CURRICULUM VITAE

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Education

Cornell University	Ph.D.	2006	Plant Pathology
University of British Columbia	B.Sc. (Honors)	2000	Microbiology

Positions

2020-23 Director of Graduate Studies and Associate Chair, Dept. of Microbiology and Molecular Genetics
2018- Associate Professor, Michigan State University
2012-18 Assistant Professor, Michigan State University
2006-11 Postdoctoral Fellow, Cornell University
2000-06 Graduate Fellow, Cornell University

Fellowships and Awards

2019 Early Career Research Excellence Award, MSU College of Human Medicine.
2015 Zoetis Award for Research Excellence, MSU College of Veterinary Medicine.
2014 Academic Competitiveness Award, MSU College of Human Medicine.
2014 Jean P. Schultz Biomedical Research Award, MSU College of Human Medicine.
2014 Innovation of the Year Award, Michigan State University.
2012,14 Grand Challenges Explorations Awards, Bill & Melinda Gates Foundation.
2009-11 Postdoctoral Fellow, Ruth L. Kirschstein National Research Service Award, NIAID.
2008-09 Postdoctoral Fellow, Heiser Program for Research in Leprosy and Tuberculosis.
2005 Postgraduate Fellow, Cornell University.
2005 Barbara McClintock Graduate Student Award, Cornell University.
2005 1st place, Best Poster, XII Molecular Plant-Microbe Interactions conference.
2001-04 Postgraduate Fellow, National Sciences and Engineering Research Council.
2000 Dolman Prize, Top graduate of UBC Department of Microbiology and Immunology.
1999 Guy Chance Award, UBC Department of Microbiology and Immunology.
1999 Science Scholar, Top 2% of UBC Faculty of Science students.
1995-00 Outstanding Student Initiative entrance scholarship, University of British Columbia.

Journal Publications (Google Scholar Citations, 5777; h-index 29)

1. Eke IE, Williams JT, Haiderer ER, Albrecht VJ, Murdoch HM, Abdalla BJ, Abramovitch RB (2023). Discovery and characterization of antimycobacterial nitro-containing compounds with distinct mechanisms of action and in vivo efficacy. ***Antimicrobial Agents and Chemotherapy,*** *in press.*

2. Williams JT, Baker JJ, Zheng H, Dechow SJ, Fallon J, Murto MR, Gilliland H, Olive AJ, Abramovitch RB (2023). A Genetic Selection for *Mycobacterium smegmatis* Mutants Tolerant to Killing by Sodium Citrate Defines a Combined Role for Cation Homeostasis and Osmotic Stress in Cell Death**.** ***mSphere***, *in press.*

3. Williams JT and Abramovitch RB (2023). Molecular Mechanism of MmpL3 Function and Inhibition. ***Microbial Drug Resistance*****,** DOI: 10.1089/mdr.2021.0424. Times cited: 2

4. Dechow SD, Baker JJ, Murto MR, Abramovitch RB (2022). *ppe51* variants enable growth of *Mycobacterium tuberculosis* at acidic pH by selectively promoting glycerol uptake. ***Journal of Bacteriology.*** 204(11): e00212-22. Times cited: 5

5. Belardinelli JM, Verma D, Li W, Avanzi C, Wiersma CJ, Williams JT, Johnson BK, Zimmerman M, Whittel N, Angala B, Jones v, Dartois V, de Moura VCN, Gonzalez-Juarrero M, Pearce C, Schenkel AR, Malcolm KC, Nick JA, Charman SA, Wells TCN, Podell BK, Vennerstrom JL, Ordway DJ, Abramovitch RB, and Jackson M (2022). Therapeutic efficacy of antimalarial drugs targeting DosRS signaling in *Mycobacterium abscessus*. ***Science Translational Medicine.*** Feb 23;14(633):eabj3860. Times cited: 8

6. Bucsan AN, Veatch A, Singh DK, Akter S, Golden NA, Kirkpatrick M, Threeton B, Ahmed M, Doyle LA, Russell-Lodrigue Kasi, Norton EB, Didier PJ, Roy CJ, Abramovitch RB, Mehra S, Khader SA, Kaushal D (2022). Response to hypoxia and the ensuing dysregulation of inflammation impacts *Mycobacterium tuberculosis* pathogenicity. ***American Journal of Respiratory and Critical Care Medicine.*** Jul 1;206(1):94-104. Times cited: 8

7. Carneiro PA, Pasquatti TN, Lima DAR, Rodrigues RA, Takatani H, Silva CBDG, Jardim R, Abramovitch RB, Wilkins MJ, Davila AMR, Araujo FR, Kaneene JB (2022). Milk contamination by *Mycobacterium tuberculosis* complex, implications for public health in Amazonas, Brazil. ***Journal of Food Protection****.* Nov 1; 85(11):1667-1673. Times cited: 2

8. Dechow SJ, Coulson GB, Wilson MW, Larsen SD, Abramovitch RB (2021). AC2P20 selectively kills M. tuberculosis at acidic pH by depleting free thiols. ***RSC Advances.*** 11(33):20089-20100. Times cited: 3

9. Carneiro PA, Pasquatti TN, Zimpel CK, Pereira TTA, Takatani H, Silva CBDG, Abramovitch RB, Guimaraes AMS, Davila AMR, Araujo FR, and Kaneene JB (2021). Genetic diversity and potential paths of transmission of *Mycobacterium bovis* in Amazon: the discovery of *M. bovis* lineage Lb1 circulating in South America. ***Frontiers in Veterinary Science.*** Article 630989, https://doi.org/10.3389/fvets.2021.630989. Times cited: 4

10. Zheng H, Williams JT, Aleiwi B, Ellsworth E, and Abramovitch RB (2020). Inhibition of *Mycobacterium tuberculosis* DosRST two-component regulatory system signaling by targeting response regulator DNA binding and sensor kinase heme. ***ACS Chemical Biology.*** 15(1):52-62. Times cited: 43

11. Zheng H and Abramovitch RB (2020). Inhibiting DosRST as a new approach to TB therapy. ***Future Medicinal Chemistry*.** Mar;12(5):457-467. Times cited: 18

12. Sanchez KG, Ferrell MJ, Chirakos AE, Nicholson KR, Abramovitch RB, Champion MM, Champion PA (2020). EspM is a conserved transcription factor that regulates gene expression in response to the ESX-1 system in *Mycobacterium marinum.* ***mBio.*** Feb 4;11(1):e02807-19. Times cited: 15

13. Martini MC, Zhang T, Williams JT, Abramovitch RB, Weathers PJ, Shell SS (2020). *Artemisia annua* and *Artemisia afra* extracts exhibit strong bactericidal activity against *Mycobacterium tuberculosis*. ***J. Ethnopharmacology*.** *doi.org/10.1016/j.jep.2020.113191.* Times cited: 39

14. Carneiro PAM, Pasquatti T, Takatani HD, Zumárraga MJ, Marfil MJ, Barnard C, Fitzgerald, S, Abramovitch, RB, Araujo F, Kaneene JB (2020). Molecular Characterization of *Mycobacterium bovis* infection in Cattle and Buffaloes in Amazon Region, Brazil. ***Veterinary Medicine and Science*.** Feb;6(1):133-141. Times cited: 15

15. Williams JT, Haiderer ER, Coulson GB, Conner K, Chen C, Dick T, Ellsworth E, Li W, Jackson MJ, Abramovitch RB (2019). Identification of new MmpL3 inhibitors by untargeted and targeted mutant screens defines MmpL3 domains with differential resistance. ***Antimicrobial Agents and Chemotherapy,*** Oct 63(10). pii: e00547-19. Times cited: 36

16. Baker JJ, Dechow SJ, Abramovitch RB (2019). Acid Fasting: Modulation of *Mycobacterium tuberculosis* metabolism at acidic pH. ***Trends in Microbiology.*** *27(11):942-953.* Times cited: 49

17. Jeon AB, Ackart DF, Li W, Jackson M, Melander RJ, Melander C, Abramovitch RB, Chicco AJ, Basaraba RJ, Obregon-Henao A (2019). 2-aminoimidazoles collapse mycobacterial proton motive force and block the electron transport chain. ***Scientific Reports.*** 9 (1), 1513. Times cited: 28

18. Franfater C*, Abramovitch RB*, Purdy GE*, Turk J, Legentil L, Lemiegre L, Hsu FF (2019). Multiple-stage precursor ion separation and high-resolution mass spectrometry toward structural characterization of 2,3-diacyltrehalose family from *Mycobacterium tuberculosis.* ***Separations***. 6(1):4 **Authors contributed equally.* Times cited: 7

19. Zheng H, Williams JT, Coulson GB, Haiderer ER, Abramovitch RB (2018). HC2091 kills *Mycobacterium tuberculosis* by targeting the MmpL3 mycolic acid transporter. ***Antimicrobial Agents and Chemotherapy.*** Jun 26;62(7). pii: e02459-17. Times cited: 39

20. Abramovitch RB (2018). *Mycobacterium tuberculosis* reporter strains as tools for drug discovery and development. ***IUBMB Life***. 70(9):818-825. Times cited: 25

21. Baker JJ, Abramovitch RB (2018). Genetic and metabolic regulation of *Mycobacterium tuberculosis* acid growth arrest. ***Scientific Reports***. 8;8(1): 4168. Times cited: 73

22. Bosserman RE, Nguyen TT, Chirakos AE, Sanchez KG, Ferrell MJ, Champion MM, Abramovitch RB, Champion PA (2017). WhiB6 regulation of ESX-1 gene expression is controlled by a negative feedback loop in *Mycobacterium marinum.* ***Proc. Natl. Acad. Sci. USA***. Nov 27. pii: 201710167. Times cited: 41

23. Coulson GB*, Johnson BK*, Colvin CJ, Fillinger RJ, Zheng H, Haiderer E, Hammer ND, Abramovitch RB (2017). Targeting *Mycobacterium tuberculosis* sensitivity to thiol stress at acidic pH kills the bacterium and potentiates antibiotics. ***Cell Chemical Biology***. 24: 993-1004. **contributed equally.* Times cited: 49

24. Zheng H, Colvin CJ, Johnson BK, Kirchhoff PD, Wilson M, Jorgensen-Muga K, Larsen SD, Abramovitch RB (2017). Inhibitors of *Mycobacterium tuberculosis* DosRST signaling and persistence. ***Nature Chemical Biology***, 13(2):218-225. Times cited: 137

25. Johnson BK, Abramovitch RB (2017). Small molecules that sabotage bacterial virulence. ***Trends in Pharmacological Sciences,*** 38(4):339-362. Times cited: 118
    -- Journal Cover and Featured Review.

26. Jeon AB, Obregón-Henao A, Ackart DF, Podell BK, Belardinelli JM, Jackson M, Nguyen TV, Blackledge MS, Melander RJ, Melander C, Johnson BK; Abramovitch RB, Basaraba RJ (2017). 2-aminoimidazoles potentiate β-lactam antimicrobial activity against *Mycobacterium tuberculosis* by reducing β-lactamase secretion and increasing cell envelope permeability. ***PLOS One***, 2(7):e0180925. Times Cited: 18

27. Augostinho Hunt AM, Gibson JA, Larrivee CL, O'Reilly S, Navitskaya S, Busik JV, Needle DB, Abramovitch RB and Waters CM (2017). A bioluminescent *Pseudomonas aeruginosa* wound model reveals increased mortality of Type 1 diabetic mice to biofilm infection. ***Journal of Wound Care,*** 26(sup7): S24-33. Times Cited: 13

28. Williams EA, Mba Medie, F, Bosserman RE, Johnson BK, Reyna C, Ferrell MJ, Champion MM, Abramovitch RB, Champion PA (2017). A nonsense mutation in *Mycobacterium marinum* that is suppressible by a novel mechanism. Times cited: 21
    Infection and Immunity, 26;85(2). pii: e00653-16.

29. Johnson BK, Scholtz, MB, Teal TK, Abramovitch RB (2016). SPARTA: Simple Program for Automated reference-based bacterial RNA-seq Transcriptome Analysis. ***BMC Bioinformatics***, 17:66. Times cited: 44

30. Liu, Y, Tan S, Huang L, Abramovitch, RB, Rohde, KH, VanderVen BC, Zimmerman MD, Chen C, Dartois V, Russell DG (2016). Immune activation of the host cell induces drug tolerance to *Mycobacterium tuberculosis* both *in vitro* and *in vivo*. ***Journal of Experimental Medicine,*** 213 (5): 809-825. Times cited: 162

31. Sloup RE, Cieza RJ, Needle DB, Abramovitch RB, Torres AG, Waters CM (2016) Polysorbates prevent biofilm formation and pathogenesis of *Escherichia coli* O104:H4. ***Biofouling,*** 32 (9):1131-1140. Times cited: 24

32. Johnson BK, Colvin CJ, Needle DB, Mba Medie F, Champion PA, Abramovitch RB (2015). The carbonic anhydrase inhibitor ethoxzolamide inhibits the *Mycobacterium tuberculosis* PhoPR regulon and Esx-1 secretion and attenuates virulence.
Antimicrobial Agents and Chemotherapy*,* 59(8):4436-45. Times cited: 88
-- Highlighted in ***The Pharmaceutical Journal*** (August, 2015)

33. VanderVen BC, Fahey RJ, Lee W, Lui Y, Abramovitch RB, Memmott C, Crowe AM, Eltis LD, Perola E, Deininger DD, Wang T, Locher CP, Russell DG (2015). Novel inhibitors of cholesterol degradation in *Mycobacterium tuberculosis* reveal how the bacterium's metabolism is constrained by the intracellular environment.
PLOS Pathogens*,* 11(2): e1004679. Times cited: 257

34. Baker JJ, Johnson BK, Abramovitch RB (2014) Slow growth of *Mycobacterium tuberculosis* at acidic pH is regulated by *phoPR* and host-associated carbon sources.
Molecular Microbiology, 94 (1): 56-69*.* Times cited: 150
-- Highlighted as an Editor's Choice in ***Science Translational Medicine*** (July 9, 2014)

35. Tan S, Sukumar N, Abramovitch RB, Parish T, Russell DG (2013) *Mycobacterium tuberculosis* responds to chloride and pH as synergistic cues to the immune status of its host cell. ***PLOS Pathogens****,* 9 (4): e1003282. Times cited: 132

36. Abramovitch RB, Rohde KH, Hsu FF, Russell DG (2011) *aprABC*: A *Mycobacterium tuberculosis* complex-specific locus that modulates pH-driven adaptation to the macrophage phagosome. ***Molecular Microbiology***, 80 (3): 678-694. Times cited: 209

37. Russell DG, VanderVen BC, Lee W, Abramovitch RB, Kim MJ, Homolka S, Niemann S, Rohde KH (2010) *Mycobacterium tuberculosis* wears what it eats.
Cell: Host and Microbe. 8(1): 68-76. Times cited: 235

38. Rohde KH, Abramovitch RB, Russell DG (2007) *Mycobacterium tuberculosis* invasion of macrophages: Linking bacterial gene expression to environmental cues.
Cell: Host and Microbe. 2 (5): 352-64. Times cited: 449

39. Rosebrock TR, Zeng L, Brady JJ, Abramovitch RB, Xiao F, Martin GB (2007) A bacterial E3 ubiquitin ligase mediates degradation of an immunity-associated host protein kinase. ***Nature***. 448 (7151): 370-374*.* Times cited: 377

40. Xiao F, He P, Abramovitch RB, Dawson JE, Nicholson LK, Sheen J, Martin GB (2007) The N-terminal region of *Pseudomonas* type III effector AvrPtoB elicits Pto-dependent immunity and has two distinct virulence determinants. ***Plant Journal***. 52 (4):595-614.Times cited: 91

41. Abramovitch RB, Anderson JC, Martin GB (2006) Bacterial elicitation and evasion of plant innate immunity. ***Nature Reviews Molecular Cell Biology****.* 7 (8): 601-611*.*
Times cited: 558

42. Abramovitch RB, Janjusevic R, Stebbins CE, Martin GB (2006) Type III effector AvrPtoB requires intrinsic E3 ubiquitin ligase activity to suppress plant cell death and immunity. ***Proc. Natl. Acad. Sci. USA***. 103 (8): 2851-2856*.* Times cited: 305

43. Janjusevic R*, Abramovitch RB*, Martin GB, Stebbins CE (2006) A bacterial inhibitor of host programmed cell death defenses is an E3 ubiquitin ligase. ***Science,*** 311 (5758): 222-226. Times cited: 410
    *Co-first authors, contributed equally to this paper.

44. Lin NC, Abramovitch RB, Kim YJ, Martin GB (2006) Diverse AvrPtoB homologs from several *Pseudomonas syringae* pathovars elicit Pto-dependent resistance and have similar virulence activities. ***Applied and Environmental Micro****.* 72 (1): 702-712. Times cited: 75

45. Abramovitch RB, Martin GB (2005) AvrPtoB: A bacterial type III effector that both elicits and suppresses programmed cell death associated with plant immunity. ***FEMS Microbiology Letters***, 245: 1-8. Times cited: 101

46. Abramovitch RB, Martin GB (2004) Strategies used by bacterial pathogens to suppress plant defenses. ***Current Opinion in Plant Biology****,* 7:356-364. Times cited: 324

47. Abramovitch RB, Kim YJ, Chen S, Dickman MB, Martin GB (2003) *Pseudomonas* type III effector AvrPtoB induces plant disease susceptibility by inhibition of host programmed cell death. ***EMBO Journal***. 22(1): 60-69. Times cited: 497

48. Abramovitch RB, Yang G, Kronstad JW (2002) The *ukb1* gene encodes a putative protein kinase required for bud site selection and pathogenicity in the fungal pathogen *Ustilago maydis*. ***Fungal Genetics and Biology*****,** 37: 98-108. Times cited: 29

49. Fouts, DE, Abramovitch RB, *et al.* (2002) Genomewide identification of *Pseudomonas syringae* pv. *tomato* DC3000 promoters controlled by the HrpL alternative sigma factor. ***Proc. Natl. Acad. Sci. USA****.* 99 (4): 2275-2280. Times cited: 360

Book Chapters

50. Johnson BK, Thomas SM, Olive AJ, Abramovitch RB (2021). Macrophage Infection Models for *Mycobacterium tuberculosis.* ***Mycobacteria Protocols, Fourth Edition***. Edited by Tanya Parish and Anuradha Kumar. Springer. Times cited: 3

51. Zheng H, Abramovitch RB (2019). Host-pathogen interactions influencing *Mycobacterium tuberculosis* persistence and drug tolerance. ***Persister Cells and Infectious Disease.*** Edited by Kim Lewis. Springer.

52. Johnson BK and Abramovitch RB (2015). Macrophage Infection Models for *Mycobacterium tuberculosis*. ***Mycobacteria Protocols, Third Edition***. Edited by Tanya Parish and David Roberts. Springer. Times cited: 26

53. Yates RM, Rohde KH, Abramovitch RB, Russell DG (2009) Functional Analysis of the Intraphagosomal Environment of the Macrophage: Fluorogenic Reporters and the Transcriptional Responses of *Salmonella* and *Mycobacterium* spp***. Phagocyte-Pathogen Interactions.*** Edited by David G. Russell and Simon Gordon, ASM press, Washington, DC.

54. Pascuzzi PE, Abramovitch RB, Anderson JC, Lin NC, Cohn JR, Martin GB (2006) Elucidation of the Virulence Activities of Pseudomonas Effector Proteins AvrPto and AvrPtoB. ***Biology of Plant Microbe Interactions, vol. 5***. Edited by Federico Sanchez, Carmen Quinto, Isabel M. Lopez-Lara, and Otto Geiger. IS-MPMI, St. Paul, Minnesota, USA.

55. Abramovitch RB, Anderson JC, Lin NC, Martin GB (2004) The roles of *Pseudomonas* type III effectors AvrPto and AvrPtoB as modulators of plant disease susceptibility and immunity. ***Biology of Plant-Microbe Interactions, vol. 4.*** *Edited by* Igor Tikhonovich, Ben Lugtenberg, and Nikolai Provorov. IS-MPMI. St. Paul, Minnesota, USA.

56. Kronstad J, Durrenberger F, Laidlaw D, De Maria A, Moniz de Sa M, Lee N, Kohno Y, Abramovitch, RB. (1999) Morphogenesis, Sporulation and Virulence in *Ustilago maydis* Are Controlled by cAMP signaling. ***Biology of Plant-Microbe Interactions, vol. 2.***

Patents and Patent Applications

1. Martin GB, Abramovitch RB, Kim YK, Lin NC. Bacterial effector proteins which inhibit programmed cell death. **U.S. Patent 7,888,467.**

2. Abramovitch RB, Johnson BK, and Colvin CJ. Compositions and methods for inhibiting bacterial growth. **U.S. Patent 10,653,679.**

3. Abramovitch RB, Ellsworth E. Compositions and methods for inhibiting bacterial growth. (HC106 analogs). **US Patent 11,617,740.**

4. Abramovitch RB, Zheng H, Johnson BK, Colvin CJ. Compounds, compositions and methods for inhibiting bacterial growth**. U.S. Patent 11,717,508**

5. Abramovitch RB, Ellsworth E., and Williams JT. Therapeutic compounds and uses thereof (MmpL3 inhibitors). (63/143,583). ***Optioned by Tarn Biosciences Inc. in 2023****.*

6. Abramovitch RB, Ellsworth E., Eke IE, and Williams JT. Therapeutic compounds and uses thereof (Nitro-containing compounds). *Provisional patent application filed.*

Invited Seminars

11/23 "TBD" **Stony Brook University,** *Department of Pharmacological Sciences, Departmental Seminar.*

09/23 "TBD" **University of Minnesota,** *Department of Microbiology, Immunology and Cancer Biology, Departmental Seminar.*

09/23 "TBD" **5th Annual MSU Precision Health Symposium, *Precision Therapeutics*,** *East Lansing, MI, Local Seminar.*

07/23 "Targeting *M. tuberculosis* adaptation to environmental cues". **Gordon Research Conference on Tuberculosis Drug Discovery and Development***,* Barcelona, Spain. *International Meeting.*

09/22 "Defining mechanisms of resistance in the *Mycobacterium tuberculosis* MmpL3 transporter". **5th International Caparica Conference on Antibiotic Resistance**, Caparica, Portugal. *International Meeting.*

09/22 "Inhibitors of the MmpL3 transporter in *M. tuberculosis* and non-tuberculous mycobacteria". **University of Michigan-Dearborn,** *Department of Natural Sciences, Departmental Seminar.*

11/21 "Inhibitors of the MmpL3 transporter in *M. tuberculosis* and non-tuberculous mycobacteria". **MSU Drug Discovery Seminar,** East Lansing, MI. *Local seminar.*

07/21 "TBD" **Gordon Research Conference on Tuberculosis Drug Discovery and Development***,* Barcelona, Spain. *International Meeting.* ***Delayed by COVID.***

06/21 "Targeting *M. tuberculosis* two-component regulatory systems" **20th European Workshop on Bacterial Protein Toxins,** *Virtual International Meeting.*

02/21 "Acid Fasting: Restriction of *Mycobacterium tuberculosis* metabolism at acidic pH" **Albert Einstein College of Medicine**, Dept. of Microbiology and Immunology. *Virtual Departmental Seminar.*

03/20 "Small Molecules Targeting the *Mycobacterium tuberculosis* DosRST Two-Component Regulatory System" **Central Michigan University**, Dept. of Chemistry and Biochemistry, *Departmental Seminar*.

01/20 "Targeting *M. tuberculosis* two-component regulatory systems" **Gordon Research Conference on Sensory Transduction in Microorganisms.** Ventura, CA. *National meeting*.

05/19 "Targeting *M. tuberculosis* two-component regulatory systems" **Chemistry and Biology of Pathogens Symposium.** East Lansing, MI. *Local Meeting*

04/19 "Targeting two component systems to inhibit *Mycobacterium tuberculosis* pathogenesis" **Rutgers New Jersey Medical School**, Dept. of Pharmacology, Physiology and Neuroscience. *Departmental Seminar.*

03/19 "Targeting two component systems to inhibit *Mycobacterium tuberculosis* pathogenesis" **Vanderbilt Institute of Chemical Biology.** *Departmental Seminar.*

01/19 "Targeting two component systems to inhibit *Mycobacterium tuberculosis* pathogenesis" **Keystone Symposium on Tuberculosis: Mechanisms, Pathogenesis, and Treatment**, Banff, Alberta, Canada. *International meeting.*

11/18 "Small molecules targeting *Mycobacterium tuberculosis* pH-driven pathogenesis" **Grand Valley State University,** Department of Biomedical Sciences. *Departmental Seminar.*

11/18 "Targeting two-component regulatory systems to inhibit *M. tuberculosis* pathogenesis" **University of Illinois Urbana-Champaign,** Department of Microbiology. *Departmental seminar.*

08/18 "Small molecules targeting *Mycobacterium tuberculosis* pH-driven pathogenesis" **Gordon Research Conference on Microbial Toxins and Pathogenicity**, Waterville Valley, NH. *National meeting.*

06/18 "Acid Growth Arrest: A new model for *Mycobacterium tuberculosis* persistence and drug tolerance" **ASM Microbe 2018**, Atlanta, GA. *National meeting.*

04/18 "Chemical biology of *Mycobacterium tuberculosis* pathogenesis" **MSU Drug Discovery Seminar**, Dept. of Pharmacology and Toxicology. *Local Meeting.*

11/17 "Small molecules that inhibit *Mycobacterium tuberculosis* environmental sensing and virulence" **Johns Hopkins University,** Department of Medicine. *Departmental seminar.*

11/17 "Inhibitors of *Mycobacterium tuberculosis* persistence and pathogenesis" **Worcester Polytechnic Institute,** Department of Biology and Biotechnology. *Departmental seminar*.

10/17 "Chemical biology of *Mycobacterium tuberculosis* pathogenesis" **University of Tennessee-Knoxville,** Department of Microbiology. *Departmental seminar*.

10/17 "Chemical biology of *Mycobacterium tuberculosis* pathogenesis" **The Ohio State University,** Department of Microbial Infection and Immunity. *Departmental seminar*.

09/17 "Small molecules that inhibit *Mycobacterium tuberculosis* environmental sensing and virulence" **Washington University,** Department of Molecular Microbiology. *Departmental seminar*.

06/17 "Small molecules that inhibit *Mycobacterium tuberculosis* environmental sensing and virulence" **Gordon Research Conference on Tuberculosis Drug Discovery and Development***,* Lucca, Italy. *International Meeting.*

05/17 "Chemical Biology of *Mycobacterium tuberculosis* pathogenesis" **Pediatric Research Rounds,** College of Human Medicine, MSU, East Lansing, MI. *Local seminar.*

04/17 "Inhibitors of *Mycobacterium tuberculosis* DosRST signaling and persistence"
ASM Conference on Tuberculosis: Past, Present, and Future, New York, NY. *National meeting*

12/16 "Inhibitors of *Mycobacterium tuberculosis* persistence and pathogenesis"
Oregon Health Sciences University, Department of Molecular Microbiology and Immunology. *Departmental Seminar*.

11/16 "Inhibitors of *Mycobacterium tuberculosis* persistence and pathogenesis"
Tufts University, School of Graduate Biomedical Sciences. *Departmental seminar.*

10/16 "Inhibitors of *Mycobacterium tuberculosis* persistence and pathogenesis"
Notre Dame University, Department of Biological Sciences. *Departmental seminar.*

06/16 "Small molecules that inhibit *M. tuberculosis* two-component regulatory systems."
Banff Conference on Infectious Diseases, Banff, Canada. *International Meeting.*

06/16 "Tuberculosis therapeutics that inhibit bacterial sensing and resistance to host immunity." **TB Summit 2016**, London, UK. *International Meeting.*

06/16 "Glow Green! Using fluorescent biosensors to find new treatments for tuberculosis."
Summer research opportunity research seminar, The Graduate School, MSU, East Lansing, MI. *Local seminar.*

12/15 "Small molecules that inhibit *M. tuberculosis* two-component regulatory systems."
University of Toledo, Department of Medical Microbiology and Immunology. *Departmental seminar.*

09/15 "Tuberculosis therapeutics that inhibit bacterial sensing and resistance to host immunity." **Drug Discovery and Development in Michigan** - Cutting Edge, East Lansing, MI. *Statewide meeting.*

08/15 "Targeting *M. tuberculosis* pH-driven pathogenesis."
22nd Annual Midwest Microbial Pathogenesis Conference, Indianapolis, IN. *Regional meeting.*

08/15 "Small molecules that inhibit *M. tuberculosis* two-component regulatory systems."
77th Harden Conference: Two Component Signaling in Bacteria: Integrating Approaches and Science, Warwickshire, UK. *International meeting.*

06/15 "Jumpstarting the development of new treatments for drug resistant tuberculosis."
Robert J. Schultz Family Research Day, Arcadia, MI. *Local meeting.*

02/15 "Glow Green! Using fluorescent biosensors to find new treatments for tuberculosis."
Classes Without Quizzes, MSU College of Natural Sciences Alumni Weekend, East Lansing, MI. *Local meeting.*

02/15 "Glow Green! Using fluorescent biosensors to find new treatments for tuberculosis."
MSU Drug Discovery Seminar, East Lansing, MI. *Local seminar.*

01/15 "Glow Green! Using fluorescent biosensors to find new treatments for tuberculosis." **MSU Respiratory Research Initiative**, East Lansing, MI. *Local seminar.*

04/14 "High throughput screens for inhibitors of *Mycobacterium tuberculosis* two-component regulatory systems." **Keystone Symposium on Novel Therapeutic Approaches to Tuberculosis**. Keystone, CO. *National meeting.*

08/13 "Targeting compounds and genes that modulate *Mycobacterium tuberculosis* pH-driven adaptation." **GLRCE Annual Meeting**, Chicago, IL. *Regional meeting.*

07/13 "Glow Green! Using fluorescent biosensors to find new treatments for tuberculosis." **Merial-NIH Veterinary Scholars Symposium**, East Lansing, MI. *National meeting.*

08/12 "Targeting compounds and genes that modulate *Mycobacterium tuberculosis* pH-driven adaptation." **GLRCE Annual Meeting**, Chicago, IL. *Regional meeting.*

08/11 "Targeting compounds and genes that modulate *Mycobacterium tuberculosis* pH-driven adaptation." **GLRCE Annual Meeting**, Chicago, IL. *Regional meeting.*

01/06 "Suppression of plant immunity by a bacterial type III effector." The Microbe-Host Interactions Workshop at the **International Plant and Animal Genome XIV Conference**, San Diego, CA. *National meeting.*

49 Total Invited Seminars

Selected Meeting Abstracts

01/17 "The acidic pH-dependent compound AC2P36 depletes *M. tuberculosis* thiol pools and potentiates the bactericidal activity of isoniazid, clofazimine and oxidizing agents" 2017 Keystone Symposium on New Developments in our Basic Understanding of Tuberculosis, Vancouver, BC, Canada.

04/16 "Reporter-based phenotypic screens to discovery inhibitors of *Mycobacterium tuberculosis* two-component regulatory systems" Poster presented at the 2016 Keystone Symposium on Phenotypic Drug Discovery, Big Sky, MT.

07/15 "The carbonic anhydrase inhibitor ethoxzolamide inhibits the *Mycobacterium tuberculosis* PhoPR regulon, Esx-1 secretion and attenuates virulence." Poster presented at the 2015 Gordon Research Conference on Tuberculosis Drug Development in Barcelona, Spain.

09/14 "A whole cell phenotypic screen in *M. tuberculosis* identifies ethoxzolamide as an inhibitor of the *phoPR* regulon." Poster presented at the 2014 ASM Interscience Conference on Antimicrobial Agents and Chemotherapy. Washington, DC.

09/13 "Chemical biology investigations of *Mycobacterium tuberculosis* pH- and hypoxia-driven adaptation." Poster presented at the 2013 Microbial Pathogenesis and Host Response meeting, Cold Spring Harbor, NY.

08/13 "High throughput screens for inhibitors of pH- and hypoxia-regulated fluorescence biosensors in *Mycobacterium tuberculosis*." Poster presented at the 2013 Midwest Microbial Pathogenesis Conference, Columbus, OH.

07/13 "High throughput screens for inhibitors of pH- and hypoxia-regulated fluorescence biosensors in *Mycobacterium tuberculosis*." Poster presented at the 2013 Gordon Research Conference on Tuberculosis Drug Development in Lucca, Italy.

09/12 "*reduced aprA expression* mutants identify pathways involved in *Mycobacterium tuberculosis* pH-driven adaptation" Poster presented at the Tuberculosis 2012 meeting in Paris, France.

01/11 "*aprABC*: A *Mycobacterium tuberculosis* complex-specific locus that modulates pH-driven adaptation to the macrophage phagosome" Poster presented at the Mycobacteria: Physiology, Metabolism and Pathogenesis Keystone Symposium, Vancouver, BC, Canada.

01/09 "Acid regulated *M. tuberculosis* reporter strains as tools for studies of pathogen adaptation to the macrophage phagosome" Poster presented at the Tuberculosis: Biology, Pathology and Therapy Keystone Symposium, Keystone, Colorado.

Current Research Support

1. National Institutes of Health, NIAID R01 AI150855 9/22/20—8/31/25
Principal Investigator, $3,335,278
Chemical genetics of *M. tuberculosis* DosRST signaling and persistence.

2. National Institutes of Health, NIAID R01 AI173285 7/13/23—6/30/28
Co-Principal Investigator, $3,698,986
Chemical biology studies of MmpL3 inhibition and resistance in mycobacteria

3. National Institutes of Health, NIAID R41 AI167330 7/06/23—6/30/25
Co-Investigator, $590,374 award to Tarn Biosciences Inc, MSU subaward.
Development of the HC2099 series of MmpL3 inhibitors to treat tuberculosis.

4. Bill & Melinda Gates Medical Research Institute 8/01/20—
Principal Investigator, $258,575 Direct Costs
Proof-of-concept studies using endoperoxide DosRST inhibitors in combination with TB antibiotics

5. Advance Grant Proof-of-concept Fund 10/01/22—9/30/23
Co-Principal Investigator, $40,000
MmpL3 inhibitors to treat Mycobacterial infections (TB and NTM infections).

6. Dr. Ralph and Marian Falk Medical Research Trust Catalyst Award 1/31/23—1/30/25
Co-Principal Investigator, *$300,000*
Development of new MmpL3 inhibitors to treat Mycobacterial infections.

Completed Research Support

7. National Institutes of Health, NIAID R21 AI148909 03/01/20—02/28/23
Principal Investigator, $419,050 Direct Costs
Development of new *M. tuberculosis* MmpL3 inhibitors

8. National Institutes of Health, NIAID R03 AI153454 06/01/20—05/31/23
Principal Investigator, $148,868 Direct Costs
Characterizing new M. tuberculosis inhibitors discovered in the Molecular Libraries Small Molecule Repository

9. National Institutes of Health, NIAID R01 AI116605 12/01/15—11/30/20
Principal Investigator, $1,914,283 Direct Costs
Mechanisms of *Mycobacterium tuberculosis* pH-driven adaptation

10. National Institutes of Health, NIAID R21 AI1170181 8/20/16—7/31/19
Co-Principal Investigator, $399,883
Non-competitive proteasome inhibitors to treat chronic, drug-resistant TB

11. MSU Foundation, Strategic Partnership Grant 14-SPG-Full-2966 07/01/15—06/30/19
Co-Principal Investigator, $399,079
Non-competitive proteasome inhibitors to treat chronic, drug-resistant TB

12. Bill & Melinda Gates Foundation OPP1119065 10/31/14—10/31/17
Principal Investigator, $901,492
Development of TB therapeutics that inhibit persistence and reduce antibiotic tolerance

13. Michigan Animal Agriculture Alliance AA16006 01/01/16—12/31/17
Principal Investigator, $41,076
Fate of *Mycobacterium bovis* in ensiled forages

14. National Institutes of Health, NIAID R21 AI105867 08/08/13—07/31/16
Principal Investigator, $392,333
Screening for inhibitors of *Mycobacterium tuberculosis* persistence-associated lipid metabolism

15. Jean P. Schultz Endowed Biomedical Research Award 09/01/14—08/31/16
Principal Investigator, $30,000
Jumpstarting the development of new treatments for drug resistant tuberculosis

16. Michigan Initiative for Innovation and Entrepreneurship 01/01/14—10/31/14
Principal Investigator, $44,022
in vivo efficacy studies of first-in-class compounds to treat chronic, drug-resistant tuberculosis

17. National Institutes of Health, NIAID U54 AI057153 03/01/12—02/28/14
Career Development Grant, $353,050
Targeting compounds and genes that modulate *Mycobacterium tuberculosis* pH-driven adaptation.

18. Bill & Melinda Gates Foundation OPP1059227 05/01/12—10/31/13
Principal Investigator, $110,000
Using a synthetic biosensor to find drugs targeting *Mycobacterium tuberculosis* persistence

Total Funded Research Support: $13,396,654 (total includes smaller internal grants not listed above, including Molecular Discovery Grants and CVM endowment funds).

Professional Activities

Grant and fellowship proposal review activities

2013-18 Reviewer, **ASM Undergraduate Research Fellowships**.
2014 Proposal Reviewer, **Wellcome Trust**.
2015 Proposal Reviewer, **Irish Health Research Board**.
2016 R01 Special Emphasis Panel "U.S. China Program for Biomedical Collaborative Research", **NIH Study Section**.
2016 R01 Special Emphasis Panel "Topics on Infectious Diseases and Drug Discovery", **NIH Study Section.**
2016 Peer Review Medical Research Panel member: Discovery Awards – Tuberculosis, **US Department of Defense Study Section**.
2017 R15 "AREA applications Infectious Diseases and Microbiology", **NIH study section**
2017 R01 Special Emphasis Panel "Topics on Infectious Diseases and Drug Discovery", **NIH Study Section.**
2017 R21/R03 "Topics in Bacterial Pathogenesis", **NIH Study Section.**
2017 R01 "International Research in Infectious Diseases including AIDS", **NIH Study Section.**
2017 R61/R33 "Dysregulation of Immune Cell Regulatory Pathways by Mtb in the Context of HIV Infection", **NIH Study Section.**
2017 Peer Review Medical Research Panel member: Discovery Awards – Antimicrobial Resistance, **US Department of Defense Study Section**.
2018 Proposal Reviewer, **Swiss National Science Foundation.**
2018 Proposal Reviewer, **European Research Council.**
2018 P01 "NIAID Investigator Initiated Program Projects", **NIH Study Section.**
2019 R13 "Support for Conferences and Scientific Meetings", **NIH Study Section,** Chairperson.
2019 R01 "Bacterial Pathogenesis BACP", **NIH Study Section.**
2019 R01 Special Emphasis Panel "Topics in Drug Discovery", **NIH Study Section**.
2019 R01 Special Emphasis Panel "US South African Program for Collaborative Biomedical Research – Phase II (Infectious Diseases)", **NIH Study Section.**
2019 Proposal Reviewer, **French National Research Agency.**
2019-21 MSU Strategic Partnerships Grant Review Panel.
2020 P01 "NIAID Investigator Initiated Program Projects", **NIH Study Section.**
2020 Proposal Reviewer, **French National Research Agency.**
2020 Proposal Reviewer, **Wellcome Trust**.
2020 R01 Special Emphasis Panel "Topics in Drug Discovery", **NIH Study Section**.
2020 R01 Special Emphasis Panel "Topics in Drug Discovery", **NIH Study Section**.
2021 R01 Special Emphasis Panel "Topics in Drug Discovery", **NIH Study Section**.
2021 R01 "Understanding the Role of the M. Tuberculosis Granuloma in TB Disease and Treatment Outcomes", **NIH Study Section**.
2021 Proposal Reviewer, **French National Research Agency.**
2022 Proposal Reviewer, **Health Research Council of New Zealand.**
2022 Proposal Reviewer, **Medical Research Council, UK Research and Innovation.**
2022 R01 Special Emphasis Panel "Infectious Diseases Research", **NIH Study Section.**

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2022 Proposal Reviewer, **Medical Research Council, UK Research and Innovation.**
2022-24 MSU Strategic Partnerships Grant Review Panel.
2022 Proposal Reviewer, **Medical Research Council, UK Research and Innovation.**
2023 Proposal Reviewer, **University of Sharjah, United Arab Emirates**.
2023 Proposal Reviewer, **National Science Center, Poland.**
2023 R01/R21 "Drug Discovery and Molecular Pharmacology A (DMPA)", **NIH Study Section.**
2023 R01/R21 "Anti-Infective Resistance and Targets (AIRT)", **NIH Study Section.**

Editorial activities

2015-2017 Editorial Board (Review Editor), **Frontiers in Cellular and Infection Biology**.
2016-present Editorial Advisory Board, **The Journal of Infectious Diseases** (Infectious Disease Society of America).
2017-2023 Editor, **Microbiology** (Microbiology Society)
2023-2025 Editorial Board, **Journal of Bacteriology** (American Society for Microbiology)

Ad hoc article reviewer (41 journals, 139 manuscripts reviewed):
ACS Infectious Disease; ACS Omega; Antimicrobial Agents and Chemotherapy; BMC Biotechnology; BMC Microbiology; Cell Chemical Biology; Cell Host & Microbe; Cell Reports; Clinical Microbiology Reviews; Current Opinion in Pharmacology; Disease Models and Mechanisms; eLife; Gene; Intl. Journal of Tuberculosis and Lung Disease; Infection and Immunity; IUBMB Life; Journal of Bacteriology; Journal of Infectious Diseases; Journal of Medical Microbiology; Journal of Medicinal Chemistry; Frontiers in Microbiology; Frontiers in Cellular and Infection Biology; mBio; MedChemComm; Microbes and Infection; Microbiology; Microbiology Spectrum; Molecular Microbiology; mSphere; Nature Communications; Nucleic Acids Research; Pathogens and Disease; PLOS Computational Biology; PLOS Pathogens; PLOS One; PNAS; Science Advances; Scientific Reports; Trends in Pharmacological Sciences; Tuberculosis; Veterinary Record Case Reports; Virulence.

Meeting organization

2018 Planner and Moderator, "Recent advances in understanding the implications of persistence in microbial pathogenesis". Plenary Session. **ASM Microbe 2018,** Atlanta, GA.

Professional Memberships

2012- American Society for Microbiology

Commercialization activities

2018- Founder and Chief Scientific Officer of **Tarn Biosciences, Inc**.

Tarn Biosciences, Inc. is a C-corporation founded in 2018 that is developing new antibiotics to treat mycobacterial infections. The company has received two rounds of funding from Red Cedar Ventures and a Phase I STTR from the NIH-NIAID. TarnBio's portfolio includes 1) Tarn-M oral and inhaled formulations to treat *M. tuberculosis* and *M. abscessus* infections and 2) Tarn-D oral and inhaled formulations to inhibit mycobacterial persistence or biofilm formation.

Graduate student, Undergraduate Student, and Postdoctoral Mentoring

Graduate students (and, if known, current position post-graduation)
2012-17 Jacob Baker MD/PhD (Infectious Disease Fellow, Spectrum Health)
2012-16 Benjamin Johnson PhD (post-doc at Van Andel Institute)
2013-17 Huiqing Zheng PhD (Research Investigator, Lanxess)
2017-21 John Williams PhD (Post-doc, Sassetti lab at Univ. Mass Medical)
2017-21 Shelby Dechow PhD (Assistant Director, Research Integrity, Univ. of Michigan)
2018- Elizabeth Haiderer DVM (PhD student)
2019-20 Cristina Zimpel DVM (visiting PhD student from Univ. of Sao Paulo).
2021- Veronica Albrecht (PhD Student)
2021- Ifeanyichukwu Eke (PhD Student)
2022- Bassel Abdalla (PhD student)
2022- Heather Murdoch (PhD Student)
2023- Adam Kibiloski (PhD Student)

Undergraduate research students (and, if known, current position post-graduation)
2012-13 Jessica Hallesy (lab manager, Rybak Lab, Wayne State University)
2012-14 Navi Sahi (Deceased)
2012-14 Devin Carter
2013-15 Hinako Terauchi (DO/PhD student, Michigan State University)
2013-15 Boitshoko Molefhi (Research and Innovation Officer, ABM University College)
2014-15 Robert Fillinger (PhD student, The Ohio State University)
2015-16 Hannah Bodnar (Dental Student, University of North Carolina, Chapel Hill)
2015-18 Marilyn Werner (Health Communications Specialist, CDC)
2016-18 Emily Juzwiak (PhD student, Johns Hopkins University)
2016-17 Hayley West (PA school, GVSU)
2016-18 Nana Abena Anti (DO/PhD student, Loma Linda University)
2017-18 Ingrid Flaspohler (PhD Student, University of Michigan)
2017-19 Joe Grech (MD student, Loyola University Chicago).
2018-19 Dylan Slaugh (Lab Technician, ALS Environmental)
2019-20 Noah Goldberg (Business Development Manager, Joovy)
2019-20 Natalie Barstys
2020-21 Jared Fallon (Research Technician, MSU)
2020-22 Megan Murto (PhD student, Van Andel Institute)
2021- Jackie Thomas
2021- Priyanka Gadam
2022- Angel Eisenhuth

Postdoctoral Researchers
2014-15 Garry Coulson (Director, Regulatory and Biosafety, Sabai Global)
2016-19 Rajni Goyal (Mitochondria in Motion).
2017-18 Uma Shankar Gautam (Director of Bacteriology Core, Duke University RBL)
2023- Alexandria Oviatt

Summer research students (*training program)*.
2013 Cory Schall (MD summer student)
2014 Sabrina Rupani (DVM summer student)
2015 Katriana Jorgensen-Muga (NHLBI R25 summer undergraduate student)

2015 Tiffany Bryant (DVM summer student)
2016 A'Jah Chandler (NHLBI R25 summer undergraduate student)
2016,17 Elizabeth Haiderer (DVM summer student)
2016 Paulo Carneiro (LCS811 summer research project)
2017 Ryan Borchert (SROP summer undergraduate student)
2017 Sharon-Rose Nartey (NHLBI R25 summer undergraduate student)
2018 Chioma Ngene (NHLBI R25 summer undergraduate student)

Student Awards and Accomplishments:

Graduate students

Ben Johnson: Rudolph Hugh Award (2015); Hsiang Everett Kimball Scholarship (2016).
Jake Baker: Schultz Award (2014); Duvall Award (2015); Wentworth Fellowship (2016); NIAID Scholarship for Keystone Symposium (2017); Whittam Award (2017).
Huiqing Zheng: MMPC Best Poster Award (2015); Rudolph Hugh Award (2016); Hsiang Everett Kimball Scholarship (2017); ASM Microbe 2017 Travel Award; CNS Dissertation Completion Fellowship (2017).
Shelby Dechow: IPSTP NIH Training Grant Fellowship (2017-2019). Marvis Richardson Endowed Award (2018 & 2019). CNS Dissertation Continuation Award (2020). Wentworth Fellowship (2020). Rudolph Hugh Award (2021). CNS Dissertation Completion Fellowship (2021).
John Williams: Elenor L Gilmore Endowed Excellence Award (2018). Invited seminar at the 2018 Keystone Symposium on Tuberculosis, Whistler, BC. Russell B. DuVall Fall Fellowship (2019); CNS Dissertation Continuation Award (2019; 2020). Peabody Fellowship (2020).
Elizabeth Haiderer: CVM Class of 2020 Student Research Award; Whittam Award (2023).
Ife Eke: Rudolph Hugh Award (2022), IPSTP Training Grant (T32), Gerhardt Award (2023).
Bassel Abdalla: IPSTP Training Grant (T32).

Undergraduate students

Marilyn Werner: Duvall Award (2016); ASM Undergraduate Research Fellowship (2016); MSU nominee for Goldwater Scholarship (2017); Peabody Award (2017).
Emily Juzwiak: Summer Research Experience, Mayo Clinic (2016). Lyman Briggs Research Symposium Grand Prize from MSUFCU (2017); Peabody Award (2017). First Prize, poster session, University Undergraduate Research Forum (2018) Philipp and Vera Gerhardt Research Award (2018)
A'Jah Chandler: Annual Biomedical Research Conference for Minority Students Travel Award (2016).
Nana Anti: Summer Research Experience, Novartis Institute of Biomed Research (2016). First Prize oral presentation University Undergraduate Research Forum (2018)

Graduate Committees

Committee member (25 total, other than students mentored in Abramovitch lab):
Darin Quach (Britton lab), Suttipun Sungusuwan (Huang lab), Alita Burmeister (Lenski lab), Peng Lu (Xi lab), Michelle Korir (Manning lab), Gregory Patten (Tepe lab), John Shook (Waters lab), Xiao Liang (Xi lab), Evert Njomen (Tepe Lab), Y Hoang (Kroos lab), Jeff Schachterle (Sundin Lab), Paulo Carneiro (Kaneene lab), Michael Maiden (Waters lab), Josh Lensmire (Hammer lab), Fernanda Miyagakishoyama (Srevatasan lab), Evan Brenner (Srevatasan lab), Sean Thomas (Olive Lab), Haleigh Gilliland (Olive Lab), Esther Chen (Crosson Lab), Rochelle Ratnayake (Parent Lab), Zoe Hansen (Manning Lab), Thomas Kim (Crosson lab), Imani Pascoe (Lebeis and Bonito Labs), Joelis Lama-Diaz (Hammer Lab).

Preliminary exam chair (15 total):
Natalia Porcek (Parent Lab), Laura Kirby (Koslwosky Lab), Ahrom Kim (Yu lab), Nico Fernandez (Waters lab), Sanjana Mukherjee (Manning lab), Brian Nohomovich (Manning Lab), Nhu Nguyen (Dufour lab), John Lee (Dufour lab), Douglas Guzior (Quinn lab), Alex Aaring (Dufour lab), Omid Madadgar (Tewari-Singh lab), Manos Kokarakis (Ducat lab), Alex Wessel (Waters lab), Morgan Collins (Petroff lab), Joel Marty (Kaminski Lab).

Masters thesis examiner (2 total):
Alex Roy (Neubig Lab), Calista Busch (Schwartz lab).

Classroom Teaching

Courses taught:

2012-2013	MMG532 (1 lecture), MMG563 (2 lectures), MMG861 (4 lectures)
2013-2014	MMG461 (14 lectures), MMG532 (1 lecture), MMG563 (8 lectures), MMG801 (1 lecture)
2014-2015	MMG532 (1 lecture), MMG563 (4 lectures), MMG801 (1 lecture), MMG861 (6 lectures), PDI851 (1 lecture)
2015-2016	MMG461 (14 lectures), MMG532 (1 lecture), MMG563 (4 lectures), MMG801 (1 lecture), VM820 (1 lecture)
2016-2017	MMG532 (1 lecture), MMG563 (5 lectures), MMG861 (7 lectures) PDI851 (1 lecture)
2017-2018	MMG461 (14 lectures), MMG532 (1 lecture), MMG563 (4 lectures)
2018-2019	MMG532 (1 lecture), MMG563 (4 lectures), MMG861 (6 lectures) PDI851 (2 lecture), VM519 (1 lecture)
2019-2020	VM500 (1 class), VM530 (1 class, 2 labs), VM547 (1 class), VM519 (1 class), MMG532 (1 lecture), MMG461 (15 lectures)
2020-2021	VM500 (1 class), VM530 (1 class, 3 labs), VM519 (1 class), MMG532 (1 lecture), VM547 (1 class), MMG861 (6 lectures), PDI851 (2 lecture)
2021-2022	VM500 (1 class) VM530 (6 classes, 3 labs), MMG532 (1 lecture), VM519 (1 class); MMG461 (8 lectures); IPSTP-RCR (5 classes)
2022-2023	VM500 (1 class) VM530 (6 classes, 3 labs), MMG532 (1 lecture), VM536 (3 classes), MMG861 (6 lectures).

Course names:

MMG461: Molecular Pathogenesis (Undergraduate students)
MMG532: Medical Microbiology (Medical students)
MMG563: Veterinary Pathogenic Microbiology (Veterinary Medicine students)
MMG801: Integrative Microbial Biology (Graduate Students)
MMG861: Advanced Microbial Pathogenesis (Graduate Students)
PDI851: Advanced General Pathology (Veterinary Residents)
VM500: Veterinary Science 1
VM530: Veterinary Science 2
VM519: Cutaneous System 1 (Veterinary Medicine Students)
VM536: Respiratory 2
VM820: Topics in Comparative Medicine and Integrative Biology (Graduate Students)
IPSTP-RCR: Classroom RCR training for IPSTP trainees.

Department, College and University Service

2012	MMG Departmental Seminar Committee
2013	MMG Graduate Committee
	BMS Graduate Admissions Committee
	MMG Faculty Search Committee, Hugh Chair in Microbial Pathogenesis
2014	MMG Graduate Committee
	BMS Graduate Admissions Committee
	MMG Faculty Search Committee, Microbiome/Infectious Disease
	MMG Strategic Planning Retreat Committee
2015	MMG Graduate Committee
	MMG Faculty Search Committee, Hugh Chair in Microbial Pathogenesis
	CHM Faculty Search Committee, Chief of Division of Infectious Diseases
	CVM representative to the University Council and Faculty Senate
	CVM College Advisory Council, *ex officio, Secretary.*
	CVM Graduate Grievance Hearings Pool
2016	MMG Faculty Advisory Committee
	CVM representative to the University Council and Faculty Senate, *re-elected*
	CVM College Advisory Council, *Secretary*
	CVM Faculty Search Committee, Dehn Endowed Chair.
	CHM Faculty Search Committee, Chief of Division of Infectious Diseases
2017	MMG Faculty Advisory Committee
	CVM representative to the University Council and Faculty Senate, *re-elected*
	CVM College Advisory Council, *Chairperson*
2018	MMG Awards Committee
	MMG Faculty Mentoring Committee, Dr. Andrew Olive, *Chair.*
	CVM College Advisory Council*, Secretary.*
2019	MMG Awards Committee
	MMG Faculty Mentoring Committee, Dr. Andrew Olive, *Chair.*
	CVM College Advisory Council
	CVM Faculty Search Committee, Ellis Chair in Antimicrobial Resistance
	CVM Search Committee, Associate Dean for Research and Graduate Studies
	IPSTP Steering committee
2020	CVM College Advisory Council, *Vice Chair*
	IPSTP Steering committee
	MMG Faculty Mentoring Committee, Dr. Andrew Olive, *Chair.*
	MMG Director of Graduate Studies
	MMG Graduate Committee (Chair)
	MMG Faculty Advisory Committee (*ex officio*)
2021	IPSTP Steering committee
	MMG Faculty Mentoring Committee, Dr. Andrew Olive, *Chair.*
	MMG Director of Graduate Studies
	MMG Graduate Committee (Chair)
	MMG Faculty Advisory Committee (*ex officio*)

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2022	IPSTP Steering committee
	MMG Faculty Mentoring Committee, Dr. Andrew Olive, *Chair*.
	MMG Faculty Mentoring Committee, Dr. Yu Zhang.
	MMG Director of Graduate Studies
	MMG Graduate Committee (Chair)
	MMG Faculty Advisory Committee (*ex officio*)
2023	IPSTP Steering committee
	MMG Faculty Mentoring Committee, Dr. Andrew Olive, *Chair*.
	MMG Faculty Mentoring Committee, Dr. Scott Sherill-Mix, *Chair*.
	MMG Faculty Mentoring Committee, Dr. Yu Zhang.

MMG: Department of Microbiology and Molecular Genetics; CVM: College of Veterinary Medicine; CHM: College of Human Medicine. BMS: BioMolecular Science.
Years are academic years (starting in August).

Abramovitch lab in the news and other publications

May 9, 2012: “Biosensor illuminates compounds to aid fight against TB”, Jason Cody, **MSU Today** (http://msutoday.msu.edu/news/2012/biosensor-illuminates-compounds-to-aid-fight-against-tb/).

May 23, 2012 “MSU Researcher searches for new tuberculosis drug with Gates Foundation grant”, Natalie Burg, **Capital Gains** (http://www.capitalgainsmedia.com/innovationnews/TB0620.aspx).

2012 “We have bad news for TB” **International Magazine**, No. 13. (http://www.isp.msu.edu/resources/documents/MSUIntl2012.pdf).

2013 “Illuminating science addresses TB threat”, Natasha Berryman, **AgBioResearch Futures Magazine** (http://agbioresearch.msu.edu/uploads/futures/Fall_WinterFutures2013_Vol31_No3and4.pdf).

April 22, 2014 “MSU innovation center recognizes inventors and inventions” **MSU Today**, (http://msutoday.msu.edu/news/2014/msu-innovation-center-recognizes-inventors-and-inventions/).

June 10, 2014 “Priming the Pipeline, Embracing Risk”, Natasha Berryman, **AgBioResearch Futures Magazine**, (http://agbioresearch.msu.edu/uploads/futures/2014FuturesAntibioticResistance.pdf and http://agbioresearch.msu.edu/news/priming_the_pipeline_embracing_risk).

April 28, 2015 “Illuminating Solutions”, Sarah Wardell. **Empower Extraordinary Campaign**. (http://givingto.msu.edu/stories/story.cfm?id=366)

June 4, 2015 “Schultz Family Helps Shed New Light on Dark Disease”, Lois Furry, **University Advancement.** (http://givingto.msu.edu/stories/story.cfm?id=380)

June 9, 2015 “Illuminating Solutions”, Faculty Voices Video, **MSU Today,** (http://msutoday.msu.edu/360/2015/robert-abramovitch-illuminating-solutions/)

July 23, 2015 “MSU scientists set sights on glaucoma medication to treat TB”, Sarina Gleason, **MSU Today** press release (http://msutoday.msu.edu/news/2015/msu-scientists-set-sights-on-glaucoma-medication-to-treat-tb/). Picked up by numerous news organizations.

December 19, 2016 “Ancient Chinese Malaria Medicine Fights TB”, Sarina Gleason, **MSU Today** press release (http://msutoday.msu.edu/news/2016/ancient-chinese-malaria-remedy-fights-tb/)

December 20, 2016 “Ancient Chinese medicine shows promise in the treatment of tuberculosis”, Léa Surugue. Interview with **International Business Times** (http://www.ibtimes.co.uk/life-saving-malaria-drug-artemisinin-also-shows-promise-treatment-tuberculosis-1597276)

December 21, 2016 “Ancient Chinese Herb Aids Fight Against TB”, Jessica Berman, Interview with **Voice of America**. (https://www.voanews.com/a/tb-tuberculosis-artemisinin/3645555.html)

December 29, 2016 “'Dormancy Inhibitors' Promising for Combating TB, Slowing Resistance”, Marilynn Larkin, **Reuters Health**. (http://www.medscape.com/viewarticle/873822).

January 26, 2017 “Malaria drug artemisinin shows promise against TB”, Claudia Caruana, Interview with **SciDev.net** (http://www.scidev.net/asia-pacific/author.claudia-caruana.html)

June 30, 2017 “Combating Tuberculosis with Ancient Chinese Malaria Meds”, Monika Buczek, Homepage of **ASM.org** (https://www.asm.org/index.php/general-science-blog/item/6645-combating-tuberculosis-with-ancient-chinese-malaria-meds)

July 2017 “What I wish I knew when starting as an assistant professor: An interview with Robert Abramovitch, Lark Coffey, Thomas Kehl-Fie and Rita Tamayo”.
Trends in Microbiology. DOI: http://dx.doi.org/10.1016/j.tim.2017.04.008

January 2018 “ Wake Up: Treating Tuberculosis by Stopping Dormancy”. MSU College of Veterinary Medicine Perspectives Magazine (https://cvm.msu.edu/news/perspectives-magazine/perspectives-winter-2018/wake-up)

January 2020 “Striving to stave off antibiotic resistance”. MSU College of Agriculture and Natural Resources (https://www.canr.msu.edu/news/striving-to-stave-off-antibiotic-resistance).

May 2022 “Targeting tuberculosis – an interview with Robert Abramovitch”. Future Medicinal Chemistry. DOI: 10.4155/fmc-2022-0110

December 2022 “MSU Drug Developers Funded for Cancer, Tuberculosis Research”. MSU Today. https://msutoday.msu.edu/news/2022/seed-funding-for-development-of-cancer-tuberculosis-drugs