

CURRICULUM VITAE

January 2020

Jean C. Pfau, Ph.D.

Department of Microbiology and Immunology
Montana State University
2155 Analysis Drive, Room 143
Health Sciences Building
PO Box 173610
Bozeman MT 59718

Phone: 406-994-4778
Fax: 406-994-4926
email: jean.pfau@montana.edu
<http://www.montana.edu/immtoxlab/>

FORMAL EDUCATION

University of Montana, Missoula MT.

Ph.D. Microbiology/Biochemistry, May 1998. Dissertation: "Lipopolysaccharide-induced signal transduction in macrophages: Mechanisms of cellular responsiveness." Advisor: G. Card, PhD.

University of Montana, Missoula MT

B.A. Zoology, *Summa Cum Laude*, 1978. Zoology Department.

Montana Secondary Education Certificate, 1978. School of Education, Biological Sciences.

Rocky Mountain College, Billings MT.

B.A. French, 1977.

PROFESSIONAL APPOINTMENTS

Faculty. 2017- current. Gallatin College and WIMU Regional Program in Veterinary Medicine, Montana State University, Bozeman, MT

Professor, Adjunct. 2015–current. Dept. of Thoracic Surgery, Icahn School of Medicine, New York, NY

Research Scientist. 2016 – current. Dept. of Microbiology and Immunology, MSU, Bozeman MT.

Laboratory Manager. 2019. Teaching Laboratories, Dept. of Microbiology and Immunology, Montana State University, Bozeman, MT

Professor. 2015-2016. Dept of Biological Sciences, Idaho State University, Pocatello, ID

Associate Professor. 2010-2015. Department of Biological Sciences, Idaho State University, Pocatello.

Director, Flow Cytometry Core Facility, 2008 – 2015, Idaho State University;
2002 – 2008, Center for Environmental Health Sciences, University of Montana.

Assistant Professor. 2008 – 2010. Department of Biological Sciences, Idaho State University

Assistant Professor. 2006 – 2008. Dept of Biomed & Pharm Sciences, Univ. of Montana, Missoula MT.

Instructor, 1998 – 2007. Division of Biological Sciences, University of Montana, Missoula

Research Assistant Professor. July 2002 – 2006. Dept of Biomed & Pharm Sci, University of Montana.

Post-Doctoral Research Fellow. July 2000 – June 2002.

Center for Environmental Health Sciences, University of Montana. Director: Andrij Holian

Research Scientist/ Lab Supervisor. April 1999 – May 2000.

The International Heart Institute of Montana, Tissue Engineering Lab, Missoula MT.

Cardiovascular wound healing, fibrosis and calcification. Director: David Cheung, Ph.D.

Post-Doctoral Research Associate. May 1998 - May 1999.

Stella Duncan Memorial Research Institute, Missoula MT. PI: George Card, Ph.D.

Research Assistant. June 1993 - May 1998.

University of Montana, Division of Biological Sciences, Missoula MT. PI: George Card, Ph.D

FUNDED GRANTS AND CONTRACTS

2001–2002	NIEHS/NIH. P.I. NRSA #F32 ES 11249-01 “Mechanism of Silica-Induced Autoimmune Responses”.	\$120,000
2002-2005	Centers for Disease Control. Subproject P.I. on RO1/CCR822092-01 “Impact of Environmental Factors on Human Disease”. Subproject title: “Assessment of Autoimmune Responses Following Asbestos Exposure”.	\$200,000
2002-2006	NIEHS/NIH, Co-investigator. R01 ES04804-8. Andrij Holian, P.I. “Effects of Silica and Asbestos on Macrophage Function”.	\$200,000
2002-2008	NCRR/NIH. Core Facility Director. P20 RR017670 COBRE. (Centers of Biomedical Research Excellence) “Fluorescence Cytometry Core”	\$250,000
2005-2008	NIEHS/NIH. P.I. R21 ES012956-01 “Effect of autoantibodies on lung fibroblast phenotype”.	\$225,000
2007-2008	NSF ADVANCE/UM Partnership for Comprehensive Equity. Visiting Scholar/Mentor Award. \$2500 to develop collaboration with Herzenberg Lab, Stanford Univ.	
2007-2008	NCRR/NIH. Subproject P.I. P20 RR017670 COBRE (Centers of Biomedical Research Excellence) “Cellular mechanisms of asbestos-induced autoimmunity.”	\$100,000
2008-2010	WWAMI Institute for Translational Health Sciences. PI. \$10,000 “Role of Peritoneal B1a B-Cells in Asbestos-Induced Autoimmunity”	
2008-2009	ISU Faculty Research Committee Grant. PI. \$5000 “Identification of antigen targets for anti-fibroblast antibodies”	
2010-2012	NIEHS/NIH. P.I. R15 (AREA grant) ES018986-01 “Role of System xc- in Asbestos-Induced Autoimmune Responses”.	\$192,028
2009-2015	Centers for Disease Control/ATSDR, Sub-Project P.I. on R01 TS000099-01 “Libby Epidemiology Research Program”, Raja Flores, PI (Icahn School of Medicine, NY). Sub-Project: Autoimmune Outcomes.	\$400,000
2012-2016	NIEHS/NIH. P.I. R15 (AREA grant) ES021884-01 “Identification of Functional Targets for Asbestos-Induced Autoantibodies”	\$366,266
2014-2015	Clinical and Translational Research – Infrastructure Network – Pilot Program “Correlating Autoantibody Profiles in Asbestos-Exposed Populations with Lung Disease Phenotypes”	\$75,000
2015-2018	NIH/EPA 1P50ES026102 Lewis/Gonzales (PI) University of New Mexico Center for Native Environmental Health Equity Research. Sub-Project: Autoimmune Outcomes of Heavy-Metal Contaminated Drinking Water, at Montana State University (Keil, Sub-Project PI) - Role: Research Scientist	
2015-2016	Montana Agricultural Experimental Station Research Innovation Grant - Increasing Exposure to Natural Occurring Asbestos in Western States: Fiber-Specific Pulmonary and Autoimmune Health Effects, Role: Co-PI (PI: D. Keil)	\$50,000
2016-2018	NIEHS/SRP R13 Conference Grant: ES027341-01 Keil/Pfau (Co-PI) Novel Findings in Asbestos Health Effects	\$18,000

- 2017-2018 **University of Pennsylvania**, Asbestos Superfund Program
 PI: Melpo Christofidou-Solomidou
 Contract: In vivo and in vitro effects of flaxseed extract on LA-induced inflammation
 Role: Sub-Project Co-Investigator \$10,000
- 2017-2018 **Institute for Translational Health Sciences (UW)**: ITHS Academic/Community Partnership Innovation Award
 PI: Pfau. Identification of Therapeutic Targets for Lamellar Pleural Thickening \$20,000
- 2018-2019 **National Health & Medical Research Council/Cancer Council, Australia**.
 PI: Alison Reid, Curtin University, Western Australia. Asbestos exposure, autoimmunity and asbestos-related disease: filling in the knowledge gaps.
 Role: Sub-Award PI. \$73,250
- 2019-2024 **DHHS/Agency for Toxic Substances & Disease Registry** 1 NU61TS000295-01-00
 Affordable Care Act Program for Early Detection of Certain Medical Conditions Related to Environmental Health Hazards, Center for Asbestos Related Diseases, Libby MT.
 PI: Brad Black, MD. Role: Consultant \$12,500,000

PUBLICATIONS – Peer Reviewed
 (Student authors are underlined)

56. **Pfau, J.C.**, T. McNew, L. Swan, B. Black. Autoimmune Markers for Progression of Libby Amphibole Lamellar Pleural Thickening. In Press: *Inhalation Toxicology*, November 2019
<https://doi.org/10.1080/08958378.2019.1699616>
55. Christofidou-Solomidou, M., R.A. Pietrofesa, K. Park, S.M. Albelda, D.E. Keil, **J.C. Pfau**. 2019. Synthetic Secoisolariciresinol Diglucoside (LGM2605) inhibits Libby Amphibole Asbestos-induced acute inflammation in mice. *Toxicology & Applied Pharm* 375:81-93.
54. **Pfau, J.C.**, C. Barbour, B. Black, K. Serve, M.J. Fritzler. 2018. Analysis of Autoantibody Profiles in Two Asbestiform Fiber Exposure Cohorts. *Jrnl of Toxicology and Environmental Health, Part A*. 81(19):1015-1027. <https://doi.org/10.1080/15287394.2018.1512432>
53. Diegel, R., B. Black, **J.C. Pfau**, T. McNew, C.W. Noonan, R. Flores. 2018. Case Series: Rheumatological Manifestations of Exposure to Libby Asbestiform Amphiboles. *Jrnl of Toxicology and Environmental Health, Part A*, 81(15):734-747.
<https://doi.org/10.1080/15287394.2018.1485124>
52. Reid, A., P. Franklin, N. de Klerk, J. Creaney, F. Brims, B. Musk, **J. Pfau**. 2018. Autoimmune antibodies and asbestos exposure: Evidence from Wittenoom, Western Australia. *Amer Jrnl of Industrial Medicine* 61(7):615-620. DOI: 10.1002/ajim.22863.
51. **Pfau, J.C.** 2018. Immunotoxicity of Asbestos. *Current Opinion in Toxicology*, 7(1-6).
50. Miller, A., J. Szeinuk, C.W. Noonan, C. Henschke, **J.C. Pfau**, B. Black, D. Yankelevitz, T. McNew, L. Linker, R. Flores. 2018. Libby Amphibole Disease: Clinical, Pulmonary Function and Radiographic Abnormalities in Former Vermiculite Mine Workers. *Journal of Occupational & Environmental Medicine*, 60(2):167-173.
49. Kaushik, G., Y. Xia, **J.C. Pfau**, C. Cretekos, K. Aho, M.A. Thomas. 2017. Dysregulation of Autism-Associated Synaptic Proteins by Psychoactive Pharmaceuticals at Environmental Concentrations. *Neuroscience Letters* 661:143-148.
48. **Pfau, J.C.**, B. Buck, R. Metcalf, Z. Kaupish, C. Stair, M. Rodriguez, B. Buck, R. Metcalf, D.E. Keil.

2017. Comparative Health Effects in Mice of Libby Amphibole and an Environmental Fibrous Amphibole from Arizona. *Tox and Applied Pharm (TAAP)* 334:24-34.
47. Bernatsky, S.M., **J.C. Pfau**, M.J. Fritzler. 2017. Environmental Exposures and Biomarkers Predictive of Rheumatoid Arthritis on the Pathway to Precision Medicine. *Jrnl Laboratory Precision Med.* 2(5):1-4.
46. Gilmer, J., T. Harding, L. Woods, B. Black, R. Flores, **J.C. Pfau**. 2016. Mesothelial Cell Autoantibodies Upregulate Transcription Factors Associated with Fibrosis. *Inhalation Toxicology* 29(1):10-17.
45. Szeinuk, J., C. Noonan, C. Henschke, **J. Pfau**, B. Black, D. Yankelevitz, A. Miller, M. Liang, Y. Liu, R. Yip, L. Linker, T. McNew, R. Flores. 2016. Pulmonary Abnormalities as a Result of Exposure to Libby Amphibole During Childhood and Adolescence – The Pre-Adult Latency Study (PALS). *Am Jrnl Indust Med* 60(1):20-34. DOI 10.1002/ajim.22674.
44. Hanson, R., C. Evilia, J. Gilmer, L. Woods, B. Black, R. Flores, **J.C. Pfau**. 2016. Libby Amphibole-Induced Mesothelial Cell Autoantibodies Bind to Surface Plasminogen and Alter Collagen Matrix Remodeling. *Physiological Reports* 4(15):1-12. E12881
43. Gilmer, J., K. Serve, M. Anthony, C. Davis, R. Hanson, **J.C. Pfau**. 2016. Libby Amphibole-Induced Mesothelial Cell Autoantibodies Promote Collagen Deposition in Mice. *Amer J Physiol: Lung Cell Mol Biol.* 310(11):L1071-7. PMID: PMC4935468
42. Kingston, M., **J.C. Pfau**, J. Gilmer, R. Brey. 2015. Selective Inhibitory Effects Of 50nm Gold Nanoparticles On Mouse Macrophage And Spleen Cells. *Jrnl Immunotoxicology*, ePub 2015:1-11.
41. Carlin, D.J., T. Larson, **J.C. Pfau**, S.H. Gavett, A. Shukla, A. Miller, R. Hines. 2015. Current Research and Opportunities to Address Environmental Asbestos Exposures. *Environ Health Perspect* 123(8):194-7. <http://dx.doi.org/10.1289/ehp.1409662>.
40. **Pfau, J.C.**, K.M.Serve, C.W. Noonan. 2014. Asbestos Exposure and Autoimmunity. *Autoimmune Diseases*, 2014:1-11. PMID: 24876951
39. Noonan CW, Conway K, Landguth EL, McNew T, Linker L, **Pfau J**, Black B, Szeinuk J, Flores R. 2014. Multiple pathway asbestos exposure assessment for a Superfund community. *Journal Of Exposure Science And Environmental Epidemiology*. 2014:1-8.
38. Zebedeo, C.N., C. Davis, C. Peña, K.W. Ng, **J.C. Pfau**. 2014. Erionite induces production of autoantibodies and IL-17 in C57BL/6 mice. *Tox & Applied Pharmacol*, 275:257-264. PMID: 24518925.
37. Serve, KM., B. Black, J. Szeinuk, **J.C. Pfau**. 2013. Asbestos-Associated Mesothelial Cell Autoantibodies Promote Collagen Deposition *In Vitro*. *Inhal. Tox.* 25:774-784. PMID:5002354
36. Ferro, A, C.N. Zebedeo, C. Davis, K.W. Ng, **J.C. Pfau**. 2013. Amphibole, but not Chrysotile, asbestos induces antinuclear autoantibodies and IL-17 in C57BL/6 mice. *J Immunotox* 11(3):283-90.
35. **Pfau, J.C.**, K. Hurley, C. Peterson, L. Coker, C. Fowers, R. Marcum. 2013. Activation and Trafficking of B1a B cells in Response to Amphibole Asbestos. *J. Immunotox.* 11:90-98.
34. Tadinada SM, Lai MB, Idikuda VK, Mukka K, Singh MRM, **Pfau J**, Bhushan A, Leung SW & Lai JCK (2013) Zinc Oxide Nanoparticles Induced Apoptosis and Necrosis in Hepatocellular Carcinoma HepG2 Cells. In Technical Proceedings of the 2013 NSTI Nanotechnology Conference, Vol. 3, Chapter 5. Environmental Health & Safety, pp. 433-436.

33. McKarns SC, Kerkvliet NI, Dean JH, Bonn MB, Cohen MD, Franko J, Laiosa MD, Lawrence BP, Luebke RW, Luster MI, Miller PG, Palmer RK, **Pfau JC**, Raman P, Regal JF, Rodgers KE, Schondelmeyer RS, Zhang X, Burns-Naas LA. 2012. Immunotoxicology: Fifty Years of Global Scientific Progress. *J Immunotoxicol.* 9(4):339-40.
32. Germolec, D., D.H. Kono, **J.C. Pfau**, K.M. Pollard. 2012. Animal Models Used to Examine the Role of the Environment in the Development of Autoimmune Disease. *J. Autoimmunity* 39(4):285-93.
31. Overocker, J. and **J.C. Pfau**. 2012. Cytokine Production Modified by System X_c- After PM10 and Asbestos Exposure. *Journal of Young Investigators* 23(6):34-39.
30. **Pfau, J.C.**, T. Seib, J. Overocker, J. Roe, A. Ferro. 2012. Functional expression of System x_c- is upregulated by asbestos but not crystalline silica in murine macrophages. *Inhalation Toxicology*, 24(8):476-85.
29. Marchand, L.S., S. St-Hilaire, E.A. Putnam, K. M. Serve, **J.C. Pfau**. 2012. Anti-Mesothelial Cell and Anti-Nuclear Autoantibodies Associated with Pleural Abnormalities in an Asbestos Exposed Population: Libby MT. *Toxicology Letters*, 208:168-173.
28. Rasmussen, D.L. and **J.C. Pfau**. 2012. Asbestos activates CH12.LX B lymphocytes via macrophage signaling. *J Immunotox.* 9(2):129-40.
27. **Pfau, J.C.**, S. Holland, S. Li, J. Sentissi. 2011. Alteration of fibroblast phenotype by asbestos-induced autoantibodies. *J Immunotox.* 8(2):159-69.
26. Bunderson-Schelvan, M., **J. Pfau**, R. Crouch, A. Holian. 2011. Non-Pulmonary Outcomes of Asbestos Exposure. *Jrnl Tox Env Health: Critical Reviews, Part B*, 14(1):122-52.
25. Bearden, S.E., R.S. Beard Jr., and **J.C. Pfau**. 2010. Extracellular Transsulfuration Generates Hydrogen Sulfide from Homocysteine and Protects Endothelium From Redox Stress. *Am Jrnl Phys - Heart and Circulatory Physiology* 299(5):H1568-76.
24. Cooper, G., K. Gilbert, E. Greidinger, J. James, **J. Pfau**, B. Richardson, N. Rose, B. Tsao. 2008. Recent Advances and Opportunities in Research on Lupus: Environmental Influences and Mechanisms of Disease. *Environ Health Perspect.* 116(6):695-702.
23. Webber, J.S., D.J. Blake, T. Ward, **J.C. Pfau**. 2008. Separation and characterization of Respirable Amphibole Fibers from Libby, Montana, USA. *Inhalation Toxicology* 7(8):733-740.
22. Blake, D.J., S.A. Wetzel, **J.C. Pfau**. 2008. Autoantibodies from mice exposed to Libby amphibole asbestos bind SSA/Ro52-enriched apoptotic blebs of murine macrophages. *Toxicology* 246(2-3):172-179.
21. **Pfau, J.C.**, M.A. Pershouse, E.A. Putnam. 2008. Directions and Needs in Asbestos Research: New Insights. Conference Summary. *Jrnl Immunotoxicology* 5(2):123-127.
20. **Pfau, J.C.**, J.J. Sentissi, D.J. Blake, S. Li, L. Calderon-Garciduenas, J.M. Brown. 2008. Asbestos-induced autoimmunity in C57Bl/6 mice. *Jrnl Immunotoxicol* 5(2):129-137.
19. Blake, D.J., C. Bolin, F. Cardozo-Pelaez, **J.C. Pfau**. 2007. NADPH Oxidase contributes to the production of ROS in murine macrophages in response to Libby asbestos exposure. *Tox Sci*; 99(1):277-288.
18. **Pfau, J.C.**, M.A. Pershouse, E.A. Putnam. 2006. Conference Summary: Directions and Needs in Asbestos Research: New Insights. *Inhalation Toxicology* 18(12):919-923.
17. Noonan, C.W., **J.C. Pfau**, T.C. Larson, M.R. Spence. 2006. Nested case-control study of autoimmune disease in an asbestos exposed population. *Environ Health Perspectives* 114(8):1243-1247.

16. Burns,-Naas, L.A., R.J. Dearman, D.R. Germolic, N.E. Kaminski, I. Kimber, G.S. Ladics, R.W. Luebke, **J.C. Pfau**, and S.B. Pruetz. 2006. Invited Review: ‘Omics’ Technologies and the Immune System. *Toxicology Mechanisms and Methods* 16:101-119.
15. Brown, J.M., C.M. Schwanke, M.A. Pershouse, **J.C. Pfau**, A. Holian. 2005. Effects of rottlerin on silica-exacerbated systemic autoimmune disease in New Zealand Mixed mice. *Am J Physiol: Lung Cell Mol Physiol*. 289(6):L990-8.
14. **Pfau, J.C.**, J.J. Sentissi, G. Weller, and E.A. Putnam. 2005. Assessment of Autoimmune Responses Associated with Asbestos Exposure in Libby MT. *Environ Health Perspectives* **113**(1):25-30.
13. Schneider, J.C., G.L. Card, **J.C. Pfau**, A. Holian. 2005. Air pollution particulate SRM1648 causes oxidant stress in RAW264.7 macrophages leading to production of prostaglandin E2, a potential Th2 mediator. *Inhalation Toxicol*. Dec 15;17(14):871-877.
12. Brown, J.M., **J.C. Pfau**, M.A. Pershouse, A. Holian. 2004. Silica, apoptosis, and autoimmunity. (Review article) *J. Immunotoxicology*. 1:177-188.
11. Archer, A.J., J. Cramton, **J.C. Pfau**, and A. Holian. 2004. Increased Airway Responsiveness after Acute Exposure to Urban Particulate Matter 1648 in a DO11.10 Murine Model. *Am J Physiol: Lung Cell Mol Physiol*. **286**(2):L337-43.
10. Brown, J.M., **J.C. Pfau**, and A. Holian. 2004. Immunoglobulin and lymphocyte responses following silica exposure in New Zealand Mixed mice. *Inhalation Toxicology* 16(3):133-9.
9. **Pfau, J.C.**, J.C. Schneider, A.J. Archer, J. Reeves, F.J. Leyva, J. Cramton. 2004. Environmental oxygen tension affects phenotype in cultured bone marrow derived macrophages. *Am J Physiol: Lung Cell Mol Physiol*. **286**(2):L354-62.
8. **Pfau, J.C.**, J.M. Brown, and A. Holian. 2004. Silica-exposed mice generate autoantibodies to apoptotic cells. *Toxicology* **195**(2-3):167-76.
7. Marchion, D.C., **J.C. Pfau**, P.A. Weber, A.C. Grobe, C.M. Duran, D.T. Cheung. 2003. An in vitro model of pericardial tissue healing. *Biomaterials* **24**(1):89-95.
6. Brown, J.M., A.J. Archer, **J.C. Pfau**, and A. Holian. 2003. Silica accelerated systemic autoimmune disease in New Zealand Mixed mice. *J Clinical Exp Immunol* **131**:415-421.
5. Hamilton, R.F. Jr., **J.C. Pfau**, G.D. Marshall, and A. Holian. 2001. Silica and PM1648 modify human alveolar macrophage antigen presenting cell activity *in vitro*. *J Env Path Tox Oncol* **20**(suppl 1):75-84.
4. Chao, S.K., R.F. Hamilton, **J.C. Pfau**, and A. Holian. 2001. Cell surface regulation of silica-induced apoptosis by the SR-A scavenger receptor in a murine lung macrophage cell line (MH-S). *Tox Appl Pharmacol* **174**:10-16
3. Grobe, A.C., D.T. Cheung, H.H. Luo, Y. Shomura, D.C. Marchion, **J.C. Pfau**, J.H. Oury, C.M.G. Duran. 2000. A Study of the junction between glutaraldehyde-treated allogeneic aorta and the native aorta. *J Heart Valve Disease* **9**:570-575.
2. **Pfau, J.C.**, E.B. Walker, and G.L. Card. 2000. Monoclonal antibodies to CD45 modify LPS-induced arachidonic acid metabolism in macrophages. *Biochimica Biophysica Acta*, **1495**:212-222.
1. **Pfau, J.C.**, E.B. Walker, and G.L. Card. 1998. Comparison of the effect of lipopolysaccharide and ceramide on arachidonic acid metabolism in THP-1 monocytic cells. *Cellular Immunology* **186**:147-153.

PUBLICATIONS SUBMITTED OR IN PREPARATION

- Keil, D.E., T. Hoyt, **J.C. Pfau**. Developmental Immunotoxicity of Low-Dose Mixtures of Arsenic, Uranium and Manganese in Mice. In Preparation for *Toxicological Sciences*
- Hanson, R., J. Gilmer, L. Woods, K. Serve, **Pfau, J.C.** Mesothelial Collagen Deposition Following Libby Amphibole Exposure Involves Autoantibody-Induced Protein Tyrosine Phosphorylation. In Preparation for *Jrnl of Immunotoxicology*

BOOK CHAPTERS

- Pfau J.C.** and C.W. Noonan. 2018. Asbestos Exposure and Autoimmune Disease. IN: Earth Systems and Environmental Sciences, Elsevier. DOI: 10.1016/B978-0-12-409548-9.11279-5
- Pfau, J.C.**, K. Serve, L. Woods, C.W. Noonan. 2015. Asbestos Exposure and Autoimmune Disease. IN: Current Topics in Environmental Health and Preventive Medicine: Biological Effects of Fibrous and Particulate Substances. Springer Publications.
- Thakur, S., **Pfau, J.C.**, Germolec, D. 2013. Animal Models to Study Autoimmune Disease. In: *Encyclopedic Reference of Immunotoxicology*, 2nd Edition. Edited by Hans-Werner Vohr. Springer Press.
- Pfau, J.C.** 2012. Rheumatoid Arthritis. In: *Immunotoxicity, Immune Dysfunction, and Chronic Disease*, Chapter 7. Edited by Robert Luebke and Rod Dietert. Humana Press.
- Noonan, C.W. and **J.C. Pfau**. 2011. Asbestos Exposure and Autoimmune Disease. In: Jerome Nriagu (Editor-in-Chief), *Encyclopedia of Environmental Health*, volume 1, pp. 193-203, Burlington: Elsevier.
- Pfau, J.C.**, D.J. Blake, M.J. Fritzler. 2009. Autoantibody Profiles of an Asbestos-Exposed Population. In: *Autoimmunity: Role, Regulation and Disorders*, Chapter 11:245-268. NOVA Science Publishers.
- Pfau, J.C.**, D.J. Blake, M.J. Fritzler. 2009. Autoantibody Profiles of an Asbestos-Exposed Population. In: *Asbestos: Risks, Environment, and Impact*, Chapter 4:71-94. NOVA Science Publishers.

SELECTED AND INVITED PRESENTATIONS

(Student presenters are underlined)

- Pfau, J.C.**, T. McNew, L. Swan, B. Black. Autoimmune Markers for Progression of Libby Amphibole Lamellar Pleural Thickening. Libby Research Partnership Meeting, May 2019.
- Pfau, J.C.**, C. Barbour, B. Black, K. Serve, M.J. Fritzler. Analysis of Autoantibody Profiles in Two Asbestiform Fiber Exposure Cohorts. Libby Research Partnership Meeting, May 2019.
- Pfau, J.C.** and D.E. Keil. 2018. Autoimmune Outcomes of Asbestos Exposure: Lessons from Libby MT. Praespero Summit on Autoimmune Diseases, Banff, Alberta, Canada. October 10-13, 2018.
- Pfau, J.C.**, T. Hoyt, M. Rodriguez, C. Stair, Z. Zaupish and D.E. Keil. 2018. Lifetime Exposure To Low Levels Of Arsenic, Manganese And Uranium Lead To Alterations In T And B Lymphocytic Populations. 10th Conference on Metal Toxicity and Cancer (MTC), Albuquerque, NM., October 28-31.
- Pfau, J.C.** and A. Korchevskiy. Asbestos Mysteries and Discoveries: Hunting for the Mode of Action. Symposium presentation. American Industrial Hygiene Conference and Expo, Philadelphia, PA, May 2018.

- Pfau, J.C.** Lessons from Libby: Non-Cancer Outcomes of Exposure to Amphibole Asbestos. Invited Seminar: University of Pennsylvania, Asbestos Superfund Center, April 2018.
- Pfau, J.C.,** B. Buck, R. Metcalf, D. Keil. What Mice Tell Us About Health Effects of Fibrous Amphiboles in Mice. Boulder City Community Action Group Public Meeting, Nov 30, 2017.
- Pfau, J.C.** Differential Non-Cancer Outcomes of Fibrous Amphiboles in Mice. ASTM Johnson Conference, Burlington VT, July 2017. (Invited Talk)
- Pfau, J.C.** and D.E. Keil. Asbestos: An Emerging Environmental Health Hazard. Immunology and Infectious Diseases Seminar Series, Montana State University, June 27, 2017.
- Pfau, J.C.,** B. Buck, R. Metcalf, Z. Kaupish, C. Stair, M. Rodriguez, D.E. Keil. Arizona Amphibole Asbestos Induces Autoimmunity and Fibrosis in Mice. ASTM Johnson Conference, Burlington VT, July 2017. (Poster)
- Pfau, J.C.,** Z. Kaupish, C. Stair, M. Rodriguez, D.E. Keil. Arizona Amphibole Asbestos Induces Autoimmunity and Fibrosis in Mice. Montana State University Student Research Celebration, April 21, 2017. (Poster)
- Pfau, J.C.,** S.M. Albelda, M. Christofidou-Solomidou. The Synthetic Lignan Secoisolariciresinol Duglucoside (LGM2605) Mitigates Libby Amphibole Asbestos-Induced Immune Cell Activation in Mice and Murine Macrophages. Center for Excellence in Environmental Toxicology, University of Pennsylvania, Perlman School of Medicine, Philadelphia, PA, June 2017. (Poster)
- Pfau, J.C.** Asbestos: An Emerging Public Health Hazard. College of Idaho, Caldwell, ID. February, 2017. (Invited Speaker).
- Pfau, J.C.** A Paradigm Shift in Evaluating Risk of Asbestos Exposure: Non-Cancer Outcomes. Association of Environmental and Engineering Geologists (AEG) meeting: Assessment, Monitoring and Mitigation of Naturally Occurring Asbestos (NOA) Hazards in the Western U.S. Oakland, CA., December 2016. (Invited Speaker)
- Maria Rodriguez, Elisa Santori, Jacob Seymour, Lacey Murphy, Jean Pfau, Brenda Buck, Dirk Goossens, Jamie DeWitt, and Deborah E. Keil 2016. Epigenetic Modification of Global Methylation Associated with Immunotoxicity Following Heavy Metal Dust Exposure. (Poster) Undergraduate Student Presentation at American Society of Clinical Laboratory Science (ASCLS), Philadelphia Aug 1-4, 2016.
- Pfau, J.C.,** L. Woods, Z. Kaupish, C. Stair, D. Keil. Nevada Amphibole Asbestos: Comparison of Effects with Libby Amphibole. (Platform talk) Clinical/ Translational Research Infrastructure Network (CTR-IN) Annual Meeting, Las Vegas, NV, June 7, 2016.
- R. Hanson, C. Evilia, L. Woods, J. Gilmer, J.C. Pfau. Libby Amphibole-Induced Mesothelial Cell Autoantibodies Bind to Surface Plasminogen and Alter Collagen Matrix Remodeling. (Poster) Society of Toxicology Annual Meeting, New Orleans, LA, March 16, 2016.
- J. Gilmer, K. Serve, R. Hanson, J.C. Pfau. Libby Amphibole-Induced Mesothelial Cell Autoantibodies Promote Collagen Deposition in Mice. (Poster) Society of Toxicology Annual Meeting, New Orleans, LA, March 16, 2016.

- J.C. Pfau.** Autoimmune Impacts from Exposure to Mineral Fibers. Curtin University, Perth Australia, October 2015. (Invited Speaker)
- J.C. Pfau.** Asbestos and Systemic Autoimmune Disease. Perth Mesothelioma/Asbestos Group Annual Symposium, Harry Perkins Research Institute, Perth, Western Australia, October 2015. (Invited Speaker)
- J.C. Pfau.** Autoimmune Impacts from Exposure to Mineral Fibers. Upper Midwest Mining and Asbestos Workshop, U.S. Environmental Protection Agency, October 2015. (Invited Speaker)
- J.C. Pfau.** Correlating Autoantibody Profiles in Asbestos Lung Disease Phenotypes. (Platform talk) Clinical/ Translational Research Infrastructure Network (CTR-IN) Annual Meeting, Las Vegas, NV, June 2015.
- J.C. Pfau.** Libby Epidemiology Research Program: Autoimmune Outcomes. 3rd Annual Libby Asbestos Research Symposium. Spokane, WA. May 2015.
- J.C. Pfau.** Autoimmune Impacts from Exposure to Mineral Fibers. ASTM Naturally Occurring Asbestos (NOA) Symposium, Anaheim, CA, May 2015.
- Gilmer, J., **J.C. Pfau.** Anti-Mesothelial Cell Autoantibodies Up-regulate Transcription Factors Involved in Collagen Pathways. Society of Toxicology Annual Meeting, San Diego, CA, March 2015. Abstract Published in *The Toxicologist*: 144:145.
- Pfau, J.C.,** J. Gilmer, D. Walker, J. Pak, L. Yang, and M.A. Thomas. Effects of Single-Source versus Multisource Copper Indium Disulfide Nanoparticles on Mouse Macrophage Gene Expression. Society of Toxicology Annual Meeting, San Diego, CA, March 2015. Abstract Published in *The Toxicologist*: 144:243.
- Hanson, R.L., J. Gilmer, K. Serve and **J.C. Pfau.** Asbestos-Induced Pleural Fibrosis Involves Autoantibody-Mediated Protein Tyrosine Phosphorylation Pathway. Society of Toxicology Annual Meeting, San Diego, CA, March 2015. Abstract Published in *The Toxicologist*: 144:145.
- Pfau, J.C.,** Tracy McNew, Tanis Hernandez. Induction of Autoantibodies and IL-17 in C57BL/6 Mice by Erionite. Internat'l Rural Health & Rural Nursing Research Conference, Montana State University, July 2014.
- Pfau, J.C.** Local & Systemic Autoimmune Responses in Non-Malignant Pleural Disease. Joint EPA/ATSDR Libby Action Plan Meeting, Arlington VA, March 2014. Invited Talk.
- Pfau, J.C.** Autoimmune Responses Following Asbestos Exposure. Society of Toxicology Annual Meeting, Phoenix, AZ, March 24-26, 2014. Invited Talk
- Pfau, J.C.,** A. Ferro, C.N. Zebedeo, C. Davis, K.W. Ng. Antinuclear Autoantibodies and IL-17 Are Induced in C57BL/6 Mice Following Amphibole, but not Chrysotile, Exposure. Society of Toxicology Annual Meeting, Phoenix, AZ, March 24-26, 2014. Poster.
- Serve, K.M., C.N. Zebedeo, C. Davis, K.W. Ng, and **J.C. Pfau.** Contribution of Autoantibodies to Fiber-Induced Fibrosis. Society of Toxicology Annual Meeting, Phoenix, AZ, March 24-26, 2014.
- Kaushik, G. **J.C. Pfau,** K. Aho, M.A. Thomas. Dysregulation of Autism-Associated Synaptic Proteins by Environmental Contaminants. Society of Toxicology Annual Meeting, Phoenix, AZ, March 24-26, 2014.

- Walker, D.R., J.J. Pak, **J.C. Pfau**. Nanotoxicity: An Interdisciplinary Problem. Third Biennial Western Regional IDeA Scientific Conference, Honolulu Hawaii, October 6-8 2013.
- Pfau, J.C.** and K.M. Serve. Grand Rounds Invited Lecture. Local and Systemic Autoimmune Responses Following Exposure to Amphibole or Chrysotile. Division of Pulmonary, Critical Care, and Sleep Medicine, Mt Sinai School of Medicine, New York, NY. September 19, 2013.
- Tadinada, S.M., M.B. Lai, V.K. Idikuda, K. Mukka, M.R.M. Singh, **J. Pfau**, A. Bhushan, S.W. Leung and J.C.K. Lai. Zinc Oxide Nanoparticles Induced Apoptosis and Necrosis in Hepatocellular Carcinoma HepG2 Cells. NSTI Nanotechnology Conference & Expo, Nanotech 2013, Washington D.C., May 12-16, 2013.
- Idikuda, V.K., Lai, M.B., **J. Pfau**, A. Bhushan, S.W. Leung and J.C.K. Lai. Cytotoxic Effects of Manganese in Human Prostate Carcinoma DU145 Cells. Experimental Biology 2013, Boston, MA, April 20-14, 2013.
- Singh, M.R.M., Lai, M.B., V.K. Idikuda, K. Mukka, **J. Pfau**, A. Bhushan, S.W. Leung and J.C.K. Lai. Cytotoxicity of Zinc Oxide Nanoparticles in Human Neurotumor Cells. Experimental Biology 2013, Boston, MA, April 20-14, 2013.
- Zebedeo, C.N. and **J.C. Pfau**. Erioite induces Th-17 Pathway Cytokines In Vitro and In Vivo. Society of Toxicology Annual meeting, March 10-14, 2013.
- Serve, K.M., A. Santin, and **J.C. Pfau**. Mechanistic Comparison of Asbestos-Associated Autoantibodies. Society of Toxicology Annual meeting, March 10-14, 2013.
- Pfau, J.**, K. Serve, and C. Noonan. Autoimmune Biomarkers. 2nd Libby Amphibole Asbestos Public Health Symposium. Center for Asbestos Related Diseases, Libby MT, October 2012.
- Serve, K. and **J. Pfau**. Asbestos-Induced Mesothelial Cell Auto-Antibodies Promote Collagen Matrix Formation. Idaho INBRE Summer Conference, University of Idaho, August 2012.
- Peña, C., N. Zebedeo, **J. Pfau**. Immunosuppressive Effects of Asbestos on Anti-cancer Cytokines. Idaho INBRE Summer Conference, University of Idaho, August 2012.
- Pfau, J.C.** and K. Serve. The Role of Anti-Mesothelial Cell Autoantibodies in Asbestos-Induced Pleural Disease. Annual Meeting of the Pacific Division of AAAS. Boise ID, June 2012.
- Zebedeo, N. and **J.C. Pfau**. Digging Deeper: The Immunotoxicology of Erionite. Annual Meeting of the Pacific Division of AAAS. Boise ID, June 2012.
- Pfau, J.C.** Silica, Asbestos, and Autoimmunity. Symposium Invited Speaker. Annual Meeting of the American Association of Immunologists, Boston MA, May 5-8, 2012.
- Kaushik, G., M.A. Thomas, **J.C. Pfau**. Dysregulation of autism-associated synaptic proteins by environmental contaminants. Idaho Academy of Sciences, Idaho Falls, ID, March 2012
- Birch, E., K. Serve, **J.C. Pfau**. Comparison of Serum Autoantibody Prevalence in Asbestos-Exposed Populations: Libby, MT and New York Pipefitters. National Conference for Undergraduate Research (NCUR), Weber State University, Ogden UT, March 2012.
- Hanson, R., D. Tew, R. Marcum, **J. Pfau**. The Role of System xc- in Macrophages and Autoimmunity. National Conference for Undergraduate Research (NCUR), Weber State University, Ogden UT, March 2012.
- Marcum, R.D. and **J.C. Pfau**. Effects of glutamate on B1a B cell function. Society of Toxicology Annual Meeting, San Francisco CA, March 2012.

- Pfau, J.C., K. Serve, K. Rowse, J. Fortner, B. Black.** Community Research Rally brings toxicology education to a rural community impacted by asbestos exposure. Society of Toxicology Annual Meeting, San Francisco CA, March 2012.
- Birch, E.C., K.M. Serve, J.C. Pfau. Comparison of serum autoantibody prevalence in asbestos-exposed populations. Society of Toxicology Annual Meeting, San Francisco CA, March 2012.
- Serve, K.M., R. Crouch, and J.C. Pfau. Asbestos-induced mesothelial cell autoantibodies promote collagen matrix formation. Society of Toxicology Annual Meeting, San Francisco CA, March 2012.
- Leung, S., A. Jaiswal, S. Lu, **J. Pfau**, Y. Wong, A. Bhushan, C.K. Daniels and J. Lai. Differential Cytotoxicity of Silicon Dioxide Nanoparticles on Neural Cells Derived from Peripheral Nervous System. International Conference on Materials for Advanced Technologies (ICMAT), June 2011, Singapore.
- Pfau, J.C., L. Marchand, S. St. Hilaire.** Anti-Mesothelial Cell Autoantibodies Associated with Asbestos Exposure and Pleural Disease. Idaho Academy of Sciences, April 2011, College of Idaho, Caldwell ID.
- Marchand, L.S., J.C. Pfau, S. St-Hilaire, E.A. Putnam. Anti-Mesothelial Cell Autoantibodies Associated with Asbestos Exposure and Pleural Disease. Society of Toxicology Annual Meeting, Washington DC, March 2011.
- Marcum, R., and J.C. Pfau. B1a Cell Activation by Glutamate. Society of Toxicology Annual Meeting, Washington DC, March 2011.
- Pfau, J.C., C. Evilia, L. DeVeaux.** The Idaho Science and Engineering Festival: Satellite Event for K-12 Science Education. Society of Toxicology Annual Meeting, Washington DC, March 2011.
- Pfau, J.C.** (Invited Speaker) The Potential of B1a B cells as Therapeutic Targets in Systemic Autoimmune Disease. Institute for Translational Health Sciences, University of Washington, Seattle WA, Dec 2010.
- Pfau, J.C.** (Invited Symposium Speaker) Asbestos-induced Autoimmunity: The possible role of the System xc⁻ Transporter. Society of Toxicology Annual Meeting, Salt Lake City, UT., March 2010.
- Rasmussen, D., L. Coker, C. Fowers, J.C. Pfau. (Poster) Direct Activation of B1a B cells via Asbestos Exposure. Society of Toxicology Annual Meeting, Salt Lake City, UT., March 2010.
- Pfau, J.C.** (Invited Speaker) Environmental Autoimmunity: Libby's Asbestos Story. NIEHS Superfund Research Program Annual Meeting, Columbia University, New York. November 2009.
- Overocker, J., Ferro, A., Pfau, J.C. Asbestos modifies expression & activity of the System xc⁻ amino acid transporter in macrophages. Mountain West Society of Toxicology Annual Meeting, Albuquerque NM, October 2009.
- Pfau, J.C.** (Symposium Speaker) Asbestos-Autotoxicus: Inhalation Toxicology and Pathogenic Autoantibodies. Symposium: Recent Advances in Pharmacology & Toxicology. Pacific Division American Association for the Advancement of Science, San Francisco CA, Aug 2009.
- Mitchell, K., **Pfau, J.C.** Toxicology Research: Imagine What We Can Do! 2009 INBRE Conference, Idaho State University, Aug 2009.
- Pfau, J.C.** Introduction to Flow Cytometry: Go with the Flow! Summer Seminar, Dept. of Biological

Sciences, Idaho State University, July 2009

- Pfau, J.C.** (Invited Speaker) Asbestos-Induced Autoimmunity: Mechanisms of Induction and Pathogenesis. Dept. of Biological Sciences, Boise State University, Oct 15, 2008.
- Pfau, J.C.**, K. Hurley, S. Li. 2008. Platform presentation: Activation and trafficking of Peritoneal B1a B cells in response to asbestos. Annual Meeting of the Society of Toxicology. Seattle WA, March 16-20, 2008.
- Hurley, K. and **J.C. Pfau**. Effects of Asbestos on B1a B cell activation and trafficking. Annual meeting of the Pacific Northwest Assoc. of Toxicologists (PANWAT), Univ. of Washington, Seattle. Sept 14-15, 2007.
- Pfau, J.C.** (Invited Speaker) Asbestos Research at the UM CEHS. Environmental Protection Agency – Denver 2007: Libby Epidemiology Meeting, July 23-24, 2007.
- Freeman, D.S., **J. C. Pfau**, G. Thormahlen,, J.T. Carter. Using a curriculum map to track how the professional program develops students toward defined outcomes. Poster: AACP Annual Meeting, Orlando FL, July 2007.
- Pfau, J.C.** (Invited Speaker). Current studies on asbestos & autoimmunity in Libby MT. Libby Community Advisory Group (CAG) meeting, Libby MT Nov. 2006.
- Pfau, J.C.** (Invited speaker) Assessment of Asbestos-Associated Autoimmunity. “An Evening of Autoimmunity” sponsored by INOVA Diagnostics and CEHS. Offered for CE credit for clinical laboratory technical staff. Missoula MT, March 20, 2006.
- Pfau, J.C.**, C.W. Noonan. Systemic autoimmune disease risk associated with asbestos exposure. 9th Intl Workshop on Autoantibodies and Autoimmunity, Gainesville, FL, Sept 29 – Oct 2, 2005.
- Pfau, J.C.** (Invited speaker) Silica, Asbestos and Lupus. Workshop: “Lupus and the Environment” Sponsored by NIEHS. Washington DC, Sept 7-8, 2005.
- Pfau, J.C.** (Invited Speaker) Asbestos exposure and autoimmune responses in mice. “Directions and Needs in Asbestos Research: New Insights”, CEHS Asbestos Conference, Univ. of Montana, July 28-29-2005.
- Pfau, J.C.** (Invited Speaker) Stress and the Immune System. Montana Neuroscience Institute Foundation, Public Lecture Series, November 2004.
- Pfau, J.C.** (Invited Speaker) Assessment of Autoimmune Responses in Libby MT. Community Advocacy Group, Libby MT, September 2004.
- Pfau, J.C.** and J.M. Brown. (Invited Speakers) *Journeys of Silica and Asbestos: From apoptosis to autoimmunity*. Environmental Protection Agency, Research Triangle Park, NC, February 2003.
- Pfau, J.C.**, E. Putnam, J.M. Brown, and A. Holian. (Invited Speaker) *Autoimmune responses following environmental exposures: silica and asbestos*. New Directions and Needs in Asbestos Research Conference, Center for Environmental Health Sciences, University of Montana, June 2002.
- Pfau, J.C.** (Invited Speaker) "Stress: the connection between body and mind", Minerva Society, Missoula Community Medical Center Foundation, Missoula MT. March 19, 1995.

PUBLISHED ABSTRACTS
Student Authors are underlined

- Pfau, J.C.**, B. Buck, R. Metcalf, D. Keil. Paradigm Shifts in Evaluating Health Effects of Asbestos: Non-Cancer Outcomes. Geological Society of America, Annual Meeting, Seattle WA, October 2017.
- Metcalf, R., B. Buck, **J. Pfau**, B. McLaurin. In Defense of the Term "Naturally-Occurring Asbestos". Geological Society of America, Annual Meeting, Seattle WA, October 2017.
- Hanson, R., C. Evilia, L. Woods, J. Gilmer, **J.C. Pfau**. 2016. Libby Amphibole-Induced Mesothelial Cell Autoantibodies Bind to Surface Plasminogen and Alter Collagen Matrix Remodeling. *The Toxicologist*: 150(1):438.
- Gilmer, J., K. Serve, R. Hanson, **J.C. Pfau**. 2016. Libby Amphibole-Induced Mesothelial Cell Autoantibodies Promote Collagen Deposition in Mice. *The Toxicologist*: 150(1):438-439.
- Gilmer, J., **J.C. Pfau**. 2015. Anti-Mesothelial Cell Autoantibodies Upregulate Transcription Factors Involved in Collagen Pathways. *The Toxicologist*: 144:145.
- Pfau, J.C.**, J. Gilmer, D. Walker, J. Pak, L. Yang, and M.A. Thomas. Effects of Single-Source versus Multisource Copper Indium Disulfide Nanoparticles on Mouse Macrophage Gene Expression. *The Toxicologist*: 144:243.
- Hanson, R.L., J. Gilmer, K. Serve and **J.C. Pfau**. Asbestos-Induced Pleural Fibrosis Involves Autoantibody-Mediated Protein Tyrosine Phosphorylation Pathway. *The Toxicologist*: 144:145.
- Pfau, J.C.** Autoimmune Responses Following Asbestos Exposure. 2014. *The Toxicologist* 138:11.
- Pfau, J.C.**, A. Ferro, C.N. Zebedeo, C. Davis, K.W. Ng. 2014. Antinuclear Autoantibodies and IL-17 Are Induced in C57BL/6 Mice Following Amphibole, but not Chrysotile, Exposure. *The Toxicologist* 138:31
- Serve, K.M., C.N. Zebedeo, C. Davis, K.W. Ng, and **J.C. Pfau**. 2014. Contribution of Autoantibodies to Fiber-Induced Fibrosis. *The Toxicologist* 138:31.
- Kaushik, G. **J.C. Pfau**, K. Aho, M.A. Thomas. 2014. Dysregulation of Autism-Associated Synaptic Proteins by Environmental Contaminants. *The Toxicologist* 138:462.
- Serve, K., A. Santin, J.C. Pfau. 2013. Mechanistic comparison of asbestos-associated autoantibodies. *The Toxicologist* 132(1):305,
- Zebedeo, C.N., and **J.C. Pfau**. 2013. Erionite induces Th-17 Pathway Cytokines in vitro and in vivo. *The Toxicologist* 132(1):80.
- Marcum, R.D. and **J.C. Pfau**. 2012. Effects of glutamate on B1a B cell function. *The Toxicologist* 126(1):357.
- Pfau, J.C.**, K. Serve, K. Rowse, J. Fortner, B. Black. 2012. Community Research Rally brings toxicology education to a rural community impacted by asbestos exposure. *The Toxicologist* 126(1):240.
- Birch, E.C., K.M. Serve, T. Ng, **J.C. Pfau**. 2012. Comparison of serum autoantibody prevalence in asbestos-exposed populations. *The Toxicologist* 126(1):165.
- Serve, K.M., R. Crouch, and **J.C. Pfau**. 2012. Asbestos-induced mesothelial cell autoantibodies promote collagen matrix formation. *The Toxicologist* 126(1):165.

- Marchand, L.S., J.C. Pfau, S. St-Hilaire, E.A. Putnam. 2011. Anti-Mesothelial Cell Autoantibodies Associated with Asbestos Exposure and Pleural Disease. *The Toxicologist* 120(S2):324.
- Marcum, R., and J.C. Pfau. 2011. B1a Cell Activation by Glutamate. *The Toxicologist* 120(S2):325.
- Pfau, J.C., C. Evilia, L. DeVeaux.** 2011. The Idaho Science and Engineering Festival: Satellite Event for K-12 Science Education. *The Toxicologist* 120(S2):400.
- Pfau, J.C., J. Overocker, A. Ferro, T. Seib.** 2010. Asbestos-Induced Autoimmunity: The Possible Role of System xc in Macrophage Signaling. *The Toxicologist* 114(1):6.
- Rasmussen, D., L. Coker, C. Fowers, J.C. Pfau. 2010. Direct Activation of B1a B cells via Asbestos Exposure. *The Toxicologist* 114(1):67.
- Pfau, J.C., K. Hurley, S. Li.** 2008. Activation and trafficking of B1a B cells in response to asbestos. *The Toxicologist* 82:124.
- Blake, D.M., J.C. Pfau. 2007. Libby amphibole asbestos is internalized and induces oxidative stress in murine macrophages; a possible mechanism for asbestos-induced autoantibody production. *Am Jnl Resp Critical Care Med* 175(April):A431.
- Pfau, J.C., S. Li, J.J. Sentissi.** 2007. Autoantibodies from asbestos-exposed mice bind to mouse lung fibroblasts and activate myofibroblasts differentiation and collagen production. *Am Jnl Resp Critical Care Med* 175(April):A431.
- Blake, D.M., S. Li, M.J. Fritzler, J.C. Pfau. 2006. Serological polyreactivity in serum samples from an asbestos-exposed community: Libby MT. *J. Immunol.*, 176:S135.
- Noonan, C.W., **J.C. Pfau**, T.C. Larson, M.R. Spence. 2005. Asbestos exposure and risk of autoimmune disease. *Am J Epidemiol* 161(suppl)
- Sentissi, J.J., C. MacKenzie, and J.C. Pfau. Antibodies to DNA Topoisomerase 1 in Asbestos-Associated Autoimmunity. *Proceedings of the American Thoracic Society* 2005: 2(Abstracts Issue):A673
- Pfau, J.C., J. Sentissi, J.M. Brown, R. Thompson.** 2005. Asbestos-induced autoimmunity in C57BL/6 mice. *The Toxicologist* 79:186.
- Sentissi, J., A. Holian, and **J.C. Pfau.** 2004. Possible role of autoantibodies in the exacerbation of asbestos induced lung fibrosis. *Am J of Resp Crit Care Medicine* 169(7):49.
- Leal, I.J., A. Holian, and J.C. Pfau. 2003. Analysis of target antigens for autoantibodies associated with asbestos exposure. *The Toxicologist* 78(S-1):100.
- J.C. Pfau, A. Archer, J. Reeves, J.C. Schneider, A. Holian.** 2004. Oxygen tension affects phenotype in cultured bone marrow-derived macrophages. *The Toxicologist* 77(suppl).
- J.C. Pfau, J.M. Brown and A. Holian.** 2002. Silica-exposed Mice Generate Autoantibodies Which Recognize Apoptotic Cells. *The FASEB Journal*, 16(5) Part II: A1219.
- Archer, A.J., **J.C. Pfau**, and A. Holian. 2002. Urban Particulate Exacerbation of Bronchoconstriction. *The FASEB Journal*, 16(4) Part I: A672.
- J.M. Brown, J.C. Pfau and A. Holian. 2002. Silica Accelerated Systemic Autoimmune Disease in Lupus

Prone New Zealand Mixed Mice. *The Toxicologist*. 66(1-S):80-81.

TEACHING EXPERIENCE

- WIMU Regional Program in Veterinary Medicine, MT State University/Washington State University
VM 513: Veterinary Physiology I: Cellular Physiology (2019)
- Dept. of Microbiology and Immunology, Montana State University (2019)
BIOM 497: Educational Methods
- University of Johannesburg, South Africa (2018, November 5-8) Intl Symp on Medical Geology in Africa
Introduction to Toxicology, Inhalation Toxicology, Toxicology of Asbestos, Precaution Principle
- Gallatin College, Montana State University (2017 – current)
BIOM250: Microbiology for the Life Sciences: Infectious Diseases
BIOH112/113: Human Form and Function 1 and II
BIOM107: Molecules of Life
- Dept. of Land Resources & Environmental Sciences, Montana State University (2017)
LRES/MB527: Toxicology (on-line and in class, co-instructor)
- Dept. of Biological Sciences, Idaho State University, Pocatello ID (2008- 2015)
BIOL3301/3302: Anatomy & Physiology (Every semester, pre-professional programs)
BIOL2206: Cell Biology (Bi-annual)
BIOL4481/4482: Independent Problems (Undergraduate research projects) (Every Semester)
BIOL4491/4492: Senior Seminars (Neuroimmunology; Toxicology) (Annual)
BIOL44/5563: Human Pathophysiology (Co-Instructor, Immunopathology)
BIOL4481/6641: Advanced Topics in Immunology (Microbial Immune Evasion) (Bi-Annual)
BIOL6692: Seminar in Toxicology (Bi-Annual)
- Dept. of Biomedical & Pharmaceutical Sciences, University of Montana, Missoula MT. (2002-2008)
Co-Instructor for BMED 641: Toxicology (Immunotoxicology)
Co-Instructor for BMED 643: Cell/Molecular Toxicology (Signal Transduction).
Co-Instructor for BMED 644: Fundamentals of Immunotoxicology. (Neuroimmunology;
Autoimmunity/Hypersensitivity)
Co-Instructor for PHAR 626: Methods in Pharmaceutical Sciences, Flow Cytometry
Co-Instructor for PHAR 630: Pharmacogenetics (Immunopharmacogenetics)
Co-Instructor for PHAR 495: Skills Lab: Sterile Products & Compounding Lab
Co-Instructor for PHAR 362: Physiological Systems Lab (Microbiol, Immunology Sections)
Co-Instructor for PHAR 341: Anatomy and Physiology, Lymphoid system.
Instructor: Health Careers Opportunity Program: Medical Microbiology
- Division of Biological Sciences, University of Montana, Missoula MT.
2000-2007 Instructor: BIOL 106: Elementary Medical Microbiology
Fall 1999 Instructor: MICB 410: Immunology
Fall 1998 Instructor: MICB 450 and 451: Microbial Physiology and Lab.

COMMITTEES AND PROFESSIONAL SERVICE

- 2019 Conference Organizer: Libby Research Partnership Conference, Libby MT, May 2019
2019 Grant Peer Reviewer: Montana INBRE
2018 Molecular Biosciences Building, Project Coordinator for Microbiology & Immunology
2015-2018 NIEHS Asbestos Conference Planning Committee (Chair)
2016 Grant Peer Reviewer: British Lung Foundation Research Grants
2015-2016 Grant Peer Reviewer: Pilot Grant program for NIGMS-funded Center for Environmental Health Sciences, University of Montana

2015 Grant Peer Reviewer: Dept. of Defense, Peer-Reviewed Medical Research Program
 2014-2015 ISU Faculty Grievance Standing Committee
 2014-2015 College of Science & Engineering Tenure & Promotion Policy Committee
 2014 Anatomy & Physiology Assistant Lecturer Search Committee
 2013-2015 Strategic Planning Committee, Dept of Biological Sciences
 2013 Tenure & Promotion: Outside reviewer for University of Arkansas
 2012-2015 ISU Majors/Minors Fair, Recruiting table for Biochemistry, Biology majors (ea Oct)
 2012-2015 Microbiology/Biochemistry Curriculum Committee
 2012-2015 Physician's Assistant Program – Graduate Faculty Representative
 2012-2015 Co-Chair - Dept of Biological Sciences Research Advisory Committee
 2012-2015 Steering Committee: ISU Biomedical Research Institute
 2012 Tenure & Promotion Committee, ISU Dept Bio Sci.
 2012 ISU Research Sharing Day, sponsored by the Office of Research
 2012-2013 Chair: Awards Committee, Society of Toxicology Immunotoxicology Specialty Section
 2012-2013 INBRE Summer Fellowship Applications – Review/Selection committee
 2012 -2015 ISU Pre-Health Advising Committee
 2011-2013 Councilor, Immunotoxicology Specialty Section, Society of Toxicology
 2011 ISU Research Forum Participant, sponsored by Office of Research
 2010-2014 A&P Instructor Evaluations
 2010-2013 Liaison: Undergraduate Education Sub-committee, Society of Toxicology
 2010-2013 Education Committee, Society of Toxicology
 2010-2011 Microbiology/Molecular Biology Faculty Search Committee
 2010-2011 NIEHS Environment & Autoimmunity Workshop Working Group
 2009-2012 Teaching (Curriculum) Committee, Dept of Biological Sciences, ISU
 2009-2011 Councilor, Mountain West Society of Toxicology
 2009-2015 Molecular Research Core Facility Advisory/Executive Committee, ISU
 2009-2010 Expert Panel, “Asbestos Mode of Action”, U.S. Environmental Protection Agency
 2009 Panel Member: ISU Office of Research, NIH Grant Workshop Oct. 6, 2009
 2008 Grant Reviewer: WWAMI Inst. Of Translational Health Sciences Pilot Grant Reviews
 2007- 2008 Pharmacy Course Assessment Committee, College of Health Prof & Biomed Sci, UM
 2003- 2008 School of Pharmacy Curriculum Committee – UM
 2002- 2008 Immunology Core Meeting Coordinator – CEHS/UM
 2006-2007 Cross-Discipline Fluorescence Instrumentation Planning Committee (Organizer, Ad hoc)
 2006-2007 Organizer: UM Immunology Faculty/Post-Doc Long-term Planning Retreats
 2002-2006 Toxicology Program Graduate Standards & Curriculum Committee (UM)
 2006 Co-Organizer for Pacific Northwest Association of Toxicology meeting, August 2006
 Chair of Abstract Submission Committee
 2006 Co-Editor: Special issue of Inhalation Toxicology for Asbestos Conference papers
 2004-2005 Conference Planning Committee (Directions and Needs in Asbestos-Related Disease Research Conference, July 28-29, 2005)
 2004-2005 Human Research Advisory Committee, Dept. of Pharmaceutical & Biomedical Sciences
 2004-2005 NSF EPSCoR Diversity Program Development Board

Graduate Research Committees (completed) (underlined = Advisor role)

Daniela Vavra, M.S., Pharmacology, Pharm. Sciences, UM 2000
 Jennifer Shaw, Ph.D., Pharmacology, Pharm. Sciences, UM 2001
Amy Osborne, M.S., Pharmacology, Pharm Sciences, UM 2001 (Co-Advisor)
Jared Brown, Ph.D., Toxicology, Biomed. Pharm. Sciences, UM 2004 (Co-Advisor)
 Jordan C. Schneider, M.S., Microbiology, Division of Biological Sciences, UM 2004
Rong Wang, Ph.D., Microbiology, Division of Biological Sciences, UM 2005 (Advisor)
 Francisco Leyva, Ph.D., Toxicology, Biomed. Pharm. Sci., UM 2007.
 Flavia Pereira, Ph.D , Pharmacology, Biomed. Pharm. Sci., UM 2007.
David Blake, Ph.D. Microbiology/Biochem, Div. Biol. Sci., UM 2007 (Advisor).
 Kelsey Metzger, DA, Biological Sciences, ISU, 2009

Jared Wortham, CLS/M.S, Biological Sciences, ISU, 2009
Devon Rasmussen, M.S., Biological Sciences, ISU, 2010 (Advisor)
 Todd Seib, Ph.D., Biomedical Sciences, Biomed Pharm Sci., UM, 2010
 Ujwal Patel, M.S., Biomedical/Pharm Sci., ISU, 2010 (GFR)
 Senyo Agbenowu, M.S., Biomedical/Pharm Sci, ISU, 2011 (GFR)
 Rich Beard, PhD., Biological Sciences, ISU, 2011
Prabha Malamakal, M.S., Public Health, ISU, 2011 (Co-Advisor)
Ryan Marcum, M.S., Biological Sciences, ISU, 2012 (Advisor)
 Benjamin Morris, M.S., Microbiology, ISU, 2012
Kinta Serve, D.A., Biological Sciences, ISU, 2013 (Advisor)
Christian (Nash) Zebedeo, M.S., Biological Sciences, ISU, 2013 (Advisor)
 Jamie Mayo, M.S., Biological Sciences, ISU, 2013
Micah Kingston, M.S. student, Health Physics, ISU, 2014 (Co-Advisor)
 Matthew Dean, PhD, Biological Sciences, ISU, 2014
Gaurav Kaushik, PhD, Biological Sciences, ISU, 2015 (Co-Advisor)
Robert Hanson, M.S., Biological Sciences, ISU, 2015 (Advisor)
John Gilmer, M.S., Biological Sciences, ISU, 2016 (Advisor)
Aaron Harnsberger, M.S. student, Biological Sciences, ISU, 2016 (Co-Advisor)

Undergraduate Researchers supervised (underlined = Undergraduate Research Fellowships)

MSU: Logyn Bloms, Elisa Santori, Caleb Stair, Jacob Seymour, Meghann Karsh, Zoie Kaupish, Maria Rodriguez, Jessica Eggers, Lindsay Swan, Krista Nelson (2019)

ISU: Jason Overocker, Aaron Ferro, Cody Fowers, Lindsey Coker, Kip Katseanes, Jeremy Roe, Sara Holland, Robert Crouch, Mark Ellett, Micah Thayn, Jed Peterson, Chad Smith, Thomas Huffaker, Cody Peterson, Jordan Judy, Shane Carnohan, Carmelita Yupe (CPI internship), Erin Birch (CPI internship), Kade Grende, Dustin Tew, Robert Hanson, Tristan Ng, Cecelia Pena (INBRE fellow), Chad Davis, Emily Atkins, Linda Woods (CPI Internship), John Gilmer, Doug Walker (INBRE fellow), Marti Anthony, Katie Nicholls, Tanner Harding, Jordan Broadway

UM: Meredith Reyes*, Jessica Kaae, Greg Weller, Rob Barrozo*, Ingrid Leal*, Ryan Thompson (* NSF EPSCoR Diversity Program Fellows)

Professional Journal Service

Editorial Board: Journal of Immunotoxicology
 Editorial Board: Toxicological Letters
 Editorial Board: Inhalation Toxicology
 Editorial Board: Toxicological Sciences

Manuscript Reviews: *Toxicological Sciences, Jrnl Immunotoxicology, Am J Physiology – Lung Cell Mol Biol, Inhalation Tox, Environ Research, Clin Rheumatology, Toxicology Letters, Toxicology & Applied Pharmacology, Am J Resp Cell & Molec Biology, Jrnl of Tox & Env Health, Cytokine, Jrnl of Autoimmunity, Autoimmune Diseases, Environmental Health Perspectives, Current Opinions in Toxicology.*

HONORS AND AWARDS

2019 Service Recognition Award, Center for Asbestos Related Diseases, Libby MT
 2015 Idaho State University Outstanding Researcher Award
 2014 Faculty annual evaluation rating of “Exceptional” by both Department Chair and Dean of the College of Science & Engineering, and Merit Award – Idaho State University
 2014 Best Oral Presentation: Clinical/Translational Research Infrastructure Network (CTR-IN) Annual Meeting, Las Vegas, Nevada
 2013 College of Science and Engineering Merit Award, Idaho State University
 2012 Outstanding Graduate Teacher and Mentor, Dept of Biological Sciences, Idaho State University

- 2012 College of Science & Engineering Master Teacher Award, Idaho State University
- 2012 Idaho State University Outstanding Teacher Award
- 2012 Excellence in Education Award, LDS Student Association
- 2011 College of Science and Engineering Merit Award, Idaho State University
- 2011 Idaho State University Outstanding Service Award
- 2010 Elsevier Top Reviewer for 2010, from the Editors of Toxicology Letters
- 2010 PI of the Year, Utah Branch, American Association for Laboratory Animal Science (AALAS)
- 2007 Outstanding Young Investigator Award, Immunotoxicology Specialty Section, Society of Toxicology
- 1997 University of Montana, DBS Pre-Doctoral Honors Fellowship
- 1997 University of Montana. Bertha Morton Graduate Scholarship (Top 5% at U.M.)
- 1996 P.E.O. Chapter BO Scholarship Renewal
- 1996 International Chapter P.E.O., Des Moines IA. International Graduate Scholar Award.
- 1995 Philanthropic Education Organization (P.E.O.) Scholarship, Chapter BO, Missoula MT
- 1993 University of Montana, Missoula MT. Super T.A. Award

MEMBERSHIPS AND AFFILIATIONS

- 2001 - current. Society of Toxicology (SOT)
- 2009 – 2015 Sigma Xi Scientific Research Society
- 2001 – 2015 Pacific NW Society of Toxicology
- 2002 – 2015 American Association of Immunologists
- 2009 - 2012 Mountain West Society of Toxicology
- 2009 - 2012 International Society for the Advancement of Cytometry
- 2002 – 2012 American Autoimmune Related Disease Association
- 2001 - 2008 Montana Academy of Science
- 1993 - 2009 American Society for Microbiology

COMMUNITY ACTIVITIES

- 2019 Community Research & Outreach Reception, Libby MT. May 2019
- 2018 Community Informational Meetings: Naturally Occurring Asbestos in Laughlin, NV, with B. Buck and R. Metcalf (UNLV). Laughlin, NV, Feb 2, 2018.
- 2017 Libby Community Educational Rally, Libby MT, November 2, 2017.
- 2017 Value of PEO Scholarships. Invited talk. PEO Chapter meeting, March 2017
- 2016 Libby Community Rally, and Libby Epidemiology Research Program meeting, Oct. 2016
- 2015 Libby Montana Community Presentation: Libby Epidemiology Research Program: Autoimmune Outcomes, May 2015, Libby MT Community Center
- 2015 Invited Lectures: Bannock County Sheriff's Department. "Stress & the Immune System"
- 2014 Lecture: Mr. Gene Reckin's High School Biology Class, Libby MT
"A Research Story: Tracking Down Libby's Pleural Disease", Oct 2014.
- 2014 Libby Research Rally, Libby MT, September 2014
- 2012-2014 Co-Director: Idaho Science & Engineering Festival (www.isu.edu/isef)
- 2014 CommUniversity/Celebrate ISU, March 18, 2014, booth presenter/organizer for College
- 2013 CommUniversity/Celebrate ISU Planning Committee
- 2013 Libby Research Rally, Libby MT, October 2013
- 2013 Young Einstein Day, Westside Elementary School, Idaho Falls, ID, Jan 25, 2013
- 2012 World AIDS Day, Invited lecture: "Stress, AIDS & the Immune System", Dec 5, 2012
- 2012 Libby Research Rally and Research Symposium, Libby MT, Oct 2012
- 2012 High School Class lectures, "Stress & the Immune System", Meridian HS, Sept 28, 2012
- 2012 High School Class lecture on Immunology, Idaho Falls High School, March 5, 2012
- 2011 University of Montana Ask-An-Alum Mentoring Program
- 2011 Libby Research Rally, Libby MT. Oct 13, 2011

2010 Idaho Science & Engineering Festival, Planning Committee
2010 Libby Research Rally & Community Advisory Committee meetings, Libby MT, Sep 17
2010 High School Class lecture on Immunology, Idaho Falls High School, March 12, 2010
2009 “Passages” Panel Volunteer, Pocatello Community Charter School
2003 – 2008 American Heart Association HeartWalk Team leader for Biomed Pharm Sci Dept., UM
1994 – 2008 Montana State Science Fair, Missoula MT. Judge, Committee Chair, and Grand Awards.