

Division of Biological Sciences
University of Montana
Missoula, Montana, 59812
(406) 243-5972
mike.minnick@mso.umt.edu

EDUCATION

Washington State University	PhD	Microbiology	1987
Walla Walla University	MS	Biology	1984
Walla Walla University	BS	Biology	1982

PROFESSIONAL EXPERIENCE

9/01-present	Professor , Division of Biological Sciences, University of Montana, Missoula, MT
8/19-5/21	Program Director , Cellular, Molecular & Microbial Biology, Division of Biological Sciences, University of Montana, Missoula, MT
9/00-9/06	Director , Murdock Molecular Biology Facility, University of Montana, Missoula, MT
1/03-7/06	Assistant Dean , Division of Biological Sciences, University of Montana, Missoula
7/08-6/10	Assistant Dean , Division of Biological Sciences, University of Montana, Missoula
1/98-9/00	Associate Director , Murdock Molecular Biology Facility, University of Montana, Missoula, MT
8/96-8/01	Associate Professor , Division of Biological Sciences, University of Montana, Missoula, MT
8/91- 8/96	Assistant Professor , Division of Biological Sciences, University of Montana, Missoula, MT
6/90 - 7/91	Postdoctoral Fellow , Department of Molecular Biology, Battelle Pacific Northwest Laboratories, Richland, WA, with Dr. Marvin E. Frazier
10/87 - 6/90	Postdoctoral Research Associate , Department of Microbiology, Washington State University, Pullman, WA, with Dr. Louis P. Mallavia
8/88 - 5/89	Instructor , Department of Microbiology, Washington State University, Pullman, WA
8/85 - 5/87	Graduate Teaching Assistant , Department of Microbiology, Washington State University, Pullman, WA
8/84 - 5/85	Graduate Research Assistant , Department of Microbiology, Washington State University, Pullman, WA
3/84 - 6/84	Instructor , Dept. of Biology, Walla Walla University, College Place, WA
1982 - 1984	Graduate Teaching Assistant , Department of Biology, Walla Walla University, College Place, WA
1981 - 1982	Undergraduate Teaching Assistant , Department of Biology, Walla Walla University, College Place, WA

HONORS and AWARDS

Selected as Honorary Member, American Society for Rickettsiology, 2023-present
 Editorial Board, *PLOS ONE*, 2020-present
 Editorial Board, *Fine Focus*, 2013-present
 Editorial Board, *Frontiers in Cellular and Infection Microbiology*, 2010-present
 Editorial Board, *Journal of Microbiological Methods*, 2007-present
 Outstanding Faculty Advising Award for undergraduate student advising, UM, 2012
 Student Affairs, Faculty Recognition Award, UM, 2012
 Honorary Member, Golden Key International Honour Society, 2011-present
 Publication selected for *Faculty of 1000 Biology*, 2007 (Battisti *et al.*, 2007)
 Student Affairs Faculty Recognition Award, University of Montana, 2007
 10 Faculty Merit Awards from UM (1994, 1995, 1998, 2000, 2003, 2004, 2008, 2010, 2012, 2017)
 Outstanding Faculty Recognition Award, UM Greek Life, 2003
 Tenure, University of Montana, 1997
 Winston and Helen Cox Teaching Award, University of Montana, 1995
 Department of Energy (NORCUS) Postdoctoral Fellowship, 1990-1991
 Washington State University Competitive Summer Research Assistantship, 1987
 Victor Burke Memorial Fellowship, Washington State University, 1985, 1986
 Dean's Award for Academic Excellence, Walla Walla University, 1984
 Graduation Cum Laude, Walla Walla University, 1982
 Outstanding Biology Graduate, Walla Walla University, 1982

PROFESSIONAL MEMBERSHIP and OFFICER POSITIONS

American Society for Microbiology (1985-present)

- Member

National Association of Advisors for the Health Professions (2009-2011)

- Member

American Society for Rickettsiology (1987-present)

- **Webmaster** (2013-2020)
- **President** (2006-2007)
- **Vice President** (2003-2006)
- **Secretary - Treasurer** (2000-2003)
- **Councilor-at-Large** (1999-2000)

American Society for Microbiology- Northwest Branch

- **President** (1994-1995)

American Heart Association (2012-2013)

- General Professional member

RESEARCH INTERESTS

- Molecular microbiology
- Bacterial pathogenesis and virulence
- RNA-mediated regulation in bacteria
- Vertebrate and invertebrate immunity

- Host-pathogen and vector-pathogen interactions

RESEARCH GRANTS AWARDED

- (30) **NIH-NIAID- R03AI167877-01**; "Targetomes of infection-specific small RNAs of *Bartonella bacilliformis*" (PI) 4/08/22-3/31/24. **\$148,000.**
- (29) **NIH-NIAID- R03 AI146927**; "Competency of sand flies as a vector for *Bartonella anchashensis*" (PI) 6/01/19-5/31/23. **\$145,000.**
- (28) **NIH-NIAID; 5R21 AI128575-02**; "Small regulatory RNAs of *Bartonella bacilliformis*, the agent of Carrion's disease" (PI); 12/01/2016-11/30/18. **\$406,517.**
- (27) **NIH-NIAID- 1R21 AI123293-01**; "*Caenorhabditis elegans* infection model for *Coxiella burnetii*" (PI) 2/15/16-1/31/19. **\$398,750.**
- (26) **NIH-NIAID- 1R15 AI119798-01**; "Role of GroEL in pathological angiogenesis during bartonellosis" (PI) 9/01/15-8/31/19. **\$429,984.**
- (25) **MUS Research Initiative: 51040-MUSR12015-03**; "One medicine: reducing the impacts of inflammatory and infectious diseases on animal and human health" (PL) Montana University System Research Initiative; 10/01/15-9/31/17. **\$75,000.**
- (24) **NIH-NIAID- 1R15 AI103511-01**; "Small regulatory RNAs of *Coxiella burnetii*- the agent of Q fever" (PI) 1/15/13-1/14/15. **\$421,034.** Reassigned to new PI (J. Battisti).
- (23) **NIH-NIAID- R21 AI095804-01**; "Role of surface proteins in sand fly colonization by *Bartonella bacilliformis*" (PI) 8/01/12-7/31/15. **\$385,659.**
- (22) **NIH- 1P20RR024483-01A1**; "Structural and functional analysis of a unique, metal-binding surface protein of *Coxiella burnetii*" (PI) Pilot project from 8/01/11-7/31/12. **\$35,489.**
- (21) **NIH-NIAID- R21AI078125**; "Role of *Coxiella burnetii* group I introns in growth modulation". (PI) 05/09-04/12. **\$389,125.**
- (20) **NIH-NCRR- 1P20RR020185-01**; "Center for Development of Immunotherapies to Zoonotic Diseases". (Mentor to M. McGuirl). Component of NIH Cobre grant to A. Harmsen (PI) 9/04-8/09. **\$86,178.**
- (19) **NIH- U54AI065357**; "*Coxiella* cultivation core" (PI) Component to Rocky Mountain Regional Center of Excellence for Biodefense and Emerging Infectious Disease" 5/01/05-4/30/10. NIH U54 AI065357-029001, 6/01/05-4/30/09. **\$777,009.**
- (18) **NIH- U54AI065357-040023**; "Gene expression and manipulation of *Coxiella burnetii*" (PI) Component to Rocky Mountain Regional Center of Excellence for Biodefense and Emerging Infectious Disease" NIH 6/01/05-4/30/09. **\$1,275,649.**
- (17) **NSF- MRI 0321329**; "Enhancing capacity for molecular and evolutionary genetics research at the University of Montana: Acquisition of an ABI 3100 genetic analyzer and related equipment" (co-PI). 7/1/03-6/31/06. **\$281,880.**
- (16) **NIH-NIAID- R01AI053111**; "Hemin receptor gene family of *Bartonella quintana*". (PI) 6-15-03 to 11-30-07. **\$1,296,800.**
- (15) **NIH-NIAID- R15AI52101**; "*Bartonella* inhibitory factor for endothelial cell growth". (PI) 9-1-02 to 8-31-04. **\$140,000.**
- (14) **NIH-NIAID- R15AI45534**; "Genetic exchange by a bacteriophage from *Bartonella*". (PI) 9-1-99 to 8-31-02. **\$104,363.**

- (13) **American Heart Association- Established Investigator Grant**; "Molecular characterization and mechanism of an angiogenic protein from *Bartonella henselae*". (PI) 1-1-99 to 12-31-02. **\$300,000.**
- (12) **MONTS (NSF-EPSCoR) grant**- "Characterizing genetic exchange by a bacteriophage-like particle from *Bartonella*". (PI) Montana University System. 7-1-98 to 6-30-99. **\$25,000.**
- (11) **Montana University Grant- 245/1647-65**; "A hemin-binding protein from *Bartonella quintana*". (PI) 7-1-98 to 6-31-99. **\$2,200.**
- (10) **Montana University Grant- 245/1640-22**; "The IalB protein of *Bartonella bacilliformis*". (PI) 7-1-96 to 7-31-97. **\$1,538.**
- (9) **NIH-NIAID- IDeA grant P20RR10169**; "The invasion locus of *Bartonella bacilliformis*". (PI) 6-1-95 to 5-31-97. **\$80,000.**
- (8) **NIH-NIAID- S15AI37054**; "Small Instrumentation Grant". (PI) 8-1-94 to 7-31-95. **\$8,841.**
- (7) **NIH-NIAID- R29AI34050**; "Virulence determinants of *Bartonella bacilliformis*". (PI) 4-1-93 to 3-31-98. **\$456,099.**
- (6) **Montana University Grant- 245/1640-22**, "Characterization and assessment of flagella as a virulence determinant for *Bartonella bacilliformis*". (PI) 7-1-93 to 6-30-94. **\$2,200.**
- (5) **MONTS (NSF-EPSCoR) Grant- RII 8912934**; "Molecular characterization of the β -hemolysin from *Bartonella bacilliformis*". (PI) 7-1-92 to 6-30-93. **\$18,000.**
- (4) **Montana University Grant- 245/1117-Y**; "Identification and characterization of the erythrocyte adhesin gene of *Bartonella bacilliformis*". (PI) 7-1-92 to 6-31-93. **\$2,060.**
- (3) **American Cancer Society- Institutional Research Grant 290857**; "Cloning and molecular characterization of the angiogenic protein(s) from the agent of bacillary angiomatosis". (PI) 7-1-91 to 6-31-92. **\$15,000.**
- (2) **Sigma Xi- Grant-in-Aid of Research**; "Tissue site of synthesis for the bacteria-induced protein M13 in the immune response of *Manduca sexta*". (PI) 1987. **\$300.**
- (1) **Sigma Xi- Grant-in-Aid of Research**; "Role of the inducible lectin M13 in the immune response of *Manduca sexta*". (PI) 1986. **\$200.**

UNDERGRADUATE TRAINEES

- Craig Sperry, American Cancer Society, High School Scholar, 1992
- Kurt Williams, 1992-1993
- Jamie Jenkins, 1992-1993
- Brad Bergman, Watkin's Scholar; Senior Thesis, 1993-1994
- Paul Dexter, 1994-1995
- Angela Bird, NIH Bridges student, 1995
- Laura Smitherman, Watkin's Scholar; Senior Thesis, 1994-1996
- Kent Barbian, Honor's College Intern, 1996-1997
- Stephen Thompson, 1997
- Shane Hall, Watkin's Scholar; Senior thesis, 1997-1998
- Noriko Ishihara, Honor's College Intern, 1997-1998
- William Nicholls, NIH Bridges student, 1998
- James Lincoln, 1998
- Kiara Held, 1999
- Laurie Minns, 1999

- Kyle McFarley, Howard Hughes Undergraduate Research Fellow, 2000
- Chad Lang, Howard Hughes Undergraduate Research Fellow, 2001
- Kate Krutulic, Howard Hughes Undergraduate Research Fellow, 2001
- Kevin Kolendich, University of Washington, MD Research Rotation, 2001
- Zachary Wilson, NSF EPSCoR Fellow, 2001-2002
- Kate Sappington, NIH BRIN summer student, 2002
- Nermi Parrow, NIH BRIN summer student, 2002
- Kate Sappington, NSF EPSCoR Fellow, 2002-2003
- Erin Webster, NSF EPSCoR Fellow, 2003
- Graham Knapp, NSF EPSCoR Fellow, 2004-2005
- Linda Parks, NSF EPSCoR Fellow, 2004-2005
- Ashlee Mills, NSF EPSCoR Fellow, 2006
- James Fox, NSF EPSCoR Fellow, 2006
- Heather Brunnell, NSF EPSCoR Fellow, 2006-2007
- Jasmin Abbott, MILES Undergraduate Research Intern, 2007-2008
- Matthew Gruber, MILES Undergraduate Research Intern, 2007-2008
- Amanda Lockwood, Hellgate High School Senior Scholar, 2007-2008
- Greg Smith, 2008
- Amanda Lockwood, 2008-2009
- Greg Smith, MILES Undergraduate Research Intern, 2009
- Amanda Lockwood, NSF EPSCoR Fellow, MILES Research Intern, 2009-2010
- Christeen Allstead, 2009-2010
- Emily Skeels, 2009-2010
- Kip Barhaugh, 2010, 2012, 2013
- Kip Barhaugh, NSF-EPSCoR Fellow, 2011
- Jeff Guccione, 2011 MILES Undergraduate Research Intern, 2010-2011
- Thomas Spallino, Space Grant Consortium Awardee, 2011-2012, 2013
- Lance Watson, 2013-2014
- Carson Whitehill, 2013-2014
- Hannah Fay, Honors College Student-Faculty Summer Research Fellow, 2014
- Hannah Fay, Space Grant Consortium Awardee, 2014
- Hannah Fay, Honors College Student-Faculty Research Fellow, 2014-2015
- Jeremy Heng, Hellgate High School Advanced Placement student, 2014-2015
- Benjamin Mason, Honors College Student-Faculty Summer Research Fellow, 2015
- Benjamin Mason, 2015-2016
- Klara Davidson, 2015-2016
- Myo Naung, 2015-2016
- Pablo Marin Garrido, Summer, 2016
- Nuridia Nulliner (visiting student from Whitman College), summer sessions 2016, 2017
- Benjamin Hickey, 2016-2017
- Mason Derendinger, 2016-2017
- Kyle Shifflett, 2017-2019 (I also served as Kyle's mentor on an Honors Capstone Project)
- Claire Utzman, 2017-2018
- Peyton Koivu, 2018
- Finley Andrew, 2018-2020
- Hunter Doty, 2019-2020
- Morgan Stark, 2019
- Savannah Stanhope, 2020
- Sam Smith, 2022
- Ruby Powell, 2021-2023
- Emily Mulvaney, 2023-present

GRADUATE STUDENT TRAINEES

<u>Student</u>	<u>Year</u>	<u>Current Profession</u>
1. David C. Scherer, MS, PhD	1993	Sr. Patent Agent, Pacific Biosciences, San Francisco, CA
2. Helen Grasseschi, DVM, MS	1994	Veterinarian, Big Sky Animal Med. Ctr., Great Falls, MT
3. Brian Clifton, MS	1995	Public Health Officer, Great Falls, MT
4. Samuel J. Mitchell, MD, PhD	1996	Physician, Bozeman, MT
5. James M. Battisti, PhD	1998	Res. Asst. Professor, UM, Missoula, MT
6. Kent Barbian, MS	1999	Research Technician, NIH, Hamilton, MT
7. Leo Choquette, MS	2002	Attorney, Princeton, NJ
8. Sherry A. Coleman, PhD	2002	Tax Specialist, Missoula, MT
9. Julie Callison, MS	2004	Research Technician, NIH, Hamilton, MT
10. Rahul Raghavan, PhD	2008	Assoc. Professor, University of Texas, San Antonio
11. Nermi L. Parrow, PhD	2010	US DHHS, Washington, DC
12. Kristina Bock, BS	2013	Steel Toe Distillery, Bonner, MT
13. Indu Warriar, PhD	2015	Post-doctoral, Boston College, Boston, MA
14. Jessica Gregory, PhD	2017	Post-doctoral, Montana Tech University, Butte, MT
15. Shaun Wachter, PhD	2020	Post-doctoral Fellow, VIDO-InterVac, Saskatoon, Canada

GRADUATE STUDENT ADVISEES (served as co-advisor)

<u>Student</u>	<u>Year</u>	<u>Current Profession</u>
1. M.A. Stevenson, DVM, PhD	1999	Veterinarian
2. Albert Grobe, PhD	2004	Adjunct Professor, UM, Missoula, MT
3. Rong Wang, PhD	2005	Research Assoc., Sloan-Kettering Cancer Center
4. David Blake, PhD	2006	Assoc. Professor, Fort Lewis College, Durango, CO
5. Brent Lonner, MS	2007	Wildlife Biologist, Montana Fish, Wildlife & Parks
6. Dean Waltee, MS	2008	Research Biologist, Montana Fish, Wildlife & Parks
7. Abigail Leary, MS	2009	Research Biologist, Montana Fish, Wildlife & Parks
8. Devon Rasmussen, DDS, MS	2012	Dentist, Bellevue, NE
9. Larissa Walker, MS	2019	Research Technician, UM, Missoula, MT

POST-DOCTORAL TRAINEES

- James Battisti, PhD- 2004-2007
- Sherrie Coleman, PhD- 2006-2008
- Rahul Raghavan, PhD- 2008-2009
- Indu Warriar, PhD- 2015-2016
- Jenny Wachter, PhD- 2016
- Shaun Wachter, PhD- 2020

GRADUATE STUDENT COMMITTEE MEMBERSHIP AT OTHER INSTITUTIONS

- Amorce Lima, PhD- University of South Florida, Department of Molecular Medicine. Tampa, FL. External Chair, PhD Committee; July, 2014.
- Casey Schroeder, PhD- University of Texas Medical Branch. Galveston, TX. PhD committee, 2014-2017.

- K. Thirunavukarasu, PhD- University of Madras, Chennai, India. External dissertation reviewer, 2012.
- Rishikesh Kumar Gupta, PhD- Anna University, Chennai, India. External dissertation reviewer, 2012.
- Michael Schmiederer, PhD- University of South Florida, Department of Molecular Medicine. Tampa, FL. External Chair, PhD committee; February, 2002.

MENTOR TO JUNIOR FACULTY MEMBERS at UM:

- Scott Wetzel, PhD- Division of Biological Sciences, University of Montana
- Michele McGuirl, PhD- Division of Biological Sciences, University of Montana
- James Battisti, PhD- Division of Biological Sciences, University of Montana
- John McCutcheon, PhD- Division of Biological Sciences, University of Montana
- Celine Beamer, PhD- (NIH COBRE) Biomedical and Pharmaceutical Sciences, University of Montana
- Patrick Secor, PhD- Division of Biological Sciences, University of Montana

PUBLICATIONS

COMPLETE LIST OF PUBLISHED WORK (87 PUBLICATIONS):

<https://www.ncbi.nlm.nih.gov/myncbi/michael.minnick.2/bibliography/public/>

THESIS AND DISSERTATION-

Minnick, M.F. 1987. The role of the bacterium-induced M13 lectin in the immune response of the tobacco hornworm (*Manduca sexta*). **PhD Dissertation**, Washington State University, Pullman, Washington.

Minnick, M.F. 1984. Translocation of photosynthates by endosymbiotic *chlorophyceae* to the sea anemone *Anthopleura elegantissima* Brandt (Cnidaria; Anthozoa). **MS Thesis**, Walla Walla University, College Place, Washington.

BOOK CHAPTERS-

12. Marrie, T.J., **M.F. Minnick**, J. Textoris, C. Capo, and J.-L. Mege. 2015. Invited author. *Coxiella*. Chapter 106. In: *Molecular Medical Microbiology 2nd Edition*. (Tang et al., eds.) Academic Press, London. Pages 1941-1972.
11. **Minnick, M.F.**, and B.E. Anderson. 2015. Invited author. *Bartonella*. Chapter 105. In: *Molecular Medical Microbiology 2nd Edition*. (Tang et al., eds.) Academic Press, London. Pages 1911-1939.
10. **Minnick, M.F.**, and R. Raghavan. 2012. Invited author. Developmental biology of *Coxiella burnetii*. In: *Coxiella burnetii: Recent Advances and New Perspectives in Research of the Q Fever Agent* (R. Toman, R.A. Heinzen, J.L. Mege, J.E. Samuel, eds.) Springer, Netherlands. *Adv. Exp. Med. Biol.* 984:231-248.
9. Battisti, J.M., and **M.F. Minnick**. 2008. Invited author. Laboratory Maintenance of *Bartonella quintana*. In: *Current Protocols in Microbiology*. Unit 3C.1.1-3C.1.13. John Wiley & Sons, NJ.
8. Walker D. H., C. Maguiña, and **M.F. Minnick**. 2006. Invited author. Bartonellosis. Chapter 40. In: *Tropical Infectious Diseases: Principles, Pathogens, and Practice, 2nd Edition*. (R.L. Guerrant, D.H. Walker, and P.F. Weller, eds.) Elsevier Press. Pages 454-462.

7. **Minnick, M.F.**, and B. E. Anderson. 2006. Invited author. The Genus *Bartonella*. In: *The Prokaryotes- A Handbook on the Biology of Bacteria*; 3rd ed. (M. Dworkin et al., eds.), Springer-Verlag, NY. 5:467-492.
6. **Minnick, M.F.** 2002. Invited author. *Bartonella*. Chapter 99. In: *Molecular Medical Microbiology*. (M. Sussman, ed.) Academic Press, London. Pages 2115-2136.
5. **Minnick, M.F.**, and B. Anderson. 2000. Invited author. *Bartonella* interactions with host cells. In: *Subcellular Biochemistry: Bacterial Invasion Into Eukaryotic Cells*. Vol. 33. (J. Hacker and T. Oelschlaeger, eds.) Plenum Press, NY. Pages 97-123.
4. Fournier, P-E., **M.F. Minnick**, and D. Raoult. 1999. Transformation of *Bartonella quintana* to green fluorescent protein expression by electroporation. In: *Rickettsia and Rickettsial Diseases at the Turn of the Third Millenium*. (D. Raoult and P. Brouqui, eds.) Elsevier Press, Amsterdam. Pages 38-42.
3. **Minnick, M.F.** 1997. Invited author. Virulence determinants of *Bartonella bacilliformis*. In: *Rickettsial Infections and Immunity*. (B. Anderson, M. Bendinelli and H. Friedman, eds.) Plenum Press, NY. Pages 197-211.
2. Mallavia, L.P., and **M.F. Minnick**. 1995. Invited author. *Coxiella burnetii* as an etiologic agent. In: *Q Fever in Humans and Animals*. (Z. Anusz, ed.) Skrypty Akademii Rolniczo Press, Olsztyn, Poland. Pages 70-84.
1. Spence, K.D., and **M.F. Minnick**. 1992. Invited author. Bacterial challenge and significance of an inducible protein (M13) in coagulation and cell agglutination in *Manduca sexta* (Lepidoptera). In: *Immunology of Insects and Other Arthropods*. (A.P. Gupta, ed.) CRC Press, Boca Raton, FL. Pages 273-287.

PEER-REVIEWED ARTICLES-

76. Quaiyum, S., Y. Yuan, G. Sun, R.M. Madhushi N. Ratnayake, G. Hutinet, P.C. Dedon, **M.F. Minnick**, and V de Crécy-Lagard. 2024. Queuosine salvage in *Bartonella henselae* Houston 1: a unique evolutionary path. Submitted to *PLOS Pathogens*.
75. **Minnick, M.F.** Functional roles and genomic impact of miniature inverted-repeat transposable elements (MITEs) in prokaryotes. 2024. In press in *Genes* (MDPI).
74. Quaiyum, S., G. Sun, J. Sun, Y. Yuan, C.J. Reed, V. Marchand, Y. Motorin, P.C. Dedon, **M.F. Minnick**, and V. de Crécy-Lagard. 2024. Mapping the tRNA Modification landscape of *Bartonella henselae* Houston I and *Bartonella quintana* Toulouse. *Frontiers in Microbiology*. Research Topic: "tRNA and Protein Synthesis in Microorganisms" (edited by Jiqiang Ling, Matthieu Gagnon) 15:1369018. doi: 10.3389/fmicb.2024.1369018
73. **Minnick, M.F.** A.J. Robinson, R.D. Powell, and T.E. Rowland. 2023. Experimental colonization of sand flies (*Lutzomyia longipalpis*; Diptera: Pscychodidae) by *Bartonella ancashensis*. *Vector Borne Zoonotic Dis*. 2023 Mar 20. doi: 10.1089/vbz.2022.0087. Epub ahead of print. [PMID: 36939868](#).
72. Andrew F.J., L.D. Hicks and **M.F. Minnick**. 2022. A system for transposon mutagenesis of *Bartonella bacilliformis*. *J Microbiol Methods*. Nov 16;203:106623. doi: 10.1016/j.mimet.2022.106623. [PMID: 36400246](#).
71. Wachter, S., L.D. Hicks, R. Raghavan and **M.F. Minnick**. 2020. Novel small RNAs expressed by *Bartonella bacilliformis* under multiple conditions reveal potential mechanisms for persistence in the sand fly vector and human host. *PLOS Negl. Trop. Dis*. 14(11): e0008671. [PMCID: PMC7717549](#)

70. Hicks, L.D., and **M.F. Minnick**. 2020. Human vascular endothelial cells express epithelial growth factor in response to infection by *Bartonella bacilliformis*. *PLoS Negl. Trop. Dis.* Apr 17;14(4):e0008236. [PMCID: PMC7190185](#)
69. Banerjee, R., O. Shine, V. Rajachandran, K. Govind, **M.F. Minnick**, S. Paul, and S. Chattopadhyay. 2020. Gene duplication and deletion, not horizontal transfer, drove intra-species mosaicism of *Bartonella henselae*. *Genomics* Jan;112(1):467-471. Epub 2019 Mar 19. DOI: 10.1016/j.ygeno.2019.03.009 [PMID: 30902757](#)
68. Wachter, S., M. Bonazzi, K. Shifflett, A.S. Moses, R. Raghavan, and **M.F. Minnick**. 2019. A CsrA-binding, *trans*-acting sRNA of *Coxiella burnetii* is necessary for optimal intracellular growth and vacuole formation during early infection of host cells. *J. Bacteriol.* 2019 Oct 21;201(22). pii: e00524-19. [PMCID: PMC6805106](#)
67. Wachter, S., R. Raghavan, J. Wachter and **M.F. Minnick**. 2018. Identification of novel MITEs (miniature inverted-repeat transposable elements) in *Coxiella burnetii*: implications for protein and small RNA evolution. *BMC Genomics* 19:247. [PMCID: PMC5896051](#)
66. Battisti, J.M., L.A. Watson, M.T. Naung, A.M. Drobish, E. Voronina and **M.F. Minnick**. 2017. *Caenorhabditis elegans* immune response to *Coxiella burnetii*. *Innate Immun.* 23:111-127. Research featured on Journal Cover. [PMCID: PMC5266666](#)
65. Warriar, I., M.C. Walter, D. Frangoulidis, R. Raghavan, L.D. Hicks and **M.F. Minnick**. 2016. The intervening sequence of *Coxiella burnetii*: characterization and evolution. *Front. Cell. Infect. Microbiol.* **6**:83. [PMCID: PMC4990558](#)
64. Paul, S., **M.F. Minnick**, and S. Chattopadhyay. 2016. Mutation-driven divergence and convergence indicate adaptive evolution of the intracellular human-restricted pathogen, *Bartonella bacilliformis*. *PLoS Negl. Trop. Dis.* **10**(5): e0004712. [PMCID: PMC4864206](#)
63. Battisti, J.M., P.G. Lawyer and **M.F. Minnick**. 2015. Colonization of *Lutzomyia verrucarum* and *Lutzomyia longipalpis* sand flies (Diptera: Psychodidae) by *Bartonella bacilliformis*, the etiologic agent of Carrion's disease. *PLoS Negl. Trop. Dis.* **9**(10): e0004128. [PMCID: PMC4593541](#)
62. Henriquez-Camacho C., P. Ventosilla P, **M.F. Minnick**, J. Ruiz, C Maguiña. 2015. Proteins of *Bartonella bacilliformis*: candidates for vaccine development. *Int. J. Peptides*. Volume 2015, Article ID 702784 [PMCID: PMC4568041](#)
61. **Minnick, M.F.**, B.E. Anderson, A. Lima, J.M. Battisti, P.G. Lawyer, and R.J. Birtles. 2014. Oroya fever and verruga peruana- bartonellosis unique to South America. *PLoS Negl. Trop. Dis.* **8**:e2919. [PMCID: PMC4102455](#)
60. Warriar, I., L.D. Hicks, J.M. Battisti, R. Raghavan, and **M.F. Minnick**. 2014. Identification of novel small RNAs and characterization of the 6S RNA of *Coxiella burnetii*. *PLoS ONE* **9**:e100147. [PMCID: PMC4064990](#)
59. Parrow, N.L., R.E. Fleming, and **M.F. Minnick**. 2013. Sequestration and scavenging: iron in infection. *Infect. Immun.* **81**:3503-3514. [PMCID: PMC3811770](#)
58. Wright, B.E., K.H. Schmidt, and **M.F. Minnick**. 2013. Kinetic models reveal the in vivo mechanisms of mutagenesis in microbes and man. *Mutat. Res.* **752**:129-137. [PMCID: PMC3631585](#)
57. Wright, B.E., K.H. Schmidt, A.T. Hunt, D.K. Reschke, and **M.F. Minnick**. 2011. Evolution of coordinated mutagenesis and somatic hypermutation in VH5. *Mol. Immunol.* **49**:537-548. [PMCID: PMC3235918](#)
56. **Minnick, M.F.**, and R. Raghavan. 2011. Invited author. Genetics of *Coxiella burnetii*: on the path of specialization. *Future Microbiol.* **6**:1297-1314. [PMCID: PMC4104754](#)

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NON-PEER-REVIEWED ARTICLES (PRE-PRINTS)-

6. **Minnick, M.F.** Functional roles and genomic impact of miniature inverted-repeat transposable elements (MITEs) in prokaryotes. *Preprints* **2024**, 2024020807. <https://doi.org/10.20944/preprints202402.0807.v1>
5. Quaiyum, S., G. Sun, J. Sun, Y. Yuan, C.J. Reed, V. Marchand, Y. Motorin, P.C. Dedon, **M.F. Minnick**, and V. de Crécy-Lagard. Mapping the tRNA Modification landscape of *Bartonella henselae* Houston I and *Bartonella quintana* Toulouse. bioRxiv 2024.01.08.574729; doi: <https://doi.org/10.1101/2024.01.08.574729>
4. Quaiyum, S., Y. Yuan, G. Sun, R.M. Madhushi N. Ratnayake, G. Hutinet, P.C. Dedon, **M.F. Minnick**, and V de Crécy-Lagard. Queuosine salvage in *Bartonella henselae* Houston 1: a unique evolutionary path. bioRxiv 2023.12.05.570228; doi: <https://doi.org/10.1101/2023.12.05.570228>
3. Hicks, L.D., S. Wachter, B.J. Mason, P.M. Garrido, M. Derendinger, K. Shifflett, **M.F. Minnick**. A human factor H-binding protein of *Bartonella bacilliformis* and potential role in serum resistance. bioRxiv 2021.04.13.439661; doi: <https://doi.org/10.1101/2021.04.13.439661>
2. Wachter, S. L.D. Hicks, R. Raghavan, **M.F. Minnick**. Novel small RNAs expressed by *Bartonella bacilliformis* under multiple conditions reveal potential mechanisms for persistence in the sand fly vector and human host. bioRxiv 2020.08.04.235903; doi: <https://doi.org/10.1101/2020.08.04.235903>
1. Wachter S., M. Bonazzi, K. Shifflett, A.S. Moses, R. Raghavan, **M.F. Minnick**. *Coxiella burnetii* small RNA 12 binds CsrA regulatory protein and transcripts for the CvpD type IV effector, regulates pyrimidine and methionine metabolism, and is necessary for optimal intracellular growth and vacuole formation during infection. bioRxiv 2019. 679134; doi: <https://doi.org/10.1101/679134>

PUBLISHED ABSTRACTS-

13. Hickey, B.V., J.M. Battisti, S.G. Wachter and **M. F. Minnick**. 2017. CBU_1932: A hypothetical DNA-binding protein of the Q fever pathogen, *Coxiella burnetii*. *Intermountain Journal of Sciences*. V 23, No. 1-4 p. 120, Dec. 2017.
12. **Minnick, M.F.** 1999. Genetic manipulation of *Bartonella* virulence determinants. *J. Microbiol. Methods* **37**:287.
11. Coleman, S. , S.J. Mitchell, and **M.F. Minnick**. Surface localization of the invasion-associated locus B protein in *Bartonella bacilliformis*. General Meeting of the American Society for Microbiology. May, 1998. Atlanta, GA.
10. Battisti, J.M., L.S. Smitherman, D.S. Samuels, and **M.F. Minnick**. *gyrB* mutations in coumermycin A1-resistant *Bartonella bacilliformis*. General Meeting of the American Society for Microbiology. May, 1997. Miami Beach, FL.
9. **Minnick, M.F.** Heat shock response in *Bartonella bacilliformis*. General Meeting of the American Society for Microbiology. May, 1996. New Orleans, LA.
8. Mitchell, S.J., and **M.F. Minnick**. An inorganic pyrophosphatase gene located immediately 3' of the invasion locus of *Bartonella bacilliformis*. General Meeting of the American Society for Microbiology. May, 1996. New Orleans, LA.
7. Mitchell, S.J., and **M.F. Minnick**. Cloning and characterization of a putative C-terminal protease from *Bartonella bacilliformis*. General Meeting of the American Society for Microbiology. May, 1995. Washington, DC.
6. McAllister, S.J., J.A. Peek, and **M.F. Minnick**. Identification and isolation of a bundle-forming fimbriae from *Bartonella bacilliformis*. General Meeting of the American Society for Microbiology. May, 1995. Washington, DC.
5. Grasseschi, H.A., and **Minnick, M.F.** Stable transformation of *Bartonella bacilliformis* (*Rickettsiales; Bartonellaceae*) by electroporation. General Meeting of the American Society for Microbiology. May, 1994. Las Vegas, NV.
4. Mitchell, S.J., and **Minnick, M.F.** Characterization of a *Bartonella bacilliformis* DNA fragment which confers human erythrocyte invasiveness on *Escherichia coli*. General Meeting of the American Society for Microbiology. May, 1994. Las Vegas, NV.
3. **Minnick, M. F.**, C. L. Small, M. E. Frazier, and L. P. Mallavia. Expression and Sequence Analysis of the *cbhE'* plasmid gene from *Coxiella burnetii*. General Meeting of the American Society for Microbiology. May, 1991. Dallas, TX.
2. **Minnick, M.F.**, C. L. Small, M. E. Frazier, and L. P. Mallavia. Analysis of strain-specific plasmid sequences from *Coxiella burnetii*. IV International Symposium on Rickettsiae and Rickettsial Diseases. September, 1990. Piest'any Spa, Czechoslovakia.
1. **Minnick, M.F.**, R. A. Heinzen, M. E. Frazier, and L. P. Mallavia. Cloning of a plasmid-encoded surface protein found in a chronic isolate of *Coxiella burnetii*. National Meeting of the American Society for Microbiology. May, 1989. New Orleans, LA.

NON-PEER-REVIEWED ARTICLES-

- Hicks, L.D., Wachter, S.W., Mason, B.J., Garrido, P.M., Derendinger, M., Shifflett, K., and **M.F. Minnick**. A human factor H-binding protein of *Bartonella bacilliformis* and potential role in serum resistance. bioRxiv; 4-14-21; doi: <https://doi.org/10.1101/2021.04.13.439661>

INVITED TALKS

41. **Minnick, M.F.** “From South America’s mountains to Montana: revealing the secrets of a neglected bacterial killer. Community Lecture Series, Alumni Association, University of Montana. March 7, 2023.
40. **Minnick, M.F.** “From the Andes to the lab bench- A 31-year quest to cure Oroya fever”. Biology Department Colloquium Series, Walla Walla University- March 8, 2022.
39. **Minnick, M.F.** Yeast- the big picture of a little “bug”. Brewing Science Certification Program, Chemistry Department, University of Montana- October 25, 2021.
38. **Minnick, M.F.** “My journey to becoming a biologist”. STEM Career Exploration- College Pathways Series 1, Valley Oak Education Resource Center. – December 1, 2020.
37. **Minnick, M.F.** “Medical Laboratory Sciences”. Premedical Sciences course, University of Montana. March 9, 2020.
36. **Minnick, M.F.** “Medical Laboratory Sciences”. Premedical Sciences course, University of Montana. October 14, 2019.
35. **Minnick, M.F.** “Big chores for small RNAs: non-coding RNA regulation in the intracellular niche of *Coxiella burnetii*, the Q fever agent”. Louisiana State University, Department of Pathobiology. March 15, 2018.
34. **Minnick, M.F.** “The RNA world” of *Coxiella burnetii*, the Q fever agent”. University of South Florida, Department of Molecular Medicine. July 7, 2014. Tampa, FL.
33. **Minnick, M.F.** “Multidrug-resistant bacteria and novel ways to treat them- the tuberculosis paradigm”. University of Montana School of Pharmacy. Recent Advances in Clinical Medicine. April 13, 2013. Missoula, MT.
32. **Minnick, M.F.** “Making lemonade from lemons; how *Coxiella burnetii*, the Q fever agent, uses selfish genetic elements to its advantage”. University of Washington School of Medicine. Allergy and Infectious Diseases. January 31, 2013. Seattle, WA.
31. **Minnick, M.F.** “Adaptive roles for the selfish genetic elements of *Coxiella burnetii* - the Q fever agent”. Montana State University. September 28, 2012. Bozeman, MT.
30. **Minnick, M.F.** “Of lice and men; *Bartonella quintana*’s unparalleled need for heme from the human host”. East Carolina University School of Medicine. March 30, 2010. Greenville, NC.
29. **Minnick, M.F.** The Q fever agent, *Coxiella burnetii*, turns table on its parasitic genetic elements by using them to regulate growth. University of Maryland. December 10, 2009. Baltimore, MD.
28. **Minnick, M.F.** Virulence determinants of *Bartonella bacilliformis*. Consultative Meeting Aimed at Developing a vaccine for the prevention of Carrion’s disease or human bartonellosis for the Andean Region. Peruvian National Institute of Health. June 22-26, 2008. Lima, Peru.
27. **Minnick, M.F.** *Of Lice and Men- Bartonella quintana*’s unparalleled need for host heme. Annual Meeting- NW American Society for Microbiology. March 11, 2007, Seattle, WA.
26. **Minnick, M.F.** Heme-iron pilfering by *Bartonella quintana* during infection of the human circulatory system. Seminar Series- Glaxo Smith Kline. November 14, 2006. Hamilton, MT.
25. **Minnick, M.F.** *Bartonella quintana*- “Iron Man” of the bacterial world. Microbiology Department Seminar, Montana State University. October 13, 2006. Bozeman, MT.
24. **Minnick, M.F.** The Q Fever Agent, *Coxiella burnetii*- virulence, versatility and voracity combined. Rocky Mountain Regional Center of Excellence- Biodefense and Emerging Infections Conference. April 17, 2006. Bozeman, MT.

23. **Minnick, M.F.** Bartonellosis- Portrait of a bacterium that remodels cells within the human vasculature. Seminar speaker. University of South Florida College of Medicine. February 25, 2002. Tampa, FL.
22. **Minnick, M.F.** Bacterial remodeling of the human microvasculature- just another day in the life of *Bartonella*. Veterinary Molecular Biology Seminar. Montana State University. October 30, 2001. Bozeman, MT.
21. **Minnick, M.F.** Bartonellosis- bacterial remodeling of cells in the human microvasculature. Mortensen Lecturer. Fourth Annual Research Symposium. Loma Linda University School of Medicine. September 11, 2001. Loma Linda, CA.
20. **Minnick, M.F.** Molecular basis for virulence in *Bartonella*. University of Idaho. March 30, 2000. Moscow, ID.
19. **Minnick, M.F.** A multifunctional virulence gene cluster from *Bartonella*; vampires of the bacterial world. University of Georgia. October 7, 1999. Athens, GA.
18. **Minnick, M.F.** Genetic manipulation of *Bartonella*. International Conference on Rickettsiae and Rickettsial Disease. June 14, 1999. Marseille, France.
17. **Minnick, M.F.** Genetic manipulation of *Bartonella* virulence determinants. First International Congress: *Bartonella* as Emerging Pathogens. Max Planck Institute; Abteilung Infektionsbiologie, March 7, 1999. Tuebingen, Germany.
16. **Minnick, M.F.** Mechanisms of host cell attachment and invasion by *Bartonella*. Keynote Address; First Annual Research Retreat, Dept. of Microbiology and Molecular Genetics, Loma Linda University School of Medicine. September 13, 1998. Loma Linda, CA.
15. **Minnick, M.F.** *Bartonella* species as emerging infectious agents. School of Medicine & Health Sciences, University of North Dakota. March 3, 1998. Grand Forks, ND
14. **Minnick, M.F.** Host cell adhesion and invasion by *Bartonella bacilliformis*. Dept. of Microbiology and Immunology, Texas A & M University. October 27, 1997. College Station, TX.
13. **Minnick, M.F.** Understanding the molecular basis of virulence in *Bartonella bacilliformis*. 97th General Meeting of the American Society for Microbiology. May 7, 1997. Miami Beach, FL.
12. **Minnick, M.F.** Virulence determinants of *Bartonella bacilliformis*; unraveling the mystery. Center for Tropical Diseases, University of Texas Medical Branch at Galveston. January 9, 1997. Galveston, TX.
11. **Minnick, M.F.** *Bartonella bacilliformis*; a model pathogen for studying infection of human erythrocytes. Meharry Medical College. April 10, 1996. Nashville, TN.
10. **Minnick, M.F.** Invasion of human red cells by *Bartonella bacilliformis*. MEA / MFT Educator's Conference, October 19, 1995. Missoula, MT.
9. **Minnick, M.F.** The molecular basis for virulence of *Bartonella bacilliformis*. Dept of Pharmacology, University of Montana. September 28, 1995. Missoula, MT.
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7. **Minnick, M.F.** Virulence factors of *Bartonella bacilliformis*. Sigma Xi Seminar, University of Montana. December 2, 1993. Missoula, MT.
6. **Minnick, M.F.** Invasion of human erythrocytes by the agent of Oroya fever. Walla Walla University. October 26, 1993. College Place, WA.
5. **Minnick, M.F.** Molecular basis for virulence in *Bartonella bacilliformis*. Rocky Mountain Laboratories (NIH-NIAID). October 21, 1993. Hamilton, MT.

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3. **Minnick, M. F.** The relationship of plasmids and virulence in *Coxiella burnetii*. Rocky Mountain Laboratories (NIH-NIAID). December 4, 1991. Hamilton, MT.
2. **Minnick, M. F.** Analysis of strain-specific plasmid sequences from the agent of Q fever, *Coxiella burnetii*. Battelle Pacific Northwest Laboratories. March, 1990. Richland, WA.
1. **Minnick, M. F.** *Coxiella burnetii* and Q fever; a model for intracellular parasitism. Walla Walla University. April, 1988. College Place, WA.

MEETING ABSTRACTS and PRESENTATIONS

104. Quaiyum, S., Y. Yuan, G. Hutinet, P.C. Dedon, **M.F. Minnick** and V. de Crécy-Lagard. Investigation of the *Bartonella henselae* Houston 1 Queuosine modification pathway. 27th Annual Meeting of the RNA Society. May 31-June 5, 2022, Boulder CO.
103. Wachter, S.G., M. Bonazzi, K. Shifflett, A.S. Moses, R. Raghavan and **M.F. Minnick**. A small RNA that regulates pyrimidine and methionine metabolism and possibly type IV secretion system effector CvpD is necessary for establishing *Coxiella burnetii*'s intracellular niche during infection. 30th Annual Meeting of the American Society for Rickettsiology. June 8-11, 2019. Santa Fe, NM.
102. Wachter, S.G., R. Raghavan and **M.F. Minnick**. Identification of small RNAs expressed *in vitro* by *Bartonella bacilliformis* under a variety of conditions that simulate the human host and sand fly vector. 30th Annual Meeting of the American Society for Rickettsiology. June 8-11, 2019. Santa Fe, NM.
101. Wachter, S.G., K Shifflett and **M.F. Minnick**. *Coxiella burnetii*'s infection-specific small RNA 12 (CbsR12) is necessary for full infection of human macrophage-like phagocytic cells. Montana Academy of Sciences Meeting. April, 5-6, 2019. Butte, MT.
100. K Shifflett, L.D. Hicks, S.G. Wachter and **M.F. Minnick**. *Bartonella bacilliformis* Hfq regulates small RNAs. Montana Academy of Sciences Meeting. April, 5-6, 2019. Butte, MT.
99. Wachter S.G., I. Warriar and **M. F. Minnick**. *Coxiella burnetii* small RNA 12 (CbsR12) is infection-specific and targets *carA* and *metK* transcripts. Montana Academy of Sciences Meeting. April, 6-7, 2018. Butte, MT.
98. Hickey, B.V., J.M. Battisti, S.G. Wachter and **M. F. Minnick**. CBU_1932: A hypothetical DNA-binding protein of the Q fever pathogen, *Coxiella burnetii*. Montana Academy of Sciences Meeting. April, 7-8, 2016. Butte, MT.
97. Battisti, J.M., M. Kinnersley and **M. F. Minnick**. Experimental evolution of *Coxiella burnetii* using chemostats. 28th Annual Meeting of the American Society for Rickettsiology. June 11-14, 2016. Big Sky, MT.
96. Battisti, J.M., L. Watson, M. Naung, A. Drobish, E. Voronina and **M. F. Minnick**. Analysis of the *Caenorhabditis elegans* innate immune response to *Coxiella burnetii*. 28th Annual Meeting of the American Society for Rickettsiology. June 11-14, 2016. Big Sky, MT.
95. Mason, B. R. T. Marconi, L. D. Hicks and **M. F. Minnick**. Human factor H-binding proteins of *Bartonella bacilliformis* and potential role in serum resistance. 28th Annual Meeting of the American Society for Rickettsiology. June 11-14, 2016. Big Sky, MT.

94. Wachter, S. G., I. Warriar and **M. F. Minnick**. *Coxiella burnetii* small RNA 12 (CbsR12) targets *carA* transcripts *in vitro*. 28th Annual Meeting of the American Society for Rickettsiology. June 11-14, 2016. Big Sky, MT.
93. Battisti, J.M., P.G. Lawyer, and **M. F. Minnick**. Colonization of *Lutzomyia verrucarum* and *Lutzomyia longipalpis* sand flies (Diptera: Psychodidae) by *Bartonella bacilliformis*, the etiologic agent of Carrión's disease. 70th International Conference on Diseases in Nature Communicable to Man (INCDNCM). August 9-11, 2015. Hamilton, MT.
92. Battisti, J.M., L. A. Watson, E. Voronina, and **M.F. Minnick**. Nematodes as a model host for studying *Coxiella burnetii* pathogenesis. 70th International Conference on Diseases in Nature Communicable to Man (INCDNCM). August 9-11, 2015. Hamilton, MT.
91. Warriar, I., R. Raghavan, J. Battisti, L.D. Hicks, and **M.F. Minnick**. Novel regulatory small RNAs of *Coxiella burnetii*. 26th Annual Meeting of the American Society for Rickettsiology. June 14-18, 2013. Portland, ME.
90. Battisti, J.M., L.A. Watson, E. Voronina, and **M.F. Minnick**. The free-living soil nematode *Caenorhabditis elegans*: a user-friendly model host for studying *Coxiella burnetii* pathogenesis. 26th Annual Meeting of the American Society for Rickettsiology. June 14-18, 2013. Portland, ME.
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85. **Minnick, M.F.** The Q fever agent, *Coxiella burnetii*, turns table on its parasitic genetic elements by using them to regulate growth. Division of Biological Sciences, University of Montana. November 30, 2009. Missoula, MT.
84. Battisti, J.M., K.N. Sappington, L.D. Hicks, G.A. Smith, R. Raghavan, and **M.F. Minnick**. P1 and OmpA: two paralogous families of *Coxiella burnetii* outer membrane proteins. Western Region COBRE-INBRE Scientific Conference. September 17-20, 2009. Big Sky, MT.
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64. Battisti, J.M., G.P. Knapp, and **M.F. Minnick**. Trials and tribulations of rearing human body lice for research- advances in artificial and animal models of cultivation. Fourth International Conference on *Rickettsia* and Rickettsial Diseases, June, 2005. Logroño, Spain.
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7. **Minnick, M.F.**, and L.P. Mallavia. Surface proteins coded by plasmids from *Coxiella burnetii*. NW Branch Meeting of the American Society for Microbiology. September, 1988. Bozeman, MT.
6. Spence, K.D., **M.F. Minnick**, and J. Bedoyan. The immune response and wound-healing in *M. sexta* larvae. Annual Meeting, Society for Invertebrate Pathology. August, 1988. San Diego, CA.
5. Spence, K.D., and **M.F. Minnick**. Bacterial challenge and significance of inducible protein in wound-healing in *Manduca sexta*. Abstract, XVIII International Congress of Entomology, July, 1988. Vancouver, BC, Canada.
4. **Minnick, M.F.**, and L.P. Mallavia. Plasmid-encoded surface proteins of *Coxiella burnetii*. National Conference, American Society for Rickettsiology and Rickettsial Diseases. April, 1988. Santa Fe, NM.
3. **Minnick, M.F.** and K.D. Spence. A bacteria-induced lectin from *Manduca sexta*; its role in immunity. Annual Meeting of the Society for Invertebrate Pathology. July, 1987. Gainesville, FL.
2. **Minnick, M.F.**, and K.D. Spence. The role of the bacteria-induced MI3 lectin in the immune response of the tobacco hornworm (*Manduca sexta*). NW Branch Meeting of the American Society for Microbiology. June, 1987. Newport, OR.
1. **Minnick, M.F.**, and L.R. McCloskey. Translocation products of zoochlorellae from the sea anemone *Anthopleura elegantissima*. West Coast Coelenterate Colloquium. March, 1984. Friday Harbor, WA.

COURSES and WORKSHOPS TAUGHT

Washington State University-

- General Microbiology Laboratory (Micb 201)

Walla Walla University -

- General Biology (Biol 100)

University of Montana-

- Medical Bacteriology and Mycology (BIOM 402)
- Medical Bacteriology and Mycology Laboratory (BIOM 403)
- General Microbiology (BIOM 360)
- General Microbiology Laboratory (BIOM 361)
- Medical Microbiology (Micb 302)
- Advanced Molecular Biology Lab (Micb 499)
- Elementary Medical Microbiology (Micb 106)
- Microbial Pathogenesis (BIOM 540)
- Immunology (Micb 410)
- Immunology Laboratory (Micb 411)
- Advanced Immunology (Micb 502; graduate course)
- Montana NIH BRIN Molecular Biology Workshops, 2002, 2003
- Freshman Seminar (HUSC 194)

JOURNAL ARTICLES REVIEWED FOR:

Acta Tropica
American Journal of Tropical Medicine and Hygiene
Antimicrobial Agents and Chemotherapy
Applied and Environmental Microbiology
Apoptosis
Arcadia: Explorations in Environmental History
Biochimica et Biophysica Acta
Biotechniques
BMC Infectious Diseases
Cellular Microbiology
Clinical and Diagnostic Laboratory Immunology
Clinical and Vaccine Immunology
Clinical Medical Reviews and Case Reports
Clinical Microbiology Reviews
Current Microbiology
Diagnostic Microbiology and Infectious Disease
DNA and Cell Biology
Emerging Infectious Disease
European Journal of Clinical Microbiology & Infectious Diseases
FEMS Immunology & Medical Microbiology
FEMS Microbiology Letters
Fine Focus (Editorial Board, 2013-)
Frontiers in Cellular and Infection Microbiology (Editorial Review Board, 2010-)
Future Microbiology
GENE
Infection and Immunity
International Journal of Microbiology
Journal of Antimicrobial Chemotherapy
Journal of Bacteriology
Journal of Biological Chemistry

Journal of Clinical Microbiology
Journal of Microbiological Methods (Editorial Board, 2007-)
Journal of the Sao Paulo Institute of Tropical Medicine
Journal of Travel Medicine
Microbes and Infection
Microbial Pathogenesis
Microbiology
Molecular and Cellular Probes
Molecular Microbiology
Nature Reviews Microbiology
Nature Microbiology
Pathogens
Pathogens and Disease
Plasmid
PLOS Neglected Tropical Diseases
PLOS One (Editorial Board, 2020-)
PLOS Pathogens
Proceedings of the National Academy of Sciences (USA)
The Lancet Microbe
Trends in Microbiology
Vaccine
Veterinary Microbiology
Zebrafish

GRANT REVIEWING

NIH-Montana INBRE- One grant proposal, January, 2021.

NIH-NIAID- Study Section, “2020/08 Microbiology and Infectious Diseases Research Committee (MID 1)”, July 28-30, 2020.

Biotechnology and Biological Sciences Research Council (UK), 1 grant proposal. Ad hoc reviewer, July, 2019.

NIH-NIAID 05 ZRG1 IDM-S (83) Study Section, “Infectious Diseases and Microbiology” 4 grants. Ad hoc reviewer, March, 2019.

University of Nebraska at Kearney- 1 grant. External reviewer, December, 2018.

Ohio University Research Council (OURC)- 1 grant. External reviewer, November, 2018.

Department of Defense (DoD)- 2017 Tick-Borne Disease Research Program, Diagnosis and Pathogenesis, DP. 1 grant. Ad hoc reviewer, December, 2017.

NIH-NIAID ZRG1 IDM-S (81) Study Section, “Bacterial Pathogenesis” 9 grants. Ad hoc reviewer, July, 2016.

Nebraska- NIH INBRE, DRPP proposal- 1 grant. Ad hoc reviewer, January, 2016.

Netherlands Organization for Scientific Research, “Innovational Research” 1 grant. Ad hoc reviewer, November, 2015.

French Research Agency, “Blanc program” 1 grant. Ad hoc reviewer, February, 2011.

NIH Rocky Mountain Regional Center of Excellence, “Developmental Project Grant”, 2 grants. Ad hoc reviewer, March, 2011.

NIH Rocky Mountain Regional Center of Excellence, “Project Grant”, 3 grants. Ad hoc reviewer, March, 2008.

- NIH Rocky Mountain Regional Center of Excellence**, "Project Grant", 3 grants. Ad hoc reviewer, October, 2007.
- NIH Rocky Mountain Regional Center of Excellence**, "Developmental Project Grant", 3 grants. Ad hoc reviewer, February, 2007.
- NIH Rocky Mountain Regional Center of Excellence**, "Project Grant", 2 grants. Ad hoc reviewer, March, 2006.
- Wellcome Trust**, "Project Grant", Ad hoc reviewer, February, 2006.
- NIH-NIAID ZRG1 Study Section**, "Bacterial Pathogenesis" Ad hoc reviewer, March, 2009.
- NIH-NIAID ZRG1 Study Section**, "Topics in Microbial Pathogenesis" Ad hoc reviewer, June, 2006.
- NIH-NIAID ZRG1 Study Section**, "Bacterial Pathogenesis" Ad hoc reviewer, October, 2005.
- NIH-NIAID BM1 Study Section**, "Bacteriology and Mycology I", Ad hoc reviewer, February, 2004.
- NIH-NIAID ZRG1 Study Section**, "Viral and Eukaryotic Pathogens" Ad hoc reviewer, November, 2004.
- NIH-NIAID ZAI1 CL-M S3 Study Section**, "Biodefense and Emerging Diseases Research Opportunities" Ad hoc reviewer, April, 2003.
- NIH-NIAID ZAI1 Study Section**, "Preparedness Against Illegitimate Use of Bacterial Pathogens", Ad hoc reviewer, April, 2001.
- U.S. Civilian Research and Development Foundation (CRDF)**, 2001.
- Veterans Administration**, Ad hoc reviewer, 2000.
- NIH-NIAID BM1 Study Section**, "Bacteriology and Mycology I", Ad hoc reviewer, February, 2000.
- NSF-MONTS**, Review panel, 1997.
- Veterans Administration**, Ad hoc reviewer, 1997.

SERVICE and LEADERSHIP ROLES

- Chair**, Interim Associate Dean, DBS, Search Committee. University of Montana. October, 2023.
- Chair**, Interim Associate Dean, DBS, Search Committee. University of Montana. January-March, 2023.
- Coodinator**, Big Sky High School Health Science Academy Program visit to UM. (50 students, with half-day program and 6 lab-shadowing experiences). April 26, 2023.
- Judge**, Hellgate Science Fair, Grades 4-6, March 18, 2022
- Chair**, UM Sabbatical Assignment Committee. 2021.
- Member**, UM Drug and Alcohol Advisory Committee. 2021-
- Member**, CMMB- Graduate Education Committee. 2020-present.
- Member**, Inter-professional Education Didactics Group, UM Health & Medicine. 2019-2020.
- Member**, Organizing Committee- 30th Meeting of the American Society for Rickettsiology. Santa Fe, NM. June 8-11, 2019.

Member, Scientific Committee- Joint Meeting of the European Society for Chlamydioses, Coxiellosis, Anaplasmoses, Rickettsioses and Bartonellosis and the American Society for Rickettsiology. Marseille, France. June 19-21, 2017.

Co-Chair, UM Research and Creativity Committee. 2016-2018.

Member, UM Goldwater Selection Committee. 2017-present.

Chair, Host-Microbe Interactions II- faculty search committee. 2017

Chair, Host-Microbe Interactions I- faculty search committee. 2015-2016.

Member, UM Research and Creativity Committee. 2011-2015.

Member, UM Division of Biological Sciences Scholarship Selection Committee, 2013, 2018, 2023

Member, UM Sabbatical Assignment Committee. 2010-2012, 2018-2020.

Member, Montana Medical Laboratory Sciences Training Program Admissions Committee. 2010-present.

Member, Montana Medical Laboratory Sciences Training Program Advisory Board. 2010-present.

Member, UM Pre-Medical Advising Committee. 2009-2013.

Member, UM Microbiology / Biochemistry Graduate Curriculum Committee. 2009-2010.

Member, UM Division of Biological Sciences Advisory Committee. 2008-2010; 2019-2021. Autumn, 2022.

Member, UM Institutional Animal Care and Use Committee (IACUC). 2008-2010.

Assistant Dean, UM Division of Biological Sciences. 2003–2006 and 2008-2010.

Member, UM Pre-Medical Advising Task Force. 2008.

Member, UM Interdisciplinary Science Building Committee. 2005-2006.

Chair, Immunologist faculty search committee. UM Division of Biological Sciences. 2003-2004.

Member, UM Assessment Advisory Committee. UM Division of Biological Sciences. 2003.

Chair, Committee on Excellence in Teaching and Learning. UM Division of Biological Sciences. 2003-2005.

Chair, UM Institutional Biosafety Committee. 2002-2006;

Member, UM Institutional Biosafety Committee. 2021-present.

Member, UM Graduate Council of the Faculty Senate. 2002.

Chair, Biochemistry/Microbiology Graduate Admissions Committee. 1996-1998; 2001-2003.

Executive Council, UM University Faculty Association. 2001-2002.

Member, UM Research Visions Committee. 2001.

Director, UM Murdock Molecular Biology Facility. 2000-2007.

Chair, Biochemistry/Microbiology Graduate Education Committee. 2000-2001.

Chair, Biochemistry faculty search committee. 2000-2001.

Chair, Virology faculty search committee. 1997-1998.

Director, UM Medical Laboratory Science (MLS) program. 1991-present.