Kristen A. Mitchell, Ph.D.

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EDUCATION

Ph.D. Pharmacology/Toxicology, Dept. of Pharmaceutical Sciences, Washington State 2003

University, Pullman, WA (Mentor: B. Paige Lawrence, Ph.D.)

B.S. Microbiology, Idaho State University, Pocatello, ID 1995

PROFESSIONAL EXPERIENCE

2013-pres.	Associate Professor (tenure), Dept. of Biological Sciences, Boise State University
2008-2013	Assistant Professor, Dept. of Biological Sciences, Boise State University
2005-2007	Adjunct Professor, San Jacinto College, Houston, TX
2003-2007	Postdoctoral Fellow, Laboratory of Dr. Cornelis Elferink, Dept. of Pharmacology and
	Toxicology, University of Texas Medical Branch, Galveston, TX
1996-2003	Graduate Research/Teaching Assistant, Dept. of Pharmaceutical Sciences, College of
	Pharmacy, Washington State University, Pullman, WA
1995-1996	Associate Research Scientist, Plasma Manufacturing Technology Division, Bayer
	Corporation, Clayton, NC

HONORS AND AWARDS			
2011	Outstanding New Investigator Award, Idaho Academy of Science		
2009	Top Ten Scholars Honored Professor, Boise State University		
2008	Junior Faculty Travel Fellowship, The Toxicology Forum		
2007	Best Postdoctoral Publication Award, Society of Toxicology		
2004	NRSA Individual Postdoctoral Fellowship (NIH/NIEHS)		
2003	Award for Outstanding Woman in Graduate Studies, Honorable Mention, WSU		
2000	Teaching Assistant Excellence Award, Washington State University		
2000	Senator of the Year, Graduate and Professional Student Association, WSU		
2000	Predoctoral Fellowship, PhRMA Foundation		
1998	Predoctoral Fellowship, American Foundation for Pharmaceutical Education		
1994	NSF Summer Research Fellowship, University of Wisconsin-Madison		

PUBLICATIONS (Peer-reviewed research articles)

- 1. Jerrells TR, Sibley DA, Slukvin II, **Mitchell KA** (1998) Effects of ethanol consumption on mucosal and systemic T-cell-dependent immune responses to pathogenic microorganisms. *Alcohol Clin Exp Res* 22 (5 Sup): 212S-215S.
- 2. Warren TK, **Mitchell KA**, Lawrence BP (2000) Exposure to 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (TCDD) suppresses the humoral and cell-mediated immune responses to influenza A virus without affecting cytolytic activity in the lung. *Toxicol Sci* 56(1):114-123.
- 3. Jerrells TR, **Mitchell K**, Pavlik J, Jerrells J, Hoerman D (2002) Influence of ethanol consumption on experimental viral hepatitis. *Alcohol Clin Exp Res* 26(11):1734-46.
- 4. **Mitchell KA**, Lawrence BP (2003) Exposure to 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (TCDD) renders influenza virus-specific CD8⁺ T cells hyporesponsive to antigen. *Toxicol Sci* 74(1):74-84.
- 5. **Mitchell KA**, Lawrence BP (2003) T cell receptor transgenic mice provide novel insights into understanding cellular targets of TCDD: Suppression of antibody production, but not the response of CD8⁺ T cells, during infection with influenza virus. *Toxicol Appl Pharmacol* 192(3):275-86.
- 6. Park KT, **Mitchell KA**, Huang G, Elferink CJ (2005) The Ah receptor predisposes hepatocytes to Fas-mediated apoptosis. *Mol Pharmacol* 67(3):612-22
- 7. **Mitchell KA**, Lockhart CA, Huang G, Elferink CJ (2006) Sustained Ah receptor activity attenuates liver regeneration. *Mol Pharmacol* 70(1):163-70.
- 8. **Mitchell KA**, Elferink CJ (2009) Timing is everything: Consequences of transient and sustained Ah receptor activation. *Biochem Pharmacol* 77(6):947-56.
- 9. **Mitchell KA**, Wilson SR, Elferink CJ (2010) The activated aryl hydrocarbon receptor synergizes mitogen-induced murine liver hyperplasia. *Toxicology* 276(2):103-9.
- 10. Horras CJ, Lamb CL, **Mitchell KA** (2011) Regulation of hepatocyte fate by interferon-gamma. *Cytokine and Growth Factor Reviews* 22:35-43.
- 11. Horras CJ, Lamb CL, **Mitchell KA** (2012) Consequences of TCDD exposure on intrahepatic lymphocytes during liver regeneration. *J Immunotoxicol* 9(4);357-67.
- 12. Jackson DP, Li H, **Mitchell KA**, Joshi AD, Elferink CJ (2014) Ah receptor-mediated suppression of liver regeneration through NC-XRE-driven p21Cip1 expression. *Mol Pharmacol* 85(4):533-41.
- 13. Harvey WA, Jurgensen KA, Pu X, Lamb CL, Cornell KA, Clark RJ, Klocke CR, **Mitchell KA** (2016) Exposure to 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (TCDD) increases human hepatic stellate cell activation. *Toxicology* 17(344-346):26-33.
- 14. Wyler SA, D'Ingillo SL, Lamb CL, **Mitchell KA** (2016) Monocyte chemoattractant protein-1 is not required liver regeneration after partial hepatectomy. *J Inflamm (Lond)* 13(2):28.
- 15. Lamb CL, Cholico GN, Perkins DE, Fewkes MT, Oxford JT, Lujan TJ, Morrill EE, **Mitchell KA** (2016) Aryl hydrocarbon receptor activation by TCDD modulates expression of extracellular matrix remodeling genes during experimental liver fibrosis. *BioMed Res Int* 2016:5309328.
- 16. Lamb CL, Cholico GN, Hagler JR, Cornell KA, **Mitchell KA**. 2,3,7,8-Tetrachlorodibenzo-*p*-dioxin (TCDD) increases necroinflammation and hepatic stellate cell activation but does not exacerbate experimental liver fibrosis in mice (*under review*)

RESEARCH GRANTS

Current:

Consequences of AhR activation in hepatic stellate cells, National Institutes of Health, R01 NIH (COBRE in Matrix Biology at Boise State University, PI Julia Oxford), P20GM109095 \$750,000 direct

Role: Project Investigator

5/2014-4/2019

Completed:

Role of monocyte chemoattractant protein (MCP)-1 in liver regeneration National Institutes of Health, R15DK088749 \$404,376

Role: PI

4/2010-4/2013

Immunoregulation of liver regeneration by the aryl hydrocarbon receptor NIH Idea Network of Biomedical Research Excellence (INBRE), P20RR016454 \$350,000

Role: Magnet PI 4/2009-3/2014

Molecular mechanisms of cellular mechanoreception in bone

NASA, NNX10AN29A

\$700,000 Role: Co-PI 2010-2013

Investigating mechanisms of alcohol-induced liver fibrosis using a zebrafish model system

M.J. Murdock Charitable Trust, Partners in Science Program

\$15,000 Role: PI 5/2010-5/2012

Role of monocyte chemoattractant protein (MCP)-1 during priming phase of liver regeneration Institute of Translational Health Sciences (ITHS), UL1RR025014

\$14,100 Role: PI 1/2010-1/2011

Role of innate immunity in Ah receptor-mediated suppression of liver regeneration Mountain States Tumor and Medical Research Institute (MSTMRI), Small Project Grant \$5,000

Role: PI

5/2008-4/2009

Role of cytochrome P4501A1 in cell cycle progression
National Institutes of Health (NIH), National Research Service Award, F32ES013588

\$90,272 Role: PI

6/2004-6/2006

Immunotoxic effects of TCDD on antigen-specific T cell responses Pharmaceutical Researchers and Manufacturers of America (PhRMA) \$25,000

Role: Predoctoral Fellow

5/2000-5/2002

 $\label{lem:methods} \textit{Mechanism of TCDD suppression of T cell-dependent immune responses during infection with human influenza A virus}$

American Foundation for Pharmaceutical Education (AFPE)

\$18,000

Role: Predoctoral Fellow

8/1998-8/2001

PROFESSIONAL ACTIVITIES

National & Regional Committees and Service	National	&	Regional	Committees	and S	Service
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2015-pres	Secretary/Treasurer, Immunotoxicology Specialty Section, Society of Toxicology
2010-pres.	Chair, Cell and Molecular Biology Section, American Association for the Advancement
_	of Science Pacific Division
2008-pres	Manuscript Reviewer (ad hoc), Toxicology, Chem Biol Interact, Toxicol Appl
	Pharmacol, Toxicol Sci, PLoS ONE
June 2016	Ad Hoc Reviewer, NIH Hepatobiliary Pathophysiology Study Section (HBPP)
2016	Symposium Organizer & Chair, Recent Advances in Pharmacology and Toxicology,
	97 th Annual Meeting of the American Association for the Advancement of Science
	Pacific Division, San Diego, CA.
2015	Symposium Organizer & Chair, Recent Advances in Pharmacology and Toxicology,
	96 th Annual Meeting of the American Association for the Advancement of Science
2012	Pacific Division, San Francisco, CA.
2012	Symposium Organizer & Chair, Recent Advances in Pharmacology and Toxicology,
	93 rd Annual Meeting of the American Association for the Advancement of Science
2011	Pacific Division, Boise, ID. External Grant Reviewer, University of Washington/NIEHS Center for Ecogenetics and
2011	Environmental Health (CEEH) Pilot Program
2009-2011	Councilor, Pacific Northwest Chapter of the Society of Toxicology (PANWAT)
2008-2011	Member, Awards Committee, Immunotoxicology Specialty Section, Society of
2000 2010	Toxicology
2009	Luncheon Organizer and Speaker, Toxicology Research in Idaho: Imagine What We
	Can Do, 8 th Annual Idaho INBRE Meeting, Pocatello, ID, August 3-5, 2009.
2009	Symposium Organizer & Chair, Recent Advances in Pharmacology and Toxicology,
	90 th Annual Meeting of the American Association for the Advancement of Science
	Pacific Division, San Francisco, CA.
2008	External Grant Reviewer, University of Washington Institute of Translational Health
	Sciences (ITHS) Small Project Program

2008	Symposium Organizer & Chair, Putting your best foot forward: Job Interviewing
	Workshop for Early Career Scientists, 47 th Annual Meeting of the Society of
2007-2008	Toxicology, Seattle, WA Chair, Postdoctoral Assembly Board, Society of Toxicology
2007-2008	Invited Panelist, National Leadership Workshop on Mentoring Women in
2007	Biomedical Sciences, NIH Working Group on Women in Biomedical Careers,
	Bethesda, MD
2006-2007	Councilor, Postdoctoral Assembly Board, Society of Toxicology
2005	Host, Undergraduate Education Program, Society of Toxicology
2004	Member, International Postdoc Committee, National Postdoctoral Association
2004	Facilitator, Annual Meeting of the National Postdoctoral Association
2003	Member, Program Committee, Gulf Coast Chapter of the Society of Toxicology
2001-2003	Student Representative, Pacific Northwest Association of Toxicologists (PANWAT),
	Society of Toxicology
Daiga Cánta I	Initialista Committees and Comice
	<i>Iniversity Committees and Service</i> Member, Institutional Animal Care and Use Committee (IACUC)
2008-pres. 2012-2013	Interim Associate Chair, Department of Biological Sciences
2012-2013	Chair, Search Committee for two faculty positions in Department of Biological
2011-2012	Sciences
2010-2013	Director, Undergraduate Studies, Department of Biological Sciences
2011-2012	Member, Biomolecular Sciences Ph.D. Program Steering Committee
2008-2013	Member, Science Competition Day Planning Committee (Chair, 2011)
2008-2010	Member, Undergraduate Research Conference Planning Committee
2008-2010	Member, Undergraduate Studies Committee, Department of Biological Sciences
Student Com	nittees
2015-pres.	Shivakumar Rayavara, student in Biomolecular Sciences Ph.D. Program (Chair)
2015-pres.	Giovan Cholico, student in Biomolecular Sciences Ph.D. Program (Chair)
2009-2016	Cheri Lamb, Ph.D. Biomolecular Sciences (Chair) (degree awarded May 2016)
2014-2016	Julia Love, M.S. Biological Sciences
2013-2015	Colton Knopp, M.A. Biological Sciences
2010-2015	Stephanie Wyler, M.S. Biological Sciences (Chair) (degree awarded May 2015)
2010-2014	Wendy Harvey, M.S. Biological Sciences (Chair) (degree awarded Dec 2014)
2010-2013	Kellie Pease, M.S. Biological Sciences
2009-2013	Lavanya Vempati, M.S. Biological Sciences
2009-2011	Ashley McCartney, M.S. candidate, Dept. Biological Sciences (Chair)
2009-2011	Reed Jacob, M.A. Chemistry and Biochemistry
2008-2011	Christopher Horras, M.S. Biological Sciences (Chair), (degree awarded Aug 2011)
2008-2010	Ming Fang, M.S. Biological Sciences
2009-2010	Emily Schmid, M.A. Biological Sciences (Chair), (degree awarded Dec 2010)
Non-Universi	ity Service
2009-2013	Member, Institutional Animal Care and Use Committee (IACUC), Brown Mackie
	College, Boise, ID
2008-2012	Member, Institutional Animal Care and Use Committee (IACUC), Boise VA Medical
	Center, Boise, ID

OUTREACH ACTIVITIES

- Presenter, "Female Reproductive System Anatomy," WWAMI Mini-Medical School, Saint Alphonsus Regional Medical Center, Boise, ID, 2/2009
- Presenter, "Anatomy and Physiology of Skin," WWAMI Mini-Medical School, Saint Luke's Boise Medical Center, Boise, ID, 2/2010

INVITED PRESENTATIONS

- 2016 Consequences of Aryl Hydrocarbon Receptor Signaling on Hepatic Stellate Cell Activation, Icahn School of Medicine Liver Disease Research Seminar Series, New York, NY
- 2015 Investigating a New Role for Aryl Hydrocarbon Receptor Signaling during Liver Fibrosis, College of Pharmacy, Idaho State University, Meridian, ID
- 2014 Investigating a New Role for Aryl Hydrocarbon Receptor Activity during Experimental Liver Fibrosis, Department of Biology, College of Idaho, Caldwell, ID
- 2012 Using Tiered Mentoring to Enhance Undergraduate Research in Biological Sciences, 3rd Annual Pacific Northwest Louis Stokes Alliance for Minority Participation (LSAMP) Conference, Corvallis, OR.
- 2012 *Modulation of Hepatic Stellate Cell Activation by Ah Receptor Ligands*. 93rd Annual Meeting of the American Association for the Advancement of Science Pacific Division, San Francisco, CA.
- 2011 The Search for a Physiological Role for the Aryl Hydrocarbon Receptor in Cell Cycle Regulation and Dioxin-Mediated Toxicity. Idaho Academy of Science, Caldwell, ID (keynote)
- 2009 AhR-Mediated Cell Cycle Control: Multiple Mechanisms, New Directions. Department of Pharmaceutical Sciences, Washington State University, Pullman, WA
- 2009 In Vivo Regulation of Hepatocyte Proliferation By the Aryl Hydrocarbon Receptor. 90th
 Annual Meeting of the American Association for the Advancement of Science Pacific Division,
 San Francisco, CA.
- 2008 In Vivo Regulation of Hepatocyte Proliferation By the Aryl Hydrocarbon Receptor. 89th
 Annual Meeting of the American Association for the Advancement of Science Pacific Division,
 Waimea, Hawaii.
- 2008 *In Vivo Regulation of Hepatocyte Proliferation By the Aryl Hydrocarbon Receptor*. 50th Anniversary Meeting of the Idaho Academy of Science, Nampa, ID.
- 2006 Role of Aryl Hydrocarbon Receptor Activity During Liver Regeneration. NIEHS Center in Environmental Toxicology, Environmental Health Sciences Seminar Series, University of Texas Medical Branch, Galveston, TX.

2006 Sustained AhR Activity Attenuates Liver Regeneration. NIEHS Center in Environmental Toxicology, Biotransformation Research Core, University of Texas Medical Branch, Galveston, TX.

TEACHING EXPERIENCE

Boise State University (2008-present)

BIOL 205 Introductory Microbiology (4 credits)

BIOL 301 Cell Biology (3 credits) BIOL 440/540 Toxicology (3 credits)

ENVHLTH 417 Principles of Toxicology (2 credits) ZOOL 401/501 Human Physiology (4 credits)

San Jacinto College (2005-2007)

BIOL 2401 Human Anatomy and Physiology I (4 credits) BIOL 2402 Human Anatomy and Physiology II (4 credits)

University of Texas Medical Branch (2003-2007)

BBSC 6104 Critical Reading of the Scientific Literature; course director (1 credit)

PHTO 6118 Introduction to Research; guest lecturer

Texas A&M University at Galveston

MARB 414 Toxicology; course co-director and lecturer (3 credits)

SCIENTIFIC AND PROFESSIONAL SOCIETIES

American Association for the Advancement of Science (2005-present)

Idaho Academy of Science (2008-present)

Pacific Northwest Chapter of the Society of Toxicology (1997-2003; 2008-present)

Sigma Xi (2008; present)

Society of Toxicology (1999-present); Full member (2009-present)