomyelinase, PlcH. *Microbiology Spectrum*, Jun 30:e0097225. PMCID: PMC12323605
- 6- Sedighi, O., Johnsen, T., Badireddy, A.R., **Wargo, M.J.**, Doiron, A.L. 2025. Synergistic effects of iron oxide nanoparticles and hydrogen peroxide in inhibiting *Pseudomonas aeruginosa* growth to combat bacterial contamination in water recovery systems. *Environmental Science: Nano*, DOI: 10.1039/D4EN01164C PubSpace ID: 20250003131

- 7- DiGianivittorio, P., Hinkel, L.A., Mackinder, J., Schutz, K., Klein, E.A. and **Wargo, M.J.** 2024. The *Pseudomonas aeruginosa sphBC* genes are important for growth in the presence of sphingosine by promoting sphingosine metabolism. *Microbiology* 171:001520. PMCID: PMC11893366
- 8- Mackinder, J.R., Hinkel, L.A., Schutz, K., Eckstrom, K., Fisher, K., and **Wargo, M.J.** 2024. Sphingosine induction of the *Pseudomonas aeruginosa* hemolytic phospholipase C/sphingomyelinase, PlcH. *JBac* 206(3): e0038223. PMCID: PMC10955842
- 9- Colgate, E.R., Klopfer, C., Dickson, D.M., Lee, B., **Wargo, M.J.**, Alam, M.A., Kirkpatrick, B.D., Hébert-Dufresne, L. 2023. Network-based analysis to evaluate patterns and relevance of pairwise enteric pathogen co-infection among infants in a highly diarrhea-endemic setting. *PLoS Computational Biology* 19(11):e1011624. PMCID: PMC10664872
- 10- Legan, T.B., Lavoie, B., Norberg, E., Tack, S., Tompkins, T., **Wargo, M.J.**, Mawe, G.M. 2023. Tryptophan-synthesizing bacteria enhance colonic serotonin signalling and gastrointestinal motility. *Neurogastroenterology and Motility* 35(10):e14629. PMCID: PMC10527075
- 11- Danforth, D., Tristano, J., **Wargo, M.J.**, and Mintz, K. 2023. Regulation of Adhesin Synthesis in *Aggregatibacter actinomycetemcomitans*. *Molecular Oral Microbiology* 38(3):237-250. PMCID: PMC10175207
- 12- Foote, A., Schutz, K., Zhao, Z., DiGianivittorio, P., Mihavics-Korwin, B.R., LiPuma, J.J., and **Wargo, M.J.** 2023. Characterization of enhanced biofilm formation between *Chryseobacterium gleum* and *Ralstonia insidiosa*. *Microbiology Spectrum* 11(2):e0410522. PMCID: PMC10100896
- 13- Montgomery, T.L., Eckstrom, K., Lile, K.H., Caldwell, S., Heney, E.R., Lahue, K.G., D'Alessandro, A., **Wargo, M.J.**, Krementsov, D.N. 2022. Tryptophan metabolism by the gut microbiota promotes host susceptibility to CNS autoimmunity. *Microbiome* 10(1):198. PMCID: PMC9685921.
- 14- Hinkel, L.A., Willsey, G.G., Lenahan, S., Eckstrom, K., Schutz, K., and **Wargo, M.J.** 2022. Creatine utilization as a sole nitrogen source in *Pseudomonas putida* KT2440 is transcriptionally regulated by CahR. *Microbiology* 168(3). doi: 10.1099/mic.0.001145. PMCID: PMC10228380.
- 15- Kokoszynska, M., Ubags, N., Bivona, J.J., Ventrone, S., Reed, L.F., Dixon, A., **Wargo, M.J.**, Poynter, M.E., and Suratt, B.T. 2021. Storage Conditions of High Fat Diets affect Pulmonary Inflammation. *Physiological Reports* 9(22):e15116. PMCID: PMC8614184
- 16- Remington, J.M., Liao, C., Ste.Marie, E., Sharafi, M., Ferrell, J.B., Hondal, R., **Wargo, M.J.**, Schneebeil, S.T., and Li, J. 2020. Aggregation state of synergistic antimicrobial peptides. *Journal of Physical Chemistry Letter* 11(21):9501-9506. PMCID: PMC8299379
- 17- Abreu, S., Hampton, T., Hoffman, E., Dearborn, J., Ashare, A., Sidhu, K.S., Matthews, D., McKenna, D., Amiel, E., Barua, J., Krasnodembskaya, A., English, K., Mahon, B., DosSantos, C., Cruz, F., Chambers, D., Liu, K., Matthay, M., Cramer, R., Stanton, B., Rocco, P., **Wargo, M.J.**, Weiss, D., and Enes, S.R. 2020. Differential effects of the cystic fibrosis lung inflammatory environment on mesenchymal stromal cells. *American Journal of Physiology-Lung Cellular and Molecular Physiology* 319(6):L908-L925. PMCID: PMC7792680
- 18- Xing, J., Marshall, J., and **Wargo, M.J.** 2020. Hybrid model of bacterial biofilm growth. *Bulletin of Mathematical Biology* 82(27):1-32 10.1007/s11538-020-00701-6 PMCID: N/A – NASA funded

- 19- Thompson, A.F., English, E.L., Nock, A.M., Willsey, G.G., Eckstrom, K., Cairns, B.M., Bavelock, M., Tighe, S.W., Foote, A., Shulman, H., Pericleous, A., Gupta, S., Kadouri, D., and **Wargo, M.J.** 2020. Characterizing species interactions that contribute to biofilm formation in a multispecies model of a potable water bacterial community. *Microbiology* 166(1):34-43 PMID: PMC7137775
- 20- Abreu, S., Enes, S., Dearborn, J., Goodwin, M., Coffey, A., Borg, Z., dos Santos, C., **Wargo, M.J.**, Cruz, F., Loi, R., DeSarno, M., Ashikaga, T., Antunes, M., Rocco, P., Liu, K., Matthay, M., McKenna, D., and Weiss, D. 2019. Lung Inflammatory Environments Differentially Alter Mesenchymal Stromal Cell Behavior. *American Journal of Physiology: Lung Cellular and Molecular Physiology* 317:L823-831 10.1152/ajplung.00263.2019. PMID: PMC6962599
- 21- Willsey, G.G., Eckstrom, K., LaBauve, A.E., Hinkel, L.A., Schutz, K., Meagher, R., LiPuma, J.J., and **Wargo, M.J.** 2019. *Stenotrophomonas maltophilia* differential gene expression in synthetic cystic fibrosis sputum reveals shared and cystic fibrosis strain-specific responses to the sputum environment. *Journal of Bacteriology* 201:e00074-19. PMID: PMC6620408
- 22- Purcaro, G., Nasir, M., Franchina, F.A., Rees, C.A., Aliyeva, M., Dapthary, N., **Wargo, M.J.**, Lundblad, L.K.A., and Hill, J.E. 2019. Breath metabolome of mice infected with *Pseudomonas aeruginosa*. *Metabolomics* 15(1):10. PMID: PMC6537093
- 23- Eckstrom, K., Willsey, G.G., LiPuma, J.J., and **Wargo, M.J.** 2018. Draft genomes of two cystic fibrosis strains of *Stenotrophomonas maltophilia*, AU30115 and AU32848. *Microbial Resource Announcements* 7(11): e01137-18. PMID: PMC6256672
- 24- Burgess, E.J., Hoyt, L.R., Randall, M.J., Mank, M.M., Bivona III, J.J., Eisenhauer, P., Botten, J.W., Ballif, B.A., Lam, Y.W., **Wargo, M.J.**, Boyson, J.C., Ather, J.L., and Poynter, M.E. 2018. Bacterial lipoproteins constitute the TLR2-stimulating activity of Serum Amyloid A (SAA). In press *Journal of Immunology* 201(8):2377-2384. PMID: PMC6179936
- 25- Willsey, G.G., Ventrone, S., Schutz, K.C., Wallace, A.M., Ribis, J.W., Suratt, B.T., and **Wargo, M.J.** 2018. Pulmonary surfactant promotes virulence gene expression and biofilm formation in *Klebsiella pneumoniae*. *Infection and Immunity* 86(7):e00135-18 PMID: PMC6013664
- 26- Meadows, J.A., Willsey, G.G., and **Wargo, M.J.** 2018. Differential requirements for processing and transport of short-chain versus long-chain O-acylcarnitines in *Pseudomonas aeruginosa*. *Microbiology* 164(4):635-645 PMID: PMC5806209
- 27- Meadows, J.A. and **Wargo, M.J.** 2018. Transcriptional regulation of carnitine catabolism in *Pseudomonas aeruginosa* by CdhR. *mSphere* 3(1):e00480-17. PMID: PMC5806209
- 28- English, E.L., Schutz, K.C., Willsey, G.G., and **Wargo, M.J.** 2018. Transcriptional responses of *Pseudomonas aeruginosa* to potable water and freshwater. *Applied and Environmental Microbiology* 84(6):e02350-17 PMID: PMC5835727
- 29- Demirdjian, S.A. Schutz, K., **Wargo, M.J.**, Lam, J., and Berwin, B. 2017. The effect of loss of O-antigen ligase on phagocytic susceptibility of motile and non-motile *Pseudomonas aeruginosa*. *Molecular Immunology* 92:106-115. PMID: PMC5694364
- 30- Euclide, P.T., Flores, N., **Wargo, M.J.**, Kilpatrick, C., and Marsden, J.E. 2017. Lack of genetic population structure of slimy sculpin in a large, fragmented lake. *Ecology of Freshwater Fishes EFF-17-0030* Epub 11 Nov 2017. Not PMID associated
- 31- Nock, A.M. and **Wargo, M.J.** 2016. Choline catabolism in *Burkholderia thailandensis* is regulated by multiple glutamine amidotransferase1-containing AraC-family transcriptional regulators. *Journal of Bacteriology* 198(18):2503-2514. PMID: PMC4999938.

- 32- Luzader, D.H., Willsey, G.G., **Wargo, M.J.**, and Kendall, M.M. 2016. The ETT2-encoded regulator EtrB modulates enterohemorrhagic *Escherichia coli* virulence. *Infection and Immunity* 84(9):2555-2565. PMID: PMC4995891
- 33- Ubags, N., Stapleton, R., Vernooy, J., Burg, E., Bement, J., Hayes, C., Zabeau, L., Tavernier, J., Poynter, M., Parsons, P., Dixon, A.E., **Wargo, M.J.**, Littenburg, B., Wouters, E., Suratt, B. 2016. Hyperleptinemia is associated with impaired pulmonary host defense. *JCI Insight* 1(8):e82101. PMID: PMC4916854.
- 34- Ubags, N., Burg, E., Antkowiak, M., Wallace, A.M., Dilli, E., Bement, J., **Wargo, M.J.**, Poynter, M., Wouters, E., Suratt, B. 2016. A comparative study of pulmonary host defense in murine obesity models: insights into neutrophil function. *American Journal of Respiratory Cell and Molecular Biology*. 55(2):188-200. PMID: PMC4979371.
- 35- Willsey, G.G. and **Wargo, M.J.** 2016. Sarcosine catabolism in *Pseudomonas aeruginosa* is transcriptionally regulated by SouR. *Journal of Bacteriology* 198(2):301-310. PMID: PMC4751790.
- 36- Willsey, G.G. and **Wargo, M.J.** 2015. Extracellular lipase and protease production from a model drinking water bacterial community is functionally robust to absence of individual members. *PLoS One* 10(11):e0143617. doi:10.1371/journal.pone.0143617. PMID: PMC4657875.
- 37- Ma, D., Green, A., Willsey, G.G., Marshall, J., **Wargo, M.J.**, and Wu, J. 2015. Effects of acoustic streaming from moderate-intensity pulsed ultrasound for enhancing biofilm mitigation effectiveness of drug-loaded liposomes. *Journal of the Acoustical Society of America* 138(2):1043-1051.
- 38- Benoit, P., Sigounas, Y., Thompson, J.L., van Rooijen, N., Poynter, M., **Wargo, M.J.**, and Boyson, J.E. 2015. The requirement of CD1d-restricted NKT cells in the clearance of *P. aeruginosa* from the lung is dependent on the host genetic background. *Infection and Immunity* 83(6):2557-65. PMID: PMC4432766
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BIORXIV RESEARCH PREPRINTS

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Mackinder, J., Quinlan, M., **Wargo, M.J.** Sphingosine synergizes with polymyxin antibiotics to kill Gram-negative bacteria. (*Microbiology* MIC-D-26-00053R1 resubmitted 16 Jun 2026)

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ARTICLES IN PREPARATION

None

ABSTRACTS

Wargo, M.J., Evans, O.F., Schutz, K. 2026. Genetic dissection of requirements for enzymatic function and secretion of the *Pseudomonas aeruginosa* hemolytic sphingomyelinase/phospholipase C, PlcH. ASM Microbe 2026, Washington DC.

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LaBauve, A.E. and **Wargo, M.J.** 2012. The *Pseudomonas aeruginosa* transcription factor, SphR, detects host-derived sphingosine to regulate a defined set of transcripts including ceramidase. North American Cystic Fibrosis Conference, 2012.

Watters, C., Trivedi, U., Lyte, M., Hampel, K.J., **Wargo, M.J.**, Rumbaugh, K. P., 2012. Insulin treatment enhances *Pseudomonas aeruginosa* biofilm formation in the diabetic wound environment. Texas Branch of the American Society for Microbiology Annual Fall Meeting, Waco, TX.

Fitzsimmons, L.F., Hampel, K.J., and **Wargo, M.J.** 2012. Impact of Choline and Glycine Betaine Pools on Osmoprotection and Phospholipase Production in *Pseudomonas aeruginosa*. 112th Annual American Society of Microbiology General Meeting.

Zhu, J., **Wargo, M.J.**, and Hill, J.E. 2012. Pathogenic bacteria detection via breath VOC profiling using Secondary Electrospray Ionization Mass Spectrometry (SESI-MS): a mouse model study. American Society for Mass Spectrometry 2012.

LaBauve, A.E. and **Wargo, M.J.** 2011. A betaine-regulated esterase, PA4921, post-transcriptionally regulates PlcH expression in *Pseudomonas aeruginosa*. North American Cystic Fibrosis Conference, 2011.

Giles, C.D., Clinton, B., Druschel, G., **Wargo, M.J.**, Richardson, A.E., and Hill, J.E. 2011. Secreted organic anions from *Pseudomonas* spp. solubilize myo-inositol hexakisphosphate from goethite surfaces thereby increasing the potential for assimilation of phosphorus by plants. *Pseudomonas* 2011, Sydney.

Meadows, J.A. and **Wargo, M.J.** 2011. Identification of a Short-chain *O*-Acylcarnitine Hydrolase and Transporter in *Pseudomonas aeruginosa*. 111th Annual American Society of Microbiology General Meeting.

LaBauve, A.E. and **Wargo, M.J.** 2011. Characterization of a putative *Pseudomonas aeruginosa* periplasmic phospholipase A₂. 111th Annual American Society of Microbiology General Meeting.

Wargo, M.J. and Allard, J.L. 2011. Choline Catabolism is Important for *Pseudomonas aeruginosa* Virulence in the Lung. 111th Annual American Society of Microbiology General Meeting.

Fitzsimmons, L.F., Hampel, K.A., Wurthmann, A.S., and **Wargo, M.J.** 2010. Small molecule inhibitors and inducers of the *Pseudomonas aeruginosa* glycine betaine catabolic pathway. North American Cystic Fibrosis Conference, 2010. [Platform Presentation](#)

Clinton, B., Giles, C.D., **Wargo, M.J.**, and Hill, J.E. 2010. *Pseudomonas aeruginosa* virulence modified by inositol phosphate-chelated iron. The 13th International Society for Microbial Ecology Meeting.

Fitzsimmons, L.F. and **Wargo, M.J.** 2010. Generation of a small molecule toolkit to dissect the interplay of catabolism and virulence in *Pseudomonas aeruginosa*. 2010 National IDEa Symposium of Biomedical Research Excellence (NISBRE).

Fitzsimmons, L.F. and **Wargo, M.J.** 2010. Small molecule inhibition of dimethylglycine catabolism in *Pseudomonas aeruginosa*. 110th Annual American Society of Microbiology General Meeting.

Accomando, K.A., Thompson-Figueroa, J., Bodden, L., Suratt, B., Allard, J.L., Whittaker, L.A., **Wargo, M.J.**, and Bates, J.H.T. 2010. Noninvasive assessment of lung function in mouse models of obesity and *Pseudomonas* infection using unrestrained video-assisted plethysmography. American Thoracic Society, 2010.

Wargo, M.J., Rajamani, S., Allard, J.L., Hogan, D.A., and Whittaker, L.A. 2009. A small molecule inhibitor of PlcH protects against surfactant dysfunction and resultant lung injury in mice. North American Cystic Fibrosis Conference, 2009.

Wargo, M.J., Whittaker, L.A., and Hogan, D.A.. 2009. Regulation of glycine betaine catabolism controls PlcH-dependent virulence in *P. aeruginosa*. North American Cystic Fibrosis Conference, 2009.

Scanlon, T.C., Teneback, C.C., **Wargo, M.J.**, Allard, J.L., Whittaker, L.A., and Griswold, K.E. 2009. Engineering Antimicrobial Enzymes for Pulmonary Infections. Biochemical Engineering XVI

Wargo, M.J., Allard, J.L., Lundblad, L.K.A., Hogan, D.A., and Whittaker, L.A. 2008. The role of *Pseudomonas aeruginosa* PlcH in alteration of lung physiology in a mouse model of infection. 2008 National IDEa Symposium of Biomedical Research Excellence (NISBRE).

Wargo, M.J., Ho, T., Allard, J.L., Whittaker, L.A., and Hogan, D.H. 2008. Regulation of *Pseudomonas aeruginosa* *plcH* in response to choline metabolites in vitro and in vivo. North American Cystic Fibrosis Conference, 2008. [Platform Presentation](#)

- Wargo, M.J.**, Allard, J.L., Lundblad, L.K.A., Hogan, D.H., and Whittaker, L.A. 2008. The role of *Pseudomonas aeruginosa* PlcH in alteration of lung physiology in a mouse model of infection. North American Cystic Fibrosis Conference, 2008.
- Chen, C., Malek, A.A., **Wargo, M.J.**, Hogan, D.A., and Beattie, G.A. 2008. *Pseudomonas syringae* is equipped with diverse mechanisms to exploit choline and its analogs from plants. American Phytopathological Society Annual Meeting, 2008.
- Wargo, M.J.**, Bomberger, J.M., Stanton, B.A., Whittaker, L.A., and Hogan, D.H. 2007. GbdR controls glycine betaine catabolism and glycine betaine-induced phospholipase C production. Pseudomonas 2007, late abstract.
- Wargo, M.J.** and Hogan, D.H. 2007. To make a living and make a killing: glycine betaine as a virulence regulator and a carbon source in *P. aeruginosa*. Boston Bacterial Meeting 2007. Platform Presentation
- Wargo, M.J.** and Hogan, D.H. 2006. Identification and characterization of factors that regulate 3OC12HSL production using a heterologous system. The 11th International Society for Microbial Ecology Meeting.
- C. A. Perrone, D. Tritschler, R. Bower, E. T. O'Toole, **M. J. Wargo**, E. F. Smith, M. E. Porter 2005. BOP2 Encodes a Novel WD-Repeat Protein that Regulates Inner Arm Dynein Activity. *Molecular Biology of the Cell*, 16: supplement.
- Wargo, M.J.** and Smith, E.F. 2004. A molecular dissection of the C1a projection of the flagellar central apparatus. *Molecular Biology of the Cell*, 15: 40a.
- Wargo, M.J.** and Smith, E.F. 2004. A novel protein, p31, is associated with a complex that includes calmodulin and PF6 and localizes to the C1a projection of the central apparatus. The Eleventh International Conference on the Cell and Molecular Biology of *Chlamydomonas*. Platform Presentation
- Benson, H.P., Dymek, E.E., **Wargo, M.J.**, and Smith, E.F. 2004. Calmodulin is a component of at least two complexes that localize to the central apparatus. The Eleventh International Conference on the Cell and Molecular Biology of *Chlamydomonas*.
- Wargo, M.J.** and Smith, E.F. 2003. Analysis of microtubule sliding patterns in flagellar axonemes reveals dynein activity on specific doublet microtubules. *Molecular Biology of the Cell*, 14:433a.
- Dymek, E.E., **Wargo, M.J.** and Smith, E.F. 2003. Calmodulin is associated with the flagellar central apparatus as a complex that includes PF6. *Molecular Biology of the Cell*, 14:433a.
- Wargo, M.J.** and Smith, E.F. 2002. The C1 microtubule of the central apparatus plays a role in defining regions of dynein-driven microtubule sliding. *Molecular Biology of the Cell*, 13:328a.
- Dymek, E.E., **Wargo, M.J.** and Smith, E.F. 2002. Characterization of calmodulin and calmodulin binding proteins associated with the flagellar central apparatus. *Molecular Biology of the Cell*, 13:192a.
- Wargo, M.J.** and Smith, E.F. 2002. The orientation of the central apparatus plays a role in defining the position of active microtubule sliding in isolated axonemes. The Tenth International Conference on the Cell and Molecular Biology of *Chlamydomonas*.
- Wargo, M.J.**, Dymek, E., and Smith, E.F. 2002. Characterization of axonemal components involved in calcium mediated regulation of flagellar motility. The Tenth International Conference on the Cell and Molecular Biology of *Chlamydomonas*.

Wargo, M.J. and Smith, E.F. 2001. Structural analyses of dynein-driven microtubule sliding in *Chlamydomonas* flagella suggest a role for the central apparatus in determining regions of active sliding. *Molecular Biology of the Cell* **L**:121.

Wargo, M.J. and Rizzo, P.J. 2001. Variants of the histone-like protein HGm in the toxic marine dinoflagellate *Gymnodinium mikimotoi* (Dinophyta). *Journal of Phycology* Abstract supplement 37(3):51-52.

Wargo, M.J., Egger, E.R., Anderson, B.M., Buda, T.R., and Holt, J.R. 1998. Determination of stream reach in a ridge and valley creek using diatom periphyton communities. *Journal of the Pennsylvania Academy of Science* v71 supplemental issue pp197-198. [Platform Presentation](#)

Egger, E.R., **Wargo, M.J.**, Anderson, B.M., and Holt, J.R. 1998. Evidence for selective attachment by epiphyton species on aquatic vascular plants. *Journal of the Pennsylvania Academy of Science* v71 supplemental issue p171.

Wargo, M.J., Holt, J.R. and Cirimo, C.P. 1997. A baseline analysis of Penns Creek focusing on attached algae. *Journal of the Pennsylvania Academy of Science* v70 supplemental issue p198. [Platform Presentation](#)

TEACHING EXPERIENCE

<u>YEAR</u>	<u>POSITION</u>	<u>COURSE NAME</u>	<u>TOPIC (# OF LECTURE/MEETINGS)</u>
<i>UNIVERSITY OF VERMONT</i>			
2026	Instructor	MD555 Attacks & Defenses	Bacteria & Fungi (4)
2025	Course Director	Bacterial Genetics	Bacterial Genetics (38)
2025	Course Director	Intro to Biomedical Research	Stats & Philosophy of Science (10)
2025	Instructor	MD555 Attacks & Defenses	Bacteria & Fungi (6)
2025	Instructor	Intro to Biomedical Research	Intro stats, Genetics, -Omics (4)
2024	Course Director	Bacterial Genetics	Bacterial Genetics (38)
2024	Course Director	Biomedical Data Analysis	Stats & Philosophy of Science (11)
2024	Instructor	Intro to Biomedical Research	Intro stats, Genetics, -Omics (4)
2024	Instructor	MD555 Attacks & Defenses	Bacteria & Fungi (6)
2023	Course Director	Bacterial Genetics	Bacterial Genetics (38)
2023	Course Director	Biomedical Data Analysis	Stats & Philosophy of Science (11)
2023	Instructor	Intro to Biomedical Research	Intro Stats, Genetics, -Omics (5)
2023	Instructor	MD555 Attacks & Defenses	Bacteria & Fungi (6)
2022	Course Director	Bacterial Genetics	Bacterial Genetics (38)
2022	Course Director	Biomedical Data Analysis	Stats & Philosophy of Science (11)
2022	Instructor	Intro to Biomedical Research	Sci method, Intro stats (7)
2022	Instructor	MD555 Attacks & Defenses	Bacteria & Fungi (6)
2021	Course Director	Prokaryotic Molecular Genetics	Bacterial Genetics (39)
2021	Course Director	Biomedical Data Analysis	Stats & Philosophy of Science (14)
2021	Instructor	Intro to Biomedical Research	Intro Bio Stats (3)
2021	Guest Lecturer	Cellular Microbiology	Bacterial & Fungal Virulence (5)
2021	Instructor	MD555 Attacks & Defenses	Bacteria & Fungi (6)
2020	Course Director	Prokaryotic Molecular Genetics	Bacterial Genetics (39)
2020	Course Director	Biomedical Data Analysis	Stats & Philosophy of Science (14)
2020	Instructor	Intro to Biomedical Research	Intro Bio Stats (3)
2020	Instructor	MD 555 Attacks & Defenses	Bacteria & Fungi (6)
2019	Course Director	Biomedical Data Analysis	Stats & Philosophy of Science (14)
2019	Course Director	Prokaryotic Molecular Genetics	Bacterial Genetics (36)
2019	Guest Lecturer	Cellular Microbiology	Bacterial & Fungal Virulence (5)
2019	Instructor	MD 555 Attacks & Defenses	Bacteria & Fungi (6)
2018	Course Director	Prokaryotic Molecular Genetics	Bacterial Genetics (37)
2018	Co-Director	Making of a Holobiont	Evolution of Microbiomes (24)
2018	Instructor	MD 540 Foundations of Medicine	Intro Bacteria, Bacterial Genetics (2)

2018	Course Director	Biomedical Data Analysis	Stats & Philosophy of Science (14)
2018	Instructor	MD 555 Attacks & Defenses	Bacteria & Fungi (6)
2017	Course Director	Prokaryotic Molecular Genetics	Bacterial genetics (36)
2017	Guest Lecturer	Cellular Microbiology	Bacterial & Fungal virulence (5)
2017	Instructor	MD 555 Attacks & Defenses	Bacteria & Fungi (6)
2016	Course Director	Prokaryotic Molecular Genetics	Bacterial Genetics (36)
2016	Faculty Preceptor	MD540 Foundations of Medicine	Small Group (2)
2015	Course Director	Prokaryotic Molecular Genetics	Bacterial genetics (31)
2015	Instructor	MD540 Foundations of Medicine	Bacterial genetics (3.5 of 154)
2015	Guest Lecturer	Cellular Microbiology	Bacterial pathogenesis (3)
2014	Course Director	Prokaryotic Molecular Genetics	Bacterial genetics (36)
2014	Guest Lecturer	Short course in molecular biology	Genetics; model systems (1)
2013	Course Director	Prokaryotic Molecular Genetics	Bacterial genetics (31)
2013	Guest Lecturer	Cellular Microbiology	Biofilms; bacterial path. (2)
2013	Instructor	Immunology	Intro and Innate Immunity (6)
2012	Course Director	Prokaryotic Molecular Genetics	Bacterial genetics (24)
2012	Guest Lecturer	CLBI302 Advanced Cell Biology	Bacterial pathogenesis (3)
2011	Course Director	Prokaryotic Molecular Genetics	Bacterial genetics (25)
2011	Course Director	Bacterial Lifestyles	Metabolism/virulence (12)
2011	Guest Lecturer	Cellular Microbiology	Biofilms/quorum sensing (2)
2011	Instructor	Immunology	Intro and Innate Immunity (9)
2010	Guest Lecturer	Med Student Y2 Microbiology	Antibiotic resistance (1)
2010	Course Director	Prokaryotic Molecular Genetics	Bacterial genetics (17)
2009	Guest Lecturer	Critical Reading	Primary literature reading (1)
2009	Guest Lecturer	Principles of Lung Biology	Bacterial lung infection (1)
2009-2013	Guest Lecturer	MMG Freshman Colloquium	Bacterial pathogenesis (4)
2008	Guest Lecturer	Immunologic Basis of Disease	Microbial biofilms (1)

DARTMOUTH COLLEGE

2007	Guest Lecturer	Introduction to Cell Biology	Photosynthesis (1)
2007	Guest Lecturer	Honors Introduction to Cell Biology	Extracellular Matrix (1)
2005	Instructor	Introduction to Cell Biology	Multiple topics (12)
2004-2005	Facilitator	Graduate Ethics	Scientific ethics (8)
2004	Guest Lecturer	Introduction to Cell Biology	Metabolism (3)
2001-2002	Teaching Assistant	Honors Introduction to Cell Biology	Multiple topics (24)

TEXAS A&M UNIVERSITY

1998-2000	Teaching Assistant	Cell Biology	Multiple topics (60)
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SUSQUEHANNA UNIVERSITY

1998	Teaching Assistant	Systematic Biology	Phylogeny & Taxonomy (20)
1997	Teaching Assistant	Limnology	Limnology (10)
1997	Tutor	Organic Chemistry	University appointed (6)
1996-1997	Teaching Assistant	Organic Chemistry	Organic chemistry methods (10)

ACADEMIC SERVICE

UNIVERSITY OF VERMONT

2025	Faculty Member	CMB Curricular Development Committee
2024-2025 acad	Chair	LCOM Faculty Standards Committee
2025	Reviewer	Selection Committee for Beckman Scholars Program
2025	Reviewer	Provost Award for Excellence in Doctoral Mentorship
2024	Faculty Member	Med-Pulm/CC Faculty Search Committee
2023-2024 acad	Chair Elect/vice chair	LCOM Faculty Standards Committee

2023-present	Co-chair	MMG Graduate Academic Programs (GAP) Committee
2022-2025	LCOM Representative	Graduate College Executive Committee
2022-2024	MMG Representative	UVM Food Systems Research Center Advisory Committee
2022-2023	Faculty Member	ASCI Chair Search Committee
2021-2022	Co-Chair	MMG Faculty Search Committee (Bacterial Genetics)
2021-2025	Faculty Member	LCOM Faculty Standards Committee
2020-2021	Faculty Member	MMG Academic Program Review Committee
2020	Chair	MMG-TGIR Faculty Search Committee (Host-Path Intx)
2020-2022	Senior Mentor	TGIR COBRE Mentor for E. Ross Colgate, Ph.D.
2019-2023	Co-Chair	MMG Research Committee
2018-2019	Chair	MMG Scientific Program and Retreats Committee
2018-2019	Faculty Member	MMG Chair's Advisory Board
2018-2022	Faculty Member	MMG Undergraduate Education Committee
2018-2019	Chair	Graduate College Executive Committee
2018-2020	MMG Representative	Search Committee for CALS Dean
2018-2019	Faculty Member	New Research Building Advisory Group
2017-2018	Faculty Member	Performance Metric subcomm. of Chairs Research Council
2017-present	Chair	LCOM Research Committee
2017-2021	Ad Hoc	LCOM Faculty Research Award Selection Committee
2017	Faculty Member	LCOM Committee on Structure and Future of MMG
2017	Faculty Member	LCOM Strategic Faculty Committee: Basic Research
2016-2018	LCOM Representative	Graduate College Executive Committee
2016-2019	MMG Representative	CALS Food Systems Advisory Committee
2016-2019	MMG Representative	CALS Studies Committee
2014-2017	Faculty Member	LCOM Research Committee
2013	Faculty Member	ASCI Faculty Search Committee
2012-2022	Faculty Member	CMB Education Committee
2012, 2014, 2016	Scientific Mentor	South Burlington High School Science Program
2011-2018	Faculty Member	MMG Seminar Committee
2011-2013	Faculty Member	LCOM Faculty Nomination Committee
2010, 2011, 2014	Judge	LCOM Graduate Research Day
2009-2012	Faculty Member	MMG Graduate Recruitment and Admissions
2009-2018	Faculty Member	MMG Undergraduate Affairs Committee

DARTMOUTH COLLEGE

2003-2004	Student Member	MCB Graduate Committee
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TEXAS A&M UNIVERSITY

1999-2000	Student Member	Biological Imaging Committee
1998-2000	Secretary	Biology Graduate Student Association

SUSQUEHANNA UNIVERSITY

2001-2012	Financial Officer	Biology Alumni Association
1997-1998	Student Member	Biology Dept. Student Advisory Committee
1997-1998	President	Lambda Sigma Chapter of βββ

REGIONAL SERVICE

Nov 2023 Academic Program Reviewer for the CMB Dept, University of Rhode Island

OTHER SERVICE

2020 - 2021 NACFC Review of Abstracts in the Infection & Immunity path

FACULTY MENTEES

CURRENT POSITION

Liz Dolci, Ph.D.	Jun 2012 – Jul 2015
E. Ross Colgate, PhD	Jun 2020 - Jul 2022
David Bernstein, Ph.D.	Jan 2023 - current
Nicole Podnecky, Ph.D.	Aug 2023 – Jul 2025
Allison Neal, Ph.D.	Aug 2023 – Jul 2025
Dani Brasino, Ph.D.	Oct 2024 - current

Prof, Northern Vermont University
Project Leader/Scientist, Emmes
Asst Prof, CEMS UVM
Asst Prof, Saint Michael's College
Assoc Prof, Norwich University
Asst Prof, MMG UVM

POSTDOCTORAL RESEARCHERS

Lauren A. Hinkel, PhD	Sep 2020 - Jul 2021
Dan Bailey, MD, PhD (PGY2-3)	Jul 2022 – Jun 2024
Pauline DiGianivittorio, PhD	Dec 2024 – Mar 2025

CURRENT POSITION

Scientist, Vernal Biosciences, VT
ID Fellow UVA
Postdoc, CHoP/UPenn

GRADUATE STUDENTS

ADVISEES

CURRENT

Olivia Evans (CMB, PhD)	2025-current
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PAST

Annette E. LaBauve (MMG, PhD)	2009-Dec 2013
Jamie A. Meadows (MMG, PhD)	2010-Jun 2015
Adam M. Nock (MMG, PhD)	2012-Apr 2018
Graham G. Willsey (CMB, PhD)	2013-Sep 2018
Lauren A. Hinkel (CMB, PhD)	2015-Sep 2020
Pauline A. DiGianivittorio (CMB, PhD)	2020-Nov 2024
Jacob Mackinder (CMB, PhD)	2021-2026

CSO, UhOh Bioscience, CA
Tech Project Monitor, Boston Govt Services
LLC, DOE Contractor
Asst Professor, Micro, Texas A&M Univ
Staff Scientist, Mantis Lab, NYSDH
Scientist, Vernal Biosciences, VT
Postdoc, CHoP/UPenn, Planet Lab
Postdoc, UIC, Alonzo Lab

ROTATION STUDENTS (IN ADDITION TO ADVISEES)

Kelly Finlaid	MMG	S2010
K.P. Smith	MMG	S2011
Todd Cramer	MMG	S2011
Chloe Adams	CMB	S2011
Ed Burgess	CMB	W2012/13
Feliz Korkmaz	CMB	S2013
Yan Xing	CMB	S2013
Nick Chamberlain	CMB	F2014
Huy Anh Tu	CMB	W2014/15
Christopher Villa	CMB	F2015
Sierra Bruno	CMB	W2015/16
Alex Thompson	CMB	F2016
Andrea Foote	CMB	W2016/17
Annalis Norman	CMB	Su2017
Cole Davidson	CMB	F2017
Trevor Wolf	CMB	F2017
Sean Lenahan	CMB	Su2018
Bethany Mihavics	CMB	W2018/19
Alexis Nadeau	CMB	W2019/20
Regina Visconti	CMB	S2020
Alicia Finney	CMB	W2021/22
Meghan Quinlan	CMB	F2024
Aditya Patwardhan	CMB	F2024
Rubaiya Shathi	CMB	F2025

Ph.D. from Shen Lab
Ph.D. from Mintz Lab
MS from Johnson Lab -(deceased)
MS from Doublié/Shen Labs
PhD from Poynter Lab -(deceased)
Ph.D. from Kerr Lab
MS from Mintz Lab
PhD from Anathy Lab
PhD from Diehl Lab
left program
PhD from Anathy Lab
PhD from Stumpf Lab
GS in Kelm Lab
PhD from Botten Lab
PhD from Carr Lab
GS in Quenet Lab
GS in Seward Lab
PhD from Huston Lab
left program
GS in Tierney Lab
left program
GS in Martorelli di Genova Lab
GS in Martorelli di Genova Lab
left program

SERVED ON DISSERTATION/THESIS COMMITTEE (UVM)

Xuan Jiang (Mintz)	2010 – 2012
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Ph.D. MMG

Jiangjiang Zhu (Hill) - Chair	2010 – 2013	Ph.D. Biomedical Engineering
K.P. Smith (Mintz)	2011 – 2015	Ph.D. MMG
Kelly Fimlaid (Shen)	2011 – 2015	Ph.D. MMG
Mary Harrison (Dunlop) - Chair	2011 – 2012	M.S. Biomedical Engineering
Chloe Adams (Doublié/Shen)	2011 – 2014	M.S. CMB
Kristi Herzer (Hill) - Chair	2012 – 2013	M.S. Biomedical Engineering
Ganesh Oka (Pinder) - Chair	2013	Ph.D. Mathematics
Yan Xing (Mintz)	2013 – 2015	M.S. MMG
William Turner (Dunlop) – Chair	2014	M.S. Mechanical Engineering
Jessica Lindle (Dunlop) – Chair	2014 – 2015	M.S. Mechanical Engineering
Ed Burgess (Poynter)	2014 – 2015	Deceased (honorary Ph.D.)
Javier Garcia-Bernardo (Dunlop)	2014 – 2015	M.S. Biomedical Engineering
Peter Euclide (Marsden) - Chair	2014 – 2018	Ph.D. Biology
Robert Mugabi (Barlow) - Chair	2015 – 2017	Ph.D. Animal Sciences
Timothy Tomko (Dunlop) - Chair	2015 – 2017	Ph.D. Civil Engineering
Nicholas Rossi (Dunlop)	2015 – 2018	transferred to BU program
Devin Champagne (Rincon) - Chair	2015 – 2018	Ph.D. CMB
Mengfei-Li (Lu)	2015 – 2017	transferred from program
Tiebin Wang (Dunlop)	2016 – 2018	transferred to BU program
Somen Mistri (Boyson) - Chair	2018 – 2022	Ph.D. CMB
Morgan Schiksnis (Kraft) - Chair	2018 – 2020	M.S. Animal Sciences
Emory Pacht (McKay) - Chair	2018 – 2023	Ph.D. Animal Sciences
Xing Jin (Marshall) – Chair	2019 – 2020	Ph.D. Mech & Elec Engineering
Theresa Montgomery (Krementsov) – Chair	2019 – 2022	Ph.D. CMB
Sandra Nnadi (Harris) – Chair	2019 – current	
Bethany Mihavics (Huston) – Chair	2020 – 2024	Ph.D. CMB
Sean Lenahan (Beebo) – Chair	2020 – 2023	Ph.D. CMB
Ashma Chakrawarti (Barlow) - Chair	2020 – 2024	Ph.D. Animal Sciences
Regina Visconti (Tierney) – Chair	2020 – current	
Camilla “Kip” Strothers (Diehl)	2020 – 2023	Ph.D. CMB
Emily Forauer (Etter)	2020 – 2021	M.S. Nutrition & Food Science
Theresa Legan (Mawe) - Chair	2021 – 2022	Ph.D. Neuroscience
Heather Schuettner (Barlow)	2020 – 2021	M.S. Animal Biosciences
Emily Norberg (Mawe)	2021 – 2022	M.S. MMG
Julie Raiguel (Harris)	2022 – current	
Emily Joyce (van der Vliet)	2022 – 2026	
Madeline Carr (Thali)	2022 – 2024	M.S. MMG
Omid Sedighi (Doiron)	2023 – 2025	Ph.D. Biomedical Engineering
Eurydice Aboagye (Etter)	2023 – current	
Alexis Roberson (Bernstein)	2024 – current	
Emma Danza (Harris)	2024 – current	
Mehrdad Ahmadinejad (Marshall) - Chair	2024 – 2026	Ph.D. Mech & Elec Engineering
Chidiebere Onoh (Barlow)	2025 – current	

SERVED ON DISSERTATION/THESIS COMMITTEE (ELSEWHERE)

Angelyca Jackson (Hogan, Dartmouth): Outside Examiner (2014) Ph.D. Defense

SERVED ON QUALIFYING EXAM COMMITTEE

John Midkiff (MMG)	Jun 2010
Jacqueline Leung (MMG)	May 2010
Andrew Menke (CMB)	Jan 2011
Parna Ghosh (CMB)	Feb 2011
Kelly Fimlaid (MMG)	Jan 2012
Shruthi Krishnamurthi (MMG)	Nov 2012

K.P. Smith (MMG)	Jul 2012
Andrew Little (CMB)	Jul 2014
Joe Clayton (CMB)	Jul 2014
Vicki DeVault (CMB)	Jul 2014
Arvis Soluvari (CMB)	Jul 2014
Devin Champagne (CMB)	Sep 2015
Robert Mugabi (ASCI)	Jul 2015
Md Mahmudul Hasan (CMB)	May 2016
Nick Chamberlain (CMB)	Jul 2016
Chris Dustin (CMB)	Aug 2016
Phil Munson (CMB)	Aug 2016
Ariel Langevin (BMEng)	Dec 2016
Chris Nissly (CMB)	Aug 2017
JJ Bivona (CMB)	Jun 2018
Frances Male (CMB)	Jun 2018
Somen Mistri (CMB)	Aug 2018
Emily Stassen (CMB)	Dec 2018
Xing Jin (Eng)	Jun 2019
Julia Snyder (CMB)	Jul 2019
Theresa Montgomery (CMB)	Aug 2019
Morgan Schiksnis (ASCI)	Nov 2019
Katie Queen (CMB)	Jun 2020
Vivia Fastiggi (CMB)	Jun 2020/Dec 2020
Alyssa Richman (CMB)	Jun 2020
Nate Shannon (CMB)	Jun 2020
Kate Quinn (CMB)	Jun 2020
Sean Lenahan (CMB)	Aug 2020
Bethany Mihavics(CMB)	Aug 2020
Evan Hoffman (CMB)	Aug 2020
Emily Forauer (NFS)	Feb 2021
Heather Schuettner (ASCI)	May 2021
Soyeon Gullickson (CMB)	Jun 2021
Kanayo Ikeh (CMB)	Jun 2021
Randi Gravelle (CMB)	Jun 2021
Camilla “Kip” Strothers (CMB)	Aug 2021
Regina Visconti (CMB)	Aug 2021
Joshua Victor (CMB)	Sep 2021
Kanayo Ikeh (CMB)	Jun 2022
Amber Goerner (CMB)	Jun 2022
Zach Miller (CMB)	Jun 2022
Julia Paquette (CMB)	Jun 2022
Maddie Sorenson (CMB)	Jun 2022
Julie Raiguel (PBIO)	Oct 2022
Omid Sedighi (BME)	Aug 2023
John Ball (CMB)	Jun 2024
Alexa Price (CMB)	Jun 2024
Emma Danza	Dec 2025
Nicole Gorman	Jan 2026

MEDICAL STUDENT RESEARCHERS

Nicki Nikkhoy	Feb 2024 – current
Dev Saha	May 2026 – current

UNDERGRADUATE RESEARCH STUDENTS (* DENOTES PUBLISHED RESEARCH FROM THE LAB)

Thomas Whalen	MMG 2010
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Benjamin Lane	MMG 2011- 2012	
Tyson McKechnie	UVM post-bac 2011	
Chaz Cao	CHEM/MMG 2011- 2013	
Kenny John	MMG 2012 – 2014	Pennsylvania State Medical School
Thomas Briggs	MMG 2012 – 2013	Craft Collective, Inc. Brewer/Micro
Eric Marshall	ENSC 2013	
Yuzo Kevorkian	MMG 2013 – 2015	GS, Tufts University Med
Rachel DeWitt	NATR HCOL 2014 – 2016	(co w/ Stockwell; Su2015 UVM SURF award)
Brad Roy	NATR 2014	(co w/ Stockwell),
Dong Yi Chen	NSF REU 2014	University of Michigan – Civil Engineering
Edwin González	NSF REU 2014	(co w/ Marsden)
Mary Wilk	MMG 2014 – 2015	deceased
Gabriela Sarriera	MMG 2014 – 2016	attending UVM LCOM F2021
Morgen Clark	MMG 2015 – 2017	(Su2016 UVM SURF award), Completed PhD at Michigan State 2025 (Ruegera Lab)
Allina Bennett	BIO 2015	
*Hannah Schulman	MMG 2015 – 2016	GS at UC Riverside; Postdoc UTK Kivlin Lab
Grace Yasewicz	MMG 2015 – 2016	
Damian Pickens	NSF REU 2016	
Rachel Cooper	MMG 2016	Tech in Amiel Lab, UVM
*Matt Bavelock	VGN 2016	
Victoria Primavera	MMG HCOL 2016 – 2018	Tech, PIADC --> GS Tufts Biomedical Sciences
Brenna Lindsey	MMG 2016 – 2017	
John Ribis	MMG 2016	GS, Tufts University Med
*Brynn Cairns	JSC – NASA EPSCoR 2017	
Morgan Howlett	BIO HCOL 2018 – 2019	
Matt Bompastore	MMG HCOL 2018 – 2020	(Su2019 Nicole J Ferland Summer Research Award, CALS Lawrence K. Forcier Outstanding Senior Award, Warren R. Steinbring Outstanding Senior in Microbiology Award) – Med School at Columbia
Lily Dunbar	JSC – NASA EPSCoR 2018	
Stephanie Riley	URI 2018	
Ray Albanese Jr.	BIOC 2018 – 2020	
Michaela Flore	MMG 2018 – 2020	
Alexa Ostafin	MMG 2018 – 2019	
Stevi Greenan	NFS 2019	
Victoria LaBree	MMG HCOL 2019 – 2020	
Megan DiSaia	ENVSCI 2019	
*Zirui Zhao	BIO 2019 – 2021	
Ellie Alspaugh	MMG 2020	
Steph Tack	MMG 2020 – 2021	(co w/ Mawe)
Matt Kinahan	MMG 2020	
*Kira Fisher	MMG 2021 - 2022	
Emilia Norberg	MMG 2021 – 2022	(co w/ Mawe) tech in Knodler Lab UVM
Sophie Unger	BIOC 2022 - 2023	(Su2022 UVM Food Systems SURF award, 2023 Biochemistry Woodworth awardee); current CFF Therapeutics, Boston
Laura O'Brien	BIO HCOL 2023 – 2025	(Su2024 SURF)
Elaine Gillan	SMC – 2024	(Su2024 VBRN)
Bela Hughes	MMG HCOL S2025-S2026	
Corinne Stemler	MMG F2025-current	
Madison Bridges	MMG F2025-current	
Christian Torres	MMG F2025-S2026	
Jasmine Engle	BIO F2025-current	
Julia Parent	MMG F2025-S2026	