

**MICHAEL F. MINNICK, PhD****CURRICULUM VITAE**

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

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

---

## HONORS and AWARDS

---

Editorial Board, *Fine Focus*, 2013-  
 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-  
 Editorial Board, *Frontiers in Cellular and Infection Microbiology*, 2010-present  
 Editorial Board, *Journal of Microbiological Methods*, 2007-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- )
- **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
- Regulatory RNAs of bacteria
- Vertebrate and invertebrate immunity

- Host-pathogen and vector-pathogen interactions

## GRANTS AWARDED

- (29) **NIH-NIAID- R03AI146927**; "Competency of sand flies as a vector for *Bartonella anshensis*" (PI) 7/01/19-6/30/21. **\$145,000.**
- (28) **NIH-NIAID; 5R21AI128575-02**; "Small regulatory RNAs of *Bartonella bacilliformis*, the agent of Carrion's disease" (PI); 12/01/2016-11/30/18. **\$406,517.**
- (27) **NIH-NIAID- 1R21AI123293-01**; "*Caenorhabditis elegans* infection model for *Coxiella burnetii*" (PI) 2/15/16-1/31/19. **\$398,750.**
- (26) **NIH-NIAID- 1R15AI119798-01**; "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  $\beta$ -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.**

---

## GRANTS PENDING

---

**NIH-NIAID- R01AI151064-01**; The CsrA post-transcriptional regulon of *Coxiella burnetii* and the role of small RNAs" (PI) 4/01/20-3/31/24. **\$1,447,895.**

---

## 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 Krutulis, 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
- 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 (also served as Kyle's mentor on an Honors Capstone Project)
- Claire Utzman, 2017-2018

- Peyton Koivu, 2018
- Finley Andrew, 2018-2019
- Morgan Stark, 2019

## 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	Medical Services Director, MSU, Bozeman, MT
5. James M. Battisti, PhD	1998	Res. Asst. Professor, UM, Missoula, MT
6. Kent Barbian, MS	1999	Technician, NIH Rocky Mountain Labs, Hamilton, MT
7. Leo Choquette, MS	2002	Attorney, Princeton, NJ
8. Sherry A. Coleman, PhD	2002	Self-employed, Missoula, MT
9. Julie Callison, MS	2004	Technician, NIH Rocky Mountain Labs, Hamilton, MT
10. Rahul Raghavan, PhD	2008	Assoc. Professor, Portland State University, OR
11. Nermi L. Parrow, PhD	2010	US DHHS, Washington, DC
12. Kristina Bock	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, Butte, MT
15. Shaun Wachter		PhD student, CMMB Program, UM

## GRADUATE STUDENT ADVISEES (served as resident 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, Albuquerque, NM
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

---

**GRADUATE STUDENT COMMITTEE member 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 MEMBER:**


---

- 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**


---

*For a complete list of published work (81 publications), see:*

<https://www.ncbi.nlm.nih.gov/myncbi/1jeqfa6L-4lkc/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. 2014. Invited author. *Coxiella*. Chapter 106. In: *Molecular Medical Microbiology 2<sup>nd</sup> Edition*. (Tang et al., eds.) Academic Press, London. Pages 1941-1972.
11. **Minnick, M.F.**, and B.E. Anderson. 2014. Invited author. *Bartonella*. Chapter 105. In: *Molecular Medical Microbiology 2<sup>nd</sup> 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**. 2005. Invited author. Bartonellosis. Chapter 44. In: *Tropical Infectious Diseases: Principles, Pathogens, and Practice, 2<sup>nd</sup> 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. 2001. Invited author. The Genus *Bartonella*. In: *THE PROKARYOTES: an Evolving Electronic Resource for the Microbiological Community*, 3rd Edition (latest update release 3.6) (M. Dworkin et al., eds.), Springer-Verlag, NY.
6. **Minnick, M.F.** 2001. 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 Millennium*. (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.) Skrypt 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-

69. Wachter, W., 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. *Journal of Bacteriology* pii: JB.00524-19. doi: 10.1128/JB.00524-19. [Epub ahead of print] PMID:31451541
68. Banerjee, R., O. Shine, V. Rajachandran, K. Govind, **M.F. Minnick**, S. Paul, and S. Chattopadhyay. 2019. Gene duplication and deletion, not horizontal transfer, drove intra-species mosaicism of *Bartonella henselae*. *Genomics* Mar 19. pii: S0888-7543(18)30730-4. doi: 10.1016/j.ygeno.2019.03.009. [Epub ahead of print]. PMID: 30902757
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](https://pubmed.ncbi.nlm.nih.gov/30058960/)



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 Immunity*. 23:111-127. doi: 10.1177/1753425916679255. [PMCID: PMC5266666](#) Research featured on Journal Cover.
65. Warrier, 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. doi:10.3389/fcimb.2016.00083. [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. doi:10.1371/journal.pntd.0004712. [PMCID: PMC4864206](#)
63. Battisti, J.M., P.G Lawyer and **M.F. Minnick**. 2015. Colonization of *Lutzomia verrucarum* and *Lutzomyia longipalpis* sand flies (Diptera: Psychodidae) by *Bartonella bacilliformis*, the etiologic agent of Carrión's disease. *PLoS Negl. Trop. Dis.* **9**(10): e0004128. DOI: 10.1371/journal.pntd.0004128. [PMCID: 4593541](#)
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, 5 pages [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- bartonelloses unique to South America. *PLoS Negl. Trop. Dis.* **8**:e2919. [PMCID: PMC4102455](#)
60. Warrier, 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](#)
55. Wright, B.E., K. Schmidt, A.T. Hunt. J.S. Lodmell, **M.F. Minnick**, and D. Reschke. 2011. The roles of transcription and genotoxins underlying p53 mutagenesis in vivo. *Carcinogenesis*. **32**:1559-1567. [PMCID: PMC3179427](#)
54. Hicks, L.D., I. Warrier, R. Raghavan, and **M.F. Minnick**. 2011. Ribozyme stability, exon skipping and potential role for RNA helicase in group I intron splicing by *Coxiella burnetii*. *J. Bacteriol.* **193**:5292-5299. [PMCID: PMC3187410](#)
53. Battisti, J.M, L.D. Hicks, and **M.F. Minnick**. 2011. A unique *Coxiella burnetii* lipoprotein involved in metal-binding (LimB). *Microbiology* **157**:966-976. [PMCID: PMC3139440](#)
52. **Minnick, M.F.**, L.D. Hicks, J.M. Battisti, and R. Raghavan. 2010. Pentamidine inhibits *Coxiella burnetii* growth and 23S rRNA intron splicing in vitro. *Int. J. Antimicrob. Agents* **36**:380-382. [PMCID: PMC2926257](#)

51. Hicks, L.D., R. Raghavan, J.M. Battisti, and **M.F. Minnick**. 2010. A DNA-binding peroxiredoxin of *Coxiella burnetii* is involved in countering oxidative stress during exponential-phase growth. *J. Bacteriol.* **192**:2077-2084. [PMCID: PMC2849434](#)
50. Raghavan, R., and **M.F. Minnick**. 2009. Group I introns and inteins: disparate origins, but convergent parasitic strategies. *J. Bacteriol.* **191**:6193-6202. [PMCID: PMC2753036](#)
49. **Minnick, M.F.**, and J.M. Battisti. 2009. Invited author. Pestilence, persistence and pathogenicity: infection strategies of *Bartonella*. *Future Microbiol.* **4**:743-758. [PMCID: PMC2754412](#)
48. Raghavan, R., L.D. Hicks, and **M.F. Minnick**. 2009. A unique group I intron in *Coxiella burnetii* is a natural splice mutant. *J. Bacteriol.* **191**:4044-4046. [PMCID: PMC2698393](#)
47. Parrow, N.L., J. Abbott, A.R. Lockwood, J.M. Battisti, and **M.F. Minnick**. 2009. Function, regulation, and transcriptional organization of the heme utilization locus of *Bartonella quintana*. *Infect. Immun.* **77**:307-316. [PMCID: PMC2612243](#)
46. Raghavan, R., L.D. Hicks, and **M.F. Minnick**. 2008. Toxic introns and parasitic intein in *Coxiella burnetii*: legacies of a promiscuous past. *J. Bacteriol.* **190**:5934-5943. [PMCID: PMC2519523](#)
45. Wright, B.E., K.H. Schmidt, N. Davis, A.T. Hunt, and **M.F. Minnick**. 2008. II. Correlations between secondary structure stability and mutation frequency during somatic hypermutation. *Molec. Immunol.* **45**:3600-3608. [PMCID: PMC2529022](#)
44. Wright, B.E., K.H. Schmidt, **M.F. Minnick**, and N. Davis. 2008. I. *VH* gene transcription creates stabilized secondary structures for coordinated mutagenesis during somatic hypermutation. *Molec. Immunol.* **45**:3589-3599. [PMCID: PMC2570340](#)
43. Raghavan, R., S.R. Miller, L.D. Hicks, and **M.F. Minnick**. 2007. The unusual 23S rRNA gene of *Coxiella burnetii*: two self-splicing group I introns flank a 34-base-pair exon and one element lacks the canonical omega G. *J. Bacteriol.* **189**:6572-6579. [PMCID: PMC2045182](#)
42. Battisti, J.M. K.N. Sappington, L.S. Smitherman, N.L. Parrow, R. Raghavan, and **M.F. Minnick**. 2007. Transcriptional regulation of the heme binding protein gene family of *Bartonella quintana* is accomplished by a novel promoter element and iron response regulator (Irr) *Infect. Immun.* **75**:4373-4385. [PMCID: PMC1951173](#)
41. Boonjakuakul, J.K., H.L. Gerns, Y.-T. Chen, L.D. Hicks, **M.F. Minnick**, S.E. Dixon, S.C. Hall, and J.E. Koehler. 2007. Proteomic and immunoblot analyses of *Bartonella quintana* total membrane proteins identify antigens recognized by sera from infected patients. *Infect. Immun.* **75**:2548-2561. [PMCID: PMC1865797](#)
40. Battisti, J.M., K.N. Sappington, L.S. Smitherman, N.L. Parrow, and **M.F. Minnick**. 2006. Environmental signals generate a differential and coordinated expression of the heme receptor gene family of *Bartonella quintana*. *Infect. Immun.* **74**:3251-3261. [PMCID: PMC1479232](#)
39. Smitherman, L.S., and **M.F. Minnick**. 2005. *Bartonella bacilliformis* GroEL: effect on growth of human vascular endothelial cells in infected co-cultures. *Ann. NY Acad. Sci.* **1063**:286-298. [PMCID: PMC1817666](#)
38. Callison, J.A., J.M. Battisti, Kate N. Sappington, L.S. Smitherman, and **M.F. Minnick**. 2005. Characterization and expression analysis of the *groESL* operon of *Bartonella bacilliformis*. *Gene* **359**:53-62. [PMCID: PMC1885459](#)
37. Wright, B.E., K.H. Schmidt, and **M.F. Minnick**. 2004. A mechanism by which transcription can regulate somatic hypermutation. *Genes Immun.* **5**:176-182.

36. **Minnick, M.F.**, L.S. Smitherman, and D.S. Samuels. 2003. Mitogenic effect of *Bartonella bacilliformis* on human vascular endothelial cells and involvement of GroEL. *Infect. Immun.* **71**:6933-6942. [PMCID: PMC308913](#)
35. Coleman, S.A., and **M.F. Minnick**. 2003. Differential expression of the invasion-associated locus B (*ialB*) gene of *Bartonella bacilliformis* in response to environmental cues. *Microb. Pathogen.* **34**:179-186. [PMCID: PMC4104752](#)
34. **Minnick, M.F.**, K.N. Sappington, L.S. Smitherman, S.G.E.Andersson, O. Karlberg, and J.A. Carroll. 2003. A five-member gene family of *Bartonella quintana*. *Infect. Immun.* **71**:814-821. [PMCID: PMC145397](#)
33. **Minnick, M.F.**, Z.R. Wilson, L.S. Smitherman, and D.S. Samuels. 2003. *gyrA* mutations in ciprofloxacin-resistant *Bartonella bacilliformis* strains obtained in vitro. *Antimicrob. Agents Chemother.* **47**:383-386. [PMCID: PMC148966](#)
32. Coleman, S.A., and **M.F. Minnick**. 2001. Establishing a direct role for the invasion-associated locus B protein of *Bartonella bacilliformis* in erythrocyte parasitism. *Infect. Immun.* **69**:4373-4381. [PMCID: PMC98509](#)
31. Fournier, P.E., **M.F. Minnick**, H. Lepidi, and D. Raoult. 2001. Experimental model of human body louse infection using green fluorescent protein-expressing *Bartonella quintana*. *Infect. Immun.* **69**:1876-1879. [PMCID: PMC98095](#)
30. Carroll, J.A., S.A. Coleman, L.S. Smitherman, and **M.F. Minnick**. 2000. Hemin-binding surface protein from *Bartonella quintana*. *Infect. Immun.* **68**:6750-6757. [PMCID: PMC97776](#)
29. Barbian, K.D., and **M.F. Minnick**. 2000. A bacteriophage-like particle from *Bartonella bacilliformis*. *Microbiology* **146**:599-609. [PMID: 10746763](#)
28. Battisti, J.M., and **M.F. Minnick**. 1999. Development of a system for genetic manipulation of *Bartonella bacilliformis*. *Appl. Environ. Microbiol.* **65**:3441-3448. [PMCID: PMC91517](#)
27. Cartwright, J.L, P. Britton, **M.F. Minnick**, and A.G. McLennan. 1999. The *ialA* invasion gene of *Bartonella bacilliformis* encodes a (di)nucleoside polyphosphate hydrolase of the MutT motif family and has homologs in other invasive bacteria. *Biochem. Biophys. Res. Comm.* **256**:474-479. [PMID: 10080922](#)
26. Battisti, J.M, L.S. Smitherman, D.S. Samuels, and **M.F. Minnick**. 1998. Mutations in *Bartonella bacilliformis gyrB* confer resistance to coumermycin A<sub>1</sub>. *Antimicrob. Agents Chemother.* **42**:2906-2913. [PMCID: PMC105964](#)
25. **Minnick, M.F.**, and K.D. Barbian. 1997. Identification of *Bartonella* using PCR; genus- and species-specific primer sets. *J. Microbiol. Methods* **31**:51-57.
24. Mitchell, S.J., and **M.F. Minnick**. 1997. Cloning, functional expression, and complementation analysis of an inorganic pyrophosphatase from *Bartonella bacilliformis*. *Can. J. Microbiol.* **43**:734-743. [PMID: 9304784](#)
23. Mitchell, S.J., and **M.F. Minnick**. 1997. A carboxy-terminal processing protease gene is located immediately upstream of the invasion-associated locus from *Bartonella bacilliformis*. *Microbiology* **143**:1221-1233. [PMID: 9141685](#)
22. Wright, B.E., and **M.F. Minnick**. 1997. Reversion rates in a *leuB* auxotroph of *Escherichia coli* K12 correlate with ppGpp levels during exponential growth. *Microbiology* **143**:847-854. [PMID: 9084168](#)
21. **Minnick, M.F.**, S.J. Mitchell, and S.J. McAllister. 1996. Invited author. Cell entry and the pathogenesis of *Bartonella* infections. *Trends Microbiol.* **4**:343-347. [PMID: 8885168](#)

20. **Minnick, M.F.**, S.J. Mitchell, S.J. McAllister, and J. M. Battisti. 1995. Nucleotide sequence analysis of the 23S ribosomal RNA-encoding gene of *Bartonella bacilliformis*. *Gene* **162**:75-79. [PMID: 7557421](#)
19. Mitchell, S.J., and **M.F. Minnick**. 1995. Characterization of a two-gene locus from *Bartonella bacilliformis* associated with the ability to invade human erythrocytes. *Infect. Immun.* **63**:1552-1562. [PMID: 7890422](#)
18. Grasseschi, H.A., and **M.F. Minnick**. 1994. Transformation of *Bartonella bacilliformis* by electroporation. *Can. J. Microbiol.* **40**:782-786. [PMID: 7954111](#)
17. **Minnick, M.F.**, Strange, J.C., and K.F. Williams. 1994. Characterization of the 16S-23S rRNA intergenic spacer of *Bartonella bacilliformis*. *Gene* **143**:149-150. [PMID: 7515366](#)
16. **Minnick, M.F.** 1994. Identification of outer membrane proteins of *Bartonella bacilliformis*. *Infect. Immun.* **62**:2644-2648. [PMID: 7515366](#)
15. Scherer, D.C., I. DeBuron-Connors, and **M.F. Minnick**. 1993. Characterization of *Bartonella bacilliformis* flagella and effect of anti-flagellin antibodies on invasion of human erythrocytes. *Infect. Immun.* **61**:4962-4971. [PMID: 8225570](#)
14. **Minnick, M.F.**, and G.L. Stiegler. 1993. Nucleotide sequence and comparison of the 5S ribosomal RNA genes of *Rochalimaea henselae*, *R. quintana*, and *Brucella abortus*. *Nucleic Acids Res.* **21**:2518. [PMID: 7685083](#)
13. **Minnick, M.F.** 1993. Characterization of the fMet initiator tRNA gene of *Bartonella bacilliformis*. *Gene* **131**:151-152. [PMID: 7690338](#)
12. **Minnick, M.F.** 1993. Nucleotide sequence of the 5S ribosomal RNA gene of *Bartonella bacilliformis*. *Nucleic Acids Res.* **21**:1036. [PMID: 7680804](#)
11. **Minnick, M.F.**, and D.C. Scherer. 1993. Cloning and sequence analysis of a hemolysin-encoding gene from *Pseudomonas paucimobilis*. *Gene* **130**:57-63. [PMID: 8344528](#)
10. Spence, K.D., J.E. Karlinsey, T.R. Kyriakides, C.S. Patil, and **M.F. Minnick**. 1992. Regulation and synthesis of selected bacteria-induced proteins in *Manduca sexta*. *Insect Biochem. Molec. Biol.* **22**:321-331.
9. **Minnick, M. F.**, L. C. Stillwell, J. M. Heineman, and G. L. Stiegler. 1992. A highly repetitive DNA sequence possibly unique to canids. *Gene* **110**:235-238. [PMID: 1537560](#)
8. **Minnick, M. F.**, C. Small, M. E. Frazier, and L. P. Mallavia. 1991. Analysis of strain-specific plasmid sequences from *Coxiella burnetii*. *Acta Virol.* **35**:497-502. [PMID: 1687630](#)
7. **Minnick, M. F.**, R. A. Heinzen, D. K. Reschke, M. E. Frazier, and L. P. Mallavia. 1991. A plasmid-encoded surface protein found in chronic isolates of *Coxiella burnetii*. *Infect. Immun.* **59**:4735-4739. [PMID: 1937836](#)
6. **Minnick, M. F.**, C. Small, M. E. Frazier, and L. P. Mallavia. 1991. Analysis of the *cbhE* plasmid gene from acute disease-causing isolates of *Coxiella burnetii*. *Gene* **103**:113-118. [PMID: 1879692](#)
5. Mallavia, L. P., L. L. Whiting, **M.F. Minnick**, R. A. Heinzen, D. Reschke, M. Foreman, O. G. Baca, and M. E. Frazier. 1990. Strategy for differentiation of *Coxiella burnetii* strains using polymerase chain reaction. *Ann. New York Acad. Sci.* **590**:572-581. [PMID: 2378478](#)
4. **Minnick, M.F.**, R. A. Heinzen, R. Douthardt, L. P. Mallavia, and M. E. Frazier. 1990. Analysis of QpRS-specific sequences from *Coxiella burnetii*. *Ann. New York Acad. Sci.* **590**:514-522. [PMID: 2378474](#)



3. **Minnick, M. F.**, R. A. Heinzen, M. E. Frazier, and L. P. Mallavia. 1990. Characterization and expression of the *cbbE* gene of *Coxiella burnetii*. *J. Gen. Microbiol.* **136**:1099-1107. [PMID: 2384744](#)
2. **Minnick, M.F.**, and K. D. Spence. 1988. Tissue site and modification of a bacteria-induced coagulation protein from *Manduca sexta*. *Insect Biochem.* **18**:637-644.
1. **Minnick, M.F.**, R. A. Rupp, and K. D. Spence. 1986. A bacterial-induced lectin which triggers hemocyte coagulation in *Manduca sexta*. *Biochem. Biophys. Res. Comm.* **137**:729-735. [PMID: 3524562](#)

### **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 *cbbE'* 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.

---

## INVITED TALKS

---

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.
8. **Minnick, M.F.** The molecular basis for host cell invasion by *Bartonella bacilliformis*. Dept. of Veterinary Molecular Biology, Montana State University. September 26, 1995. Bozeman, MT.
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.
4. **Minnick, M.F.** Molecular characterization of the virulence determinants of *Bartonella bacilliformis*. Biochemistry Department Seminar. Montana State University. October 1, 1993. Bozeman, MT.
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

---

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. 30<sup>th</sup> 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. 30<sup>th</sup> 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. 28<sup>th</sup> 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*. 28<sup>th</sup> 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. 28<sup>th</sup> 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*. 28<sup>th</sup> 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 Carrion's disease. 70<sup>th</sup> 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. 70<sup>th</sup> 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*. 26<sup>th</sup> 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. 26<sup>th</sup> Annual Meeting of the American Society for Rickettsiology. June 14-18, 2013. Portland, ME.
89. Battisti, J.M., R.N. Johnson, P.G. Lawyer, and **M.F. Minnick**. Artificial infection of *Lutzomyia* sand flies with *Bartonella bacilliformis*. 26<sup>th</sup> Annual Meeting of the American Society for Rickettsiology. June 14-18, 2013. Portland, ME.
88. **Minnick, M.F.**, L.D. Hicks, C. Bock, I. Warriar and R. Raghavan. The 6S regulatory small RNA of *Coxiella burnetii*. 25<sup>th</sup> Annual Meeting of the American Society for Rickettsiology. July 28-31, 2012. Park City, UT.
87. Warriar, I., L.D. Hicks, J. Guccione and **M.F. Minnick**. Characterization of an intervening sequence (IVS) of *Coxiella burnetii*. 25<sup>th</sup> Annual Meeting of the American Society for Rickettsiology. July 28-31, 2012. Park City, UT.
86. Battisti, J.M., K.N. Sappington, L.D. Hicks, G.A. Smith, R. Raghavan, and **M.F. Minnick**. Characterization of two families of *Coxiella burnetii* Outer Membrane Proteins. Third Biennial NIH, NCRR National IDEA symposium of Biomedical Research Excellence (NISBRE). June 16-18, 2010. Bethesda, MD.
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.
83. Battisti, J.M. K.N. Sappington, L.D. Hicks, G.A. Smith, R. Raghavan, and **M.F. Minnick**. Two paralogous families of *Coxiella burnetii* Outer Membrane Proteins. 23<sup>rd</sup> Annual Meeting. August 15-18, 2009. Hilton Head Island, SC.
82. Battisti, J.M., L.D. Hicks, and **M.F. Minnick**. A novel *Coxiella burnetii* lipoprotein involved in metal binding (LimB). 23<sup>rd</sup> Annual Meeting. August 15-18, 2009. Hilton Head Island, SC.
81. Battisti, J.M., K.N. Sappington, L.D. Hicks, and **M.F. Minnick**. *Coxiella burnetii* adherence to extracellular matrix components. Annual Meeting- Rocky Mountain Regional Center of Excellence (NIH). October 6, 2008. Bozeman, MT.
80. Coleman, S.A. and **M.F. Minnick**. The *Coxiella burnetii* *rpoH* gene is induced to high levels during early infection *in vitro*. Annual Meeting- Rocky Mountain Regional Center of Excellence (NIH). October 6, 2008. Bozeman, MT.

79. Sappington, K.N., R. Raghavan, L.D. Hicks, J.M. Battisti, and **M.F. Minnick**. A DNA-binding peroxiredoxin is synthesized by *Coxiella* residing in the parasitophorous vacuole. Annual Meeting- Rocky Mountain Regional Center of Excellence (NIH). October 6, 2008. Bozeman, MT.
78. Raghavan R., L.D. Hicks, J.M. Battisti, and **M.F. Minnick**. The sole 23S rRNA gene of *Coxiella burnetii* encodes two group I introns (ribozymes) involved in growth and development. Annual Meeting of the NIH-NIAID Regional Centers for Biodefense and Emerging Infectious Diseases Research. April 6-8, 2008. Chicago, IL.
77. Raghavan R., S.A. Coleman, L.D. Hicks, J.M. Battisti, and **M.F. Minnick**. Two rDNA introns contribute to the slow growth of *Coxiella burnetii*. 21<sup>st</sup> Annual Meeting of the American Society for Rickettsiology. September 8-11, 2007. Colorado Springs, CO.
76. Raghavan, R., S.R. Miller, L.D. Hicks, and **M.F. Minnick**. Discovery and characterization of a novel group I intron in the 23S rDNA of *Coxiella burnetii*. 21<sup>st</sup> Annual Meeting of the American Society for Rickettsiology. September 8-11, 2007. Colorado Springs, CO.
75. Parrow, N.L., J.M. Battisti, L.S. Smitherman, K.N. Sappington and **M.F. Minnick**. Function and Regulation of the Hemin Uptake Locus of *Bartonella quintana*. 21<sup>st</sup> Annual Meeting of the American Society for Rickettsiology. September 8-11, 2007. Colorado Springs, CO.
74. Battisti, J.M., L.S. Smitherman, K.N. Sappington, N.L. Parrow, R. Raghavan, and **M.F. Minnick**. Transcriptional regulation of the heme binding protein gene family of *Bartonella quintana* is accomplished by a novel promoter element and iron response regulator (Irr). 21<sup>st</sup> Annual Meeting of the American Society for Rickettsiology. September 8-11, 2007. Colorado Springs, CO.
73. Coleman, S.A. L.D. Hicks, and **M.F. Minnick**. The *Coxiella burnetii* *rpoH* gene is induced to high levels during early infection *in vitro*. 21<sup>st</sup> Annual Meeting of the American Society for Rickettsiology. September 8-11, 2007. Colorado Springs, CO.
72. Raghavan, R., J.M. Battisti, L.D. Hicks, S.A. Coleman, and **M.F. Minnick**. *Coxiella burnetii* 23S rRNA introns may be involved in development, slow growth and persistence within host cells. 4<sup>th</sup> Annual Meeting of the NIH-NIAID Regional Centers for Biodefense and Emerging Infectious Diseases Research. April 15-17, 2007. St. Louis, MO.
71. **M.F. Minnick**. Genetic manipulation in *Coxiella burnetii*. Annual Meeting- Rocky Mountain Regional Center of Excellence (NIH). October 2, 2006. Salt Lake City, UT.
70. Raghavan, R., L.D. Parks, J.M. Battisti, and **M.F. Minnick**. A system for site-directed mutagenesis of the obligate intracellular bacterium, *Coxiella burnetii*. National meeting, American Society for Rickettsiology and Rickettsial Diseases and 5<sup>th</sup> International Conference on *Bartonella* as Emerging Pathogens, September 2, 2006. Monterey, CA.
69. Battisti, J.M., L.S. Smitherman, K.N. Sappington, R. Raghavan, and **M.F. Minnick**. 2006. Transcriptional regulation of the *Bartonella quintana* hemin binding protein family. National meeting, American Society for Rickettsiology and Rickettsial Diseases and 5<sup>th</sup> International Conference on *Bartonella* as Emerging Pathogens, September 2, 2006. Monterey, CA.
68. Raghavan, L. Parks, J.M. Battisti, and **M.F. Minnick**. Taming *Coxiella burnetii*: a biological weapon in our backyard. 2006. Graduate Student and Faculty Research Conference. April 8, 2006. University of Montana, Missoula, MT.
67. Parrow, N.L., K.N. Sappington, L.S. Smitherman, R. Raghavan, J.M. Battisti, and **M.F. Minnick**. 2006. The role of the Irr protein in regulation of hemin acquisition systems of *Bartonella quintana*. Graduate Student and Faculty Research Conference. April 8, 2006. University of Montana, Missoula, MT.

66. Raghavan, R., J.M. Battisti, L.L. Parks, and **M.F. Minnick**. 2006. Genetic manipulation of *Coxiella burnetii*. Third Annual Meeting of the NIH-NIAID Regional Centers for Biodefense and Emerging Infectious Diseases Research. March 26-28, 2006. New York, NY.
65. Carter, J., S. Kuntz, W. Hill, J. Elam, S. Fehrer, S. Glow, **M.F. Minnick**, M. Sare, and L. Wrobel. Developing a collaborative interdisciplinary team (how to play well with others). HRSA/ BHPPr First All-Grantee Conference, June, 2005. Washington, DC.
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.
63. Battisti, J.M., K.N. Sappington, and **M.F. Minnick**. Differential expression of the *Bartonella quintana hbp* multi-gene family in response to environmental cues and identification of a potentially novel regulatory element. Fourth International Conference on *Rickettsia* and Rickettsial Diseases, June, 2005. Logroño, Spain.
62. Smitherman, L.S. and **M.F. Minnick**. *Bartonella bacilliformis* GroEL: effect on human vascular endothelial cell (HUVEC) growth during co-culture. Fourth International Conference on *Rickettsia* and Rickettsial Diseases, June, 2005. Logroño, Spain.
61. Parrow, N.L., J.M. Battisti, K.N. Sappington, R. Raghavan and **M.F. Minnick**. Regulation of hemin uptake in *Bartonella quintana*. Annual Meeting of the Montana Academy of Sciences. April 9, 2005. Butte, MT.
60. Kuntz S, Hill W, Carter J, Elam J, Fehrer S, Glow S, Hall E, **Minnick M.F.**, Reynolds M, Sare M, Wrobel L. "Integrating Disaster Education into Existing Health Science Curricula: Preparing Tomorrow's Workforce for Emerging Threats." APHA Public Health and the Environment, November 8, 2004. Washington DC.
59. Carter J., S. Kuntz, E. Hall, S. Glow, S. Fehrer, **M.F. Minnick**, W. Hill, M. Sare, L. Wrobel and J. Elam. Montana Basic Biodefense for Students in Pharmacy, Nursing, and the Allied Health Professions: Year One. First HRSA Bioterrorism Training and Curriculum Annual Meeting, May 26-27, 2004. Bethesda, MD.
58. Carter J., S. Kuntz, E. Hall, S. Glow, W. Hill, **M.F. Minnick**, M. Sare, L. Wrobel, S. Fehrer and J. Elam. Basic Biodefense Project: Initial Progress and Results of the Core Curriculum. 105<sup>th</sup> Annual AACP Meeting, July 11, 2004. Salt Lake City, UT.
57. Parrow, N. L., **M.F. Minnick**, K. Sappington, and J. Battisti. The *secA-fur* operon of *Bartonella quintana*. Montana Academy of Sciences Meeting. April 17, 2004. Billings, MT.
56. Parrow, N.L., **M.F. Minnick**, K. Sappington, and J.M. Battisti. Characterization of the *secA-fur* operon in *Bartonella quintana*. UM College of Arts and Sciences- Graduate Student and Faculty Research Conference, April 10, 2004. Missoula, MT.
55. Smitherman, L.S., D.S. Samuels, and **M.F. Minnick**. Effect of *Bartonella bacilliformis* cell fractions on human vascular endothelial cell growth. National meeting, American Society for Rickettsiology and Rickettsial Diseases, September 29, 2003. Rocky Gap, MD.
54. **Minnick, M.F.**, D.S. Samuels, and L.S. Smitherman. *Bartonella* GroEL is a secreted mitogen for human vascular endothelial cells. National meeting, American Society for Rickettsiology and Rickettsial Diseases, September 29, 2003. Rocky Gap, MD.
53. **Minnick, M.F.**, and L.S. Smitherman. Characterization of proteins from *Bartonella* that cause proliferation or inhibition of vascular endothelial cell growth. American Heart Association Research Symposium. May 18, 2002. Dallas, TX.

52. **Minnick, M.F.** *Bartonella's* last stand- the invasion locus. Joint Meeting of the American Society for Rickettsiology and *Bartonella* as an Emerging Pathogen. August 17, 2001. Big Sky, MT.
51. **Minnick, M.F.**, L.S. Smitherman, and J.A. Carroll. The hemin receptor gene family of *Bartonella quintana*. Joint Meeting of the American Society for Rickettsiology and *Bartonella* as an Emerging Pathogen Group. August 17, 2001. Big Sky, MT.
50. Coleman, S.A., and **M.F. Minnick**. Establishing a direct role for the *Bartonella bacilliformis* invasion-associated locus B (lalB) protein in human erythrocyte parasitism. Annual Meeting, Montana Academy of Sciences. April 21, 2001. Bozeman, MT.
49. **Minnick, M.F.**, L.S. Smitherman, and D. S. Samuels. A *Bartonella henselae* protein that inhibits growth of human vascular endothelial cells. Sesqui-annual meeting of the American Society for Rickettsiology. May 1, 2000. Captiva Island, FL.
48. **Minnick, M.F.**, S. A. Coleman, L.S. Smitherman, and J.A. Carroll. A hemin-binding surface protein from *Bartonella quintana*. Sesqui-annual meeting of the American Society for Rickettsiology. May 1, 2000. Captiva Island, FL.
47. Coleman, S.A, and **M.F. Minnick**. Mutagenesis of the invasion-associated locus B gene of *Bartonella bacilliformis*. International Conference on Rickettsiae and Rickettsial Disease. June 14, 1999. Marseille, France.
46. Barbian, K.D., and **M.F. Minnick**. The molecular biology of a bacteriophage-like particle from *Bartonella bacilliformis*. International Conference on Rickettsiae and Rickettsial Disease. June 14, 1999. Marseille, France.
45. **Minnick, M.F.**, L.S. Smitherman, and J.A. Carroll. A tail-specific protease may be involved in hemin acquisition by *Bartonella quintana*. International Conference on Rickettsiae and Rickettsial Disease. June 14, 1999. Marseille, France.
44. Cartwright, J.L., P. Britton, **M.F. Minnick**, and A.G. McLennan. Do invasive bacteria synthesize alarmone nucleotides during the invasion process? International Congress on cellular responses to oxidative and osmotic stress. August 28, 1999. Egmond aan Zee, The Netherlands.
43. Barbian, K.D., and **M.F. Minnick**. Molecular biology of the bacteriophage-like particle from *Bartonella bacilliformis*. Annual Meeting, Montana Academy of Sciences. April 20, 1999. Butte, MT.
42. Barbian, K.D., and **M.F. Minnick**. The potential role of a bacteriophage-like particle from *Bartonella bacilliformis* in transduction. NW Branch Meeting of the American Society for Microbiology, September 12, 1998. Coeur d'alene, ID.
41. Coleman S.A., and **M.F. Minnick**. Mutagenesis of the invasion-associated locus B gene from *Bartonella bacilliformis*. NW Branch Meeting of the American Society for Microbiology. September 12, 1998. Coeur d'alene, ID.
40. Coleman S.A., and **M.F. Minnick**. Surface localization of the lalB protein from *Bartonella bacilliformis*. Annual Meeting, Montana Academy of Sciences. April 11, 1998. Bozeman, MT.
39. Barbian K.D., and **M.F. Minnick**. Identification of *Bartonella* using PCR; genus and species-specific primer sets. Annual Meeting, Montana Acad. Sciences. April 11, 1998. Bozeman, MT.
38. Battisti J.M., and **M.F. Minnick**. Mutagenesis of the flagellin gene in *Bartonella bacilliformis*. Annual Meeting, Montana Academy of Sciences. April 11, 1998. Bozeman, MT.
37. **Minnick, M.F.**, and L.S. Smitherman. A filamentous surface protein from *Bartonella bacilliformis*. National Meeting, American Society for Rickettsiology, September 22, 1997. Pittsburgh, PA.

36. Battisti, J.M., and **M.F. Minnick**. Site-directed mutagenesis of the *Bartonella bacilliformis* flagellin gene. National Meeting of the American Society for Rickettsiology, September 22, 1997. Pittsburgh, PA.
35. Wright, B.E., and **M.F. Minnick**. The effect of the stringent response on mutation rates in *Escherichia coli* K12. June 19, 1996. Gordon Conference, NH.
34. Mitchell, S.J., and **M.F. Minnick**. Characterization of genes flanking the invasion-associated locus of *Bartonella bacilliformis*. National meeting, American Society for Rickettsiology and Rickettsial Diseases, March 10, 1996. Monterey, CA.
33. McAllister, S.J., and **M.F. Minnick**. Identification of autoaggregative fimbriae expressed by *Bartonella bacilliformis*. National meeting, American Society for Rickettsiology and Rickettsial Diseases, March 10, 1996. Monterey, CA.
32. **Minnick, M.F.** Protein induction in *Bartonella bacilliformis* during heat shock. National meeting, American Society for Rickettsiology and Rickettsial Diseases, March 10, 1996, Monterey, CA.
31. McAllister, S.J., and **M.F. Minnick**. Identification and isolation of bundle-forming fimbriae from *Bartonella bacilliformis*. NW Branch Meeting of the American Society for Microbiology. June, 1995. Missoula, MT.
30. Mitchell, S.J., and **M.F. Minnick**. A putative C-terminal protease from *Bartonella bacilliformis*. NW Branch Meeting of the American Society for Microbiology. June, 1995. Missoula, MT.
29. Battisti, J.M., and **M.F. Minnick**. Insertional mutagenesis of the *Bartonella bacilliformis* flagellin gene. NW Branch Meeting of the American Society for Microbiology. June, 1995. Missoula, MT.
28. Battisti, J.M., and **M.F. Minnick**. Mutagenesis of the *Bartonella bacilliformis* flagellin gene. Annual Meeting, Montana Academy of Sciences. April 8, 1995. Helena, MT.
27. Mitchell, S.J., and **M.F. Minnick**. A putative C-terminal protease from *Bartonella bacilliformis*. Annual Meeting, Montana Academy of Sciences. April 8, 1995. Helena, MT.
26. McAllister, S.J., and **M.F. Minnick**. Identification and isolation of bundle-forming fimbriae from *Bartonella bacilliformis*. Annual Meeting, Montana Acad. Sciences, April 8, 1995. Helena, MT.
25. **Minnick, M.F.**, and B.K. Clifton. Identification of immunogenic surface proteins of *Bartonella bacilliformis*. National meeting, American Society for Rickettsiology and Rickettsial Diseases, , September 17, 1994. St. Simons Island, GA.
24. Mitchell, S.J., and **M.F. Minnick**. Characterization of genes involved in host cell invasion by *Bartonella bacilliformis*. National meeting, American Society for Rickettsiology and Rickettsial Diseases, , September 17, 1994. St. Simons Island, GA.
23. Mitchell, S.J., and **M.F. Minnick**. A cloned *Bam*HI fragment from *Bartonella bacilliformis* confers human erythrocyte invasiveness on *Escherichia coli*. NW Branch Meeting of the American Society for Microbiology. June 18, 1993. Pullman, WA.
22. Scherer, D.C., and **M.F. Minnick**. *Bartonella bacilliformis* flagella and inhibition of invasion into human erythrocytes by anti-flagellin antiserum. NW Branch Meeting of the American Society for Microbiology. June 18, 1993. Pullman, WA.
21. **Minnick, M.F.** Sequence analysis of the ribosomal RNA operon of *Bartonella bacilliformis*. NW Branch Meeting of the American Society for Microbiology. June 18, 1993. Pullman, WA.
20. Valgenti, H.A., and **M.F. Minnick**. Transformation of *Bartonella bacilliformis*. Annual Meeting, Montana Academy of Sciences, April 17, 1993. Helena, MT.

19. Scherer, D.C., and **M.F. Minnick**. Characterization of flagella from *Bartonella bacilliformis*. Annual Meeting, Montana Academy of Sciences, April 17, 1993. Helena, MT.
18. **Minnick, M.F.** The ribosomal RNA operon of *Bartonella bacilliformis*. Annual Meeting, Montana Academy of Sciences, April 17, 1993. Helena, MT.
17. Scherer, D.C., and **M.F. Minnick**. Purification and characterization of flagella from *Bartonella bacilliformis*. National Meeting of the American Society for Rickettsiology and Rickettsial Diseases, September 19, 1992. Hamilton, MT.
16. **Minnick, M.F.**, and D.C. Scherer. Cloning and characterization of a beta hemolysin from *Bartonella bacilliformis*. National Meeting of the American Society for Rickettsiology and Rickettsial Diseases, September 19, 1992. Hamilton, MT.
15. **Minnick, M.F.** and D.C. Scherer. Characterization of a hemolysin gene from *Bartonella bacilliformis*. NW Branch Meeting of the American Society for Microbiology, June 19, 1992. Seattle, WA.
14. **Minnick, M. F.**, C. L. Small, and L.P. Mallavia. Identification and characterization of a plasmid gene unique to acute-disease causing isolates of *Coxiella burnetii*. 4th Annual Biotech-Industry Collaboration Forum. April 16, 1992. Missoula, MT.
13. **Minnick, M. F.**, C. L. Small, M. E. Frazier, and L. P. Mallavia. Expression and sequence analysis of *cbhE*<sup>+</sup>; a plasmid gene unique to acute isolates of *Coxiella burnetii*. National Conference, American Society for Rickettsiology and Rickettsial Diseases. May, 1991. Galveston, TX.
12. Stiegler, G.L., E.C. Sisk, L.C. Stillwell, and **M. F. Minnick**. Evidence for ras-oncogene activation in radiation-induced carcinogenesis. Annual Meeting of the Radiation Research Society. January, 1991. Fort Collins, CO.
11. **Minnick, M.F.**, R.A. Heinzen, M.E. Frazier, and L.P. Mallavia. Characterization of plasmid sequences unique to acute or chronic isolates of *Coxiella burnetii*. NW Branch Meeting of the American Society for Microbiology. June, 1990. Moscow, ID.
10. Mallavia, L.P., L.L. Whiting, **M.F. Minnick**, R.A. Heinzen, D. Reschke, M. Foreman, O.G. Baca, and M.E. Frazier. Strategy for differentiation of *Coxiella burnetii* strains using polymerase chain reaction. National Conference, American Society for Rickettsiology and Rickettsial Diseases. September, 1989. Diamond Point, NY.
9. **Minnick, M.F.**, R.A. Heinzen, R. Douthardt, L.P. Mallavia, and M.E. Frazier. Analysis of QpRS-specific sequences from *Coxiella burnetii*. National Conference, American Society for Rickettsiology and Rickettsial Diseases. September 1989. Diamond Point, NY.
8. Mallavia, L.P., **M.F. Minnick**, and M. E. Frazier. New methods for differentiation and detection of disease related isolates of *Coxiella burnetii*. International Northwest Conference on Diseases in Nature Communicable to Man. August, 1989. Calgary, Alberta, Canada.
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

---

## JOURNAL ARTICLE REVIEWING:

---

*Acta Tropica*  
*American Journal of Tropical Medicine and Hygiene*  
*Antimicrobial Agents and Chemotherapy*  
*Applied and Environmental Microbiology*  
*Apoptosis*  
*Biochimica et Biophysica Acta*  
*Biotechniques*  
*BMC Infectious Diseases*  
*Cellular Microbiology*  
*Clinical and Diagnostic Laboratory Immunology*  
*Clinical and Vaccine Immunology*  
*Clinical Microbiology Reviews*

*Current Microbiology*  
*Diagnostic Microbiology and Infectious Disease*  
*DNA and Cell Biology*  
*Emerging Infectious Disease*  
*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*  
*Pathogens and Disease*  
*Plasmid*  
*PLOS Neglected Tropical Diseases*  
*PLOS One*  
*PLOS Pathogens*  
*Proceedings of the National Academy of Sciences (USA)*  
*Trends in Microbiology*  
*Vaccine*  
*Zebrafish*

---

## GRANT REVIEWING

**Biotechnology and Biological Sciences Research Council (UK)**, 1 grant. 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**

**Member**, Inter-professional Education Didactics Group, UM Health & Medicine. 2019-

**Member**, Organizing Committee- 30<sup>th</sup> 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, 2016-2017.

**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

**Member**, UM Sabbatical Assignment Committee. 2010-2012, 2018-present.

**Member**, Admissions Committee for MUS- Montana Medical Lab Sciences Training Program. 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.

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

**Assistant Dean**, UM Division of Biological Sciences. 2003–2006, 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 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 Technology program. 1991-present.