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Education:

SUNY College at Buffalo	B.A.	1982	Biology/Chemistry
SUNY College at Buffalo	M.A.	1985	Biology/Parasit.
SUNY HSC at Syracuse	Ph.D.	1989	Anatomy/Cell Biol.

Experience:

- ❖ 1982-1983. Graduate Student Research Assistant, SUNY Buffalo. Commensurate with masters program. Characterization of a hemolytic anemia associated with fascioliasis and hyperprolinemia.
- ❖ 1983-1984. Senior Lab Technician. Albany Medical Center, Albany, New York. Cancer research on DNA alkylation and purification of DNA binding proteins.
- ❖ 1985-1989. Graduate Student Research Assistant. Dept. of Anatomy and Cell Biology, SUNY HSC at Syracuse, Syracuse, NY. Studies on avian vascular development.
- ❖ 1989-1991. Post-Doctoral Research Fellow. Dept. of Pathology, Univ. of Washington, Seattle, WA. Studies on murine embryonic vascular development.
- ❖ 1991- 1993. Post-Doctoral Assistant. Dept. of Molecular Genetics, Univ. of Cincinnati, Cincinnati, OH. Production of gain and loss of function transgenic mice and use of embryoid bodies to study embryonic blood vessel development.
- ❖ 1993- 1998. Research Scientist. McLaughlin Research Institute.
- ❖ 1993-1998. Director and Supervisor, Transgenic Mouse Facility. McLaughlin Research Institute. Developed a facility for production of transgenic mice and gene targeting. Produced genetically altered mice; trained supervised personnel for same purpose.
- ❖ 2003-2004. Director (interim), Dept. of Laboratory Animal Resources. The University of Montana.
- ❖ 1998-2008. Associate Professor of Molecular Genetics. Dept. of Biomedical & Pharmaceutical Sciences, University of Montana, Missoula, MT.
- ❖ 2008-present. Professor of Molecular Genetics. Dept. of Biomedical & Pharmaceutical Sciences, University of Montana, Missoula, MT.

Awards and Honors:

- Undergraduate Honors Research Program. 1979. Dept. of Biological Sciences. SUNY College at Buffalo.
- Deans List for Undergraduate Academic Honors. 1980. SUNY College at Buffalo.

- Graduate Research Assistantship/Tuition Remission Fellowship. 1982. Dept. of Biology, SUNY College at Buffalo.
- NIH Training Grant Award, Woods Hole Marine Biological Laboratory, Woods Hole, MA. 1987.
- Graduate Assistantship Tuition Remission Fellowship. 1986-1989. SUNY HSC at Syracuse.
- NIH Post-doctoral Fellowship Training Award. 1989-1990. University of Washington. Dept. of Pathology.
- NIH Program of Excellence Post-doctoral Fellowship Award. 1990-1993. University of Cincinnati. Dept. of Molecular Genetics.
- Meritorious performance evaluation and merit salary increase. 1998-1999. The University of Montana, Dept. of Pharmaceutical Sciences.
- Meritorious performance evaluation and recommendation for merit salary increase. 1999-2000. The University of Montana, Dept. of Pharmaceutical Sciences.
- Tenure. 2001-2002. The University of Montana, Dept. of Pharmaceutical Sciences.
- Meritorious performance evaluation and merit salary increase. 2002-2003.
- Rho Chi Teacher of the Month. February 2003. School of Pharmacy and Allied Health Sciences, The University of Montana.
- Meritorious performance evaluation and recommendation for merit salary increase. 2003-2004.
- Promotion to full Professor. Dept. Biomedical & Pharmaceutical Sciences. The University of Montana. 2008.
- Mershon Award. Montana Academy of Sciences. 2009.
- Meritorious performance evaluation and merit salary increase. 2006-2007.
- Meritorious performance evaluation and merit salary increase. 2009-2010.
- Meritorious performance evaluation and recommendation for merit salary increase. 2013. The University of Montana, Dept. of Pharmaceutical Sciences.
- Sabbatical. Spring 2013.

Professional Societies

- American Association of Colleges of Pharmacy
- Montana Academy of Sciences
- Kappa Psi Pharmaceutical Society
- NAVBO (North American Vascular Biology Organization)
- Society of Developmental Biology

Professional Service

- American Diabetes Association-Montana Affiliate, Board of Directors, 1994-1998.
- American Diabetes Association - Montana Affiliate, President, 1995-1997.
- American Heart Association- Idaho/Montana Affiliate, Board of Directors, 1995-1997.
- American Heart Association- Idaho/Montana Affiliate, Research Committee 1995-1997.
- American Heart Association- Idaho/Montana Affiliate, President Elect, 1997-98.
- American Heart Association- Northwest Region Nominating Committee, 1998- 2000.
- American Heart Association- Northwest Region Advocacy Committee, 1999-2000.
- American Heart Association- Northwest Region Board of Directors 1998-1999. 2000-2002.

- American Heart Association- Northwest Region Research Committee 1998- 2002.
- American Heart Association- Great America Research Consortium Steering Committee, 1998- 2002.
- American Heart Association- American Heart Association- Great America Research Consortium Vascular Biology Peer Review Panel, 2000-2002.
- American Heart Association- Missoula Leadership Council, 2000- 2003.
- American Heart Association- Northwest Research Committee Chair, 2000-2002.
- American Heart Association- Northwest Region Advocacy Committee, 2001- 2002.
- American Heart Association- Northwest Region Research Committee 1998- 2002.
- American Heart Association- Pacific Mountain Affiliate Research Committee. 2002-2004.
- American Heart Association- State of Montana Advocacy Committee. 2003-2005.
- Montana Cardiovascular Disease Prevention and Control Task Force Board Member, 2000-2005.
- Montana Academy of Sciences- 1999-2002. Vice President for Toxicology Section.
- Montana Academy of Sciences- Board of Directors & President Elect, 2003.
- Montana Academy of Sciences- President, 2004-2007.
- Montana Academy of Sciences- Web Master, 2005-2010.
- Montana Academy of Sciences, Executive Director, 2008- 2012.
- Montana Academy of Sciences- Board of Directors 2003-present.
- Department of Biomedical & Pharmaceutical Sciences- UFA bargaining council representative for collective bargaining. 2006-2008.
- University Faculty Association, Executive Board, The University of Montana. 2006-2011.
- University Faculty Association, Vice President, The University of Montana, 2008-present.
- Chair, Bargaining Committee, University Faculty Association, 2008-2009.
- Montana University System Coalition of Union Faculty, Chair, 2009-2011.
- Chair, Montana University System Reinvention Workforce Focus Group 2010.
- President, The University of Montana University Faculty Association. 2010-2011
- Bargaining Committee, University Faculty Association. 2010-2011.
- The University of Montana Strategic Planning and Budget Committee/Budget Committee. 2009-2011.
- The University of Montana Presidential Leadership Council. 2010-2011.
- Faculty Volunteer, MontPIRG, The university of Montana Chapter. 2010-2011.
- Sabbatical, The University of Montana, Spring 2012.
- Faculty Advisor- Gamma Eta Chapter of Kappa Psi Pharmaceutical Society, The University of Montana. 2006- present.
- Faculty Advisor, Grizzly Coed Hockey Team, The University of Montana. 2009-present.
- Representative, Montana Legislature, House District 93. 2013-2015
- Member, House Tax Committee, Montana Legislature. 2013-2015.
- Memembr, House Education Committee, Montana Legislature. 2013-2015.
- American Heart Association, Western Regional Advocacy Committee. 2014- present.

Teaching Experience:

- SUNY College at Buffalo. 1981-1982. Undergraduate tutor in calculus and chemistry.

- SUNY Health Science Center at Syracuse.1985-89. Teaching Assistant in Medical Gross Anatomy and Medical Microscopic Anatomy.
- Onondaga Community College. 1988. Instructor of Human Anatomy and Physiology.
- Institute for Developmental Research, Cincinnati, Ohio. 1992-93 Lectures in Developmental Biology Course.
- Visiting lecturer- Cardiovascular Pharmacology, University of Montana, Dept. of Pharmaceutical Sciences. 1997.
- University of Montana. 1998- present.
- Instructor in Anatomy and Physiology (BMED 341, 342)- Developmental & cell biology, Histology, Integument, muscle, endocrine and heart units 1999-present.
- Facilitator: Integrated Studies, first year Pharmacy Students, 1998- present.
- Instructor- Health Careers Opportunity Program- Heart Unit lecture and lab. 2000-present.
- Instructor in Anatomy and Physiology Lab (BMED 361)- Gross anatomy, heart, histology labs. 1998- present.
- Instructor in Anatomy and Physiology Lab (BMED 361)- statistics lab. 1999-2002.
- Instructor in Toxicology I- Developmental Toxicology. 2001- present.
- Instructor in Toxicology II- Cardiovascular Toxicology. 2001- present.
- Instructor in Toxicology III- Cell cycle unit. 2002- present.
- Instructor in Pharmacology and Toxicology (BMED 444). Cardiovascular pharm unit: 2008-2011.
- Course Director for Research Methods in Biochemical Pharmacology (Phar 626) 1999.
- Course Director for Cardiovascular Pharmacology and Toxicology (BMED 620) 2010.
- Course Director for Pharmacogenetics (BMED 640). 2000- present.
- Course Director for School of Pharmacy Elective in Pharmacogenetics (BMED 495). 2003- present.
- Course Director for Topics in Pharmacogenetics (BMED 395/430/630) 2008-present.
- Course Director for Pharmacology and Toxicology (BMED 444) 2010-2011.
- Course Director for Physiological Systems (Phar 341) 2012-present.

Committee Service:

- ✓ School of Pharmacy & Allied Health Sciences Strategic Planning Committee 1998-1999 (ad hoc).
- ✓ School of Pharmacy & Allied Health Sciences ACPE Certification Self-Study Committee, Faculty Subcommittee Chair, 1999-2000 (ad hoc).
- ✓ School of Pharmacy & Allied Health Sciences ACPE Certification Self-Study Committee, Faculty Subcommittee Chair, 2004-2005(ad hoc).
- ✓ School of Pharmacy & Allied Health Sciences Achievement Committee, Chair. 2000-2001 (ad hoc).
- ✓ Search Committee for Director of Vascular Biology, International Heart Institute & University of Montana Dept. BMED, University of Montana. 2002.
- ✓ Search Committee Chair for Director of Laboratory Animal Medicine & Attending Veterinarian. 2004.
- ✓ U. Montana, NSF EPSCoR equipment grant review panel. (ad-hoc). 2001.
- ✓ UM Institutional Animal Care and Use Committee 1999-2001.
- ✓ UM Institutional Animal Care and Use Committee, Chair 2001- 2005.
- ✓ Institutional Biosafety Committee, St. Patrick Hospital. 2003.

- ✓ Library Subcommittee, Department of Pharmaceutical Sciences, School of Pharmacy and Allied Health Sciences, The University of Montana. 2000- 2006.
- ✓ Seminar Committee, Chair, Department of Pharmaceutical Sciences, School of Pharmacy and Allied Health Sciences, The University of Montana. 2003- 2004.
- ✓ Seminar Committee, Department of Biomedical & Pharmaceutical Sciences 2003- 2007.
- ✓ Recruitment Committee, Chair. Center for Environmental Health Sciences. The University of Montana. 2002- 2006.
- ✓ Planning Committee, Dept, of Biomedical & Pharmaceutical Sciences. The University of Montana. 2003-2005.
- ✓ Chair, Search Committee for Director of Vascular Biology, International Heart Institute & University of Montana Dept. BMED, University of Montana. 2006-07.
- ✓ Recruitment and Retention Task Force. UM Campus committee. 2007-2008.
- ✓ Pre-Med Advising Task Force. UM campus ad-hoc committee. 2008.
- ✓ University of Montana- Strategic Planning & Budget Committee. 2009- 2010.
- ✓ UM Faculty Development Office Steering Committee. 2009- 2011.
- ✓ Professional Pharmacy Program Student Advisor. School of Pharmacy and Allied Health Sciences. 1999- present.
- ✓ Department of Biomedical & Pharmaceutical Sciences- Graduate Standards Committee. 2006- present.
- ✓ Continuing Education Committee, School of Pharmacy and Allied Health Sciences. 2011- present.
- ✓ Academic Standards and Curriculum Review Committee- 2014- present.
- ✓ ASCRC Forestry & Biomedical Sciences Subcommittee, Chair- 2014-present.
- ✓ ASCRC Task Force for Distance Education, Chair- 2014.

Invited Presentations:

- 1986- Society for Experimental Electron Microscopy. McMaster Univ. Hamilton Ontario.
- 1987- Regional Meeting of the Society for Developmental Biology. Thomas Jefferson Medical College. Philadelphia, PA
- 1989- University of Washington, Seattle WA. Dept. of Pathology.
- 1990- University of California at San Francisco. Howard Hughes Institute for Cancer Research.
- 1991- University of Cincinnati, Program of Excellence.
- 1991- Keystone Symposium on Vascular Biology.
- 1992- University of Cincinnati, Dept. of Anatomy annual seminar series.
- 1992- University of Cincinnati, Dept. of Biochemistry and Molecular Genetics.
- 1992- American Association of Anatomists, San Diego, CA.
- 1993- Vanderbilt University, Dept of Medicine, Div. of Cardiology.
- 1993- University of South Carolina, Dept. of Anatomy.
- 1993- University of South Dakota, Dept. of Anatomy.
- 1993- McLaughlin Research Institute, Annual Workshop on Genetic Basis of Disease.
- 1993- Cold Spring Harbor Symposium on Tumor Angiogenesis.
- 1994- University of Oregon Health Sciences Center, Dept. of Anatomy.
- 1995- University of Montana, Division of Biological Sciences
- 1996- Montana State University, Dept. of Veterinary Molecular Biology
- 1996- International Heart Institute- Montana Cardiovascular Retreat

- 1997- Prizm Pharmaceuticals, San Diego, California
- 1997- International Heart Institute- Montana Cardiovascular Retreat
- 1997- University of Montana, Dept. of Pharmaceutical Sciences.
- 1998- International Heart Institute- Montana Cardiovascular Retreat.
- 1998- Pepperdine University, Malibu, CA- Summer seminar series.
- 1998- ASBMB 1998 Fall Symposia, "Regulation of Bone Formation: Polypeptide growth factors".
- 1999- University of Washington, Department of Pathology- Vascular Biology seminar series.
- 1999- Pepperdine University, Malibu, CA- Summer seminar series.
- 1999- University of Montana, Division of Biological Sciences.
- 1999- International Heart Institute- Montana Cardiovascular Retreat- Growth Factor regulation of Myocardial Angiogenesis
- 1999- Rocky Mountain Valve symposium- "TMR mediated angiogenesis in a mouse model for myocardial angiogenesis"
- 2000- University of Connecticut Health Sciences Center.
- 2000- American Society for Bone and Mineral Research (symposium presentation) "Overexpression of FGF-2 in transgenic mice causes premature and enhanced apoptotic chondrocyte cell death at the epiphysial growth plate"
- 2000- Oregon Health Sciences University. Dept. of Cardiology.
- 2001- American Heart Association: Conference on Coronary Angiogenesis: Poster
- 2001- Experimental Biology 2001: Chair, Minisymposium on *Growth Factors in Angiogenesis*
- 2001- Experimental Biology 2001: Taren Grass student Presentation Minisymposium on "*Growth Factors in Angiogenesis*"
- 2001- Weissman Lab Retreat, Rocky Mountain Labs, Hamilton, MT. "FGF-2 regulation of chondrocyte differentiation and growth".
- 2002- American Physiological Society. Invited student presentation by Taren Grass "Growth factor regulation of Coronary Angiogenesis".
- 2002- Montana Academy of Sciences. Taren Grass student presentation on Coronary Angiogenesis.
- 2002- Montana Academy of Sciences. Wenjie He student presentation on arsenic toxicity in vascular development.
- 2003- Montana Academy of Sciences. Taren Grass student presentation on Coronary Angiogenesis.
- 2003- Montana Academy of Sciences. Wenjie He student presentation on arsenic toxicity in vascular development.
- 2003- Cardiology Grand Rounds. St. Patrick Hospital. "Gene Therapy for Treatment of Heart Failure and Cardiac Therapeutics"
- 2004- National Institute of Environmental Health Sciences. Mechanisms of Arsenic Toxicity in Embryonic Vascular Development".
- 2004- Montana Academy of Sciences- "Mechanisms of Arsenic Toxicity in Vascular Development.
- 2004- Montana Academy of Sciences- "PM Mediated Alteration of Endothelial Cell Kinetics and Gene Expression is Consistent with Vascular Dysfunction"
- 2004- Gordon Conference on Endothelium- "Arsenic Exposure and Endothelial Cell Dysfunction in Development".
- 2005- Society of Toxicology Platform Session- "Arsenic Toxicity: Molecular and Developmental Mechanisms in Miscarriage".

- 2006- Society of Toxicology Platform Session- "Vascular Dymorphogenesis causes placental insufficiency and miscarriage in arsenic exposed mice".
- 2006- Montana Academy of Sciences- Jason Wilham presented: "The Role of Zinc and Reactive Oxygen Species in the Regulation of Nitric Oxide Synthase".
- 2007- Brown University. Dept. of Pathology seminar series: "FGF2 pleiotropisms, what have we learned in thirty years?".
- 2012- MOLMED. Conference on Molecular Medicine. Vellore Institute of Technology. Vellore, India.
- 2014- Montana March of Dimes. Prematurity Summit. Fall, 2014.

Conferences/Symposia Attended

- 2005- Society of Toxicology
- 2005- Montana Academy of Sciences
- 2005- Gordon Conference: The Endothelium
- 2006- Montana Academy of Sciences
- 2006- Society for Toxicology
- 2006- Gordon Conference: Fibroblast Growth Factors in Development & Disease
- 2007- Society for Neurosciences
- 2008- Society of Toxicology
- 2008- Vascular Development NAVBO Conference
- 2009- Montana Academy of Sciences
- 2009- Gordon Conference: Fibroblast Growth Factors in Development & Disease
- 2010- Montana Academy of Sciences
- 2012- MOLMED conference on Molecular Medicine. Vellore, India.
- 2015- Shodiar Children's Hospital Pallister-Opitz Genetics *Symposium*. 2015.
- 2015- McLaughlin Research Institute Workshop. 2015.

Funded Grant Proposals:

- ◆ American Heart Association, Washington State Affiliate. Grant-in Aid. Co-PI with Dr. Ron Heimark. 1989-1990.
- ◆ American Heart Association, Ohio Affiliate. Grant-in-Aid. Co-PI with Dr. Tom Doetschman. 1991-1992.
- ◆ American Health Assistance Foundation. National Heart Foundation. "In vitro Transgenesis to Study Endothelial Cell Growth". J. Douglas Coffin, PI. April 1994- April 1995. \$15,000/ year for 1 year.
- ◆ American Heart Association, Montana Affiliate Grant-in Aid. "Neovascularization in FGF Transgenic Mice". J. Dougals Coffin, PI. July 1994- July 1996. \$25,000/year for two years= \$50,000 total.
- ◆ National Institutes of Health. Montana IDEA Program. "Basic FGF in Transgenic Mice". J. Douglas Coffin, PI. March 1995- February 1997. \$40,000.
- ◆ National Institutes of Health. National Heart, Blood and Lung Institute. Basic Fibroblast Growth Factor in Cardiovascular Development and Disease. J. Douglas Coffin, PI. December 1994- December 2001. RO1. \$1.2 Million
- ◆ American Heart Association. Sponsor: Predocotral Fellowship for Taren Grass. Growth Factor Function in Coronary Angiogenesis. 2000-2002. \$45,000.
- ◆ NSF-EPSCoR State Competitive Grants Program. 2001-2002. \$20,000.

- ◆ NIH/NIEHS R21 “Mechanisms of arsenic toxicity in vascular development” 2002-2004, \$200,000. J.D. Coffin, PI.
- ◆ NIH/NCRR. COBRE AWARD. “Cardiovascular toxicity of Arsenic”. Collaborator 20%. (A. Holian, Project Director; H. Beall, PI). 9/2002- 6/2006.
- ◆ Centers for Disease Control. (A. Holian Project Director, J. D. Coffin PI) 20% effort. 2002-2003.
- ◆ American Heart Association. Sponsor: Predocotral Fellowship renewal for Taren Grass. “Growth Factor Function in Coronary Angiogenesis”. 2000-2003. \$22,500.
- ◆ Centers for Disease Control. (A. Holian Project Director, J. D. Coffin PI) 20% effort. 2003-2004.
- ◆ NSF EPSCoR 2005-2006. \$25,000.
- ◆ Alzheimer’s Foundation (subcontract) Ed Stopa, PI. \$30,000. 2005-2006.
- ◆ Alzheimer’s Foundation (subcontract) Ed Stopa, PI. \$30,000. 2006-2007.
- ◆ NIH/NCRR. COBRE AWARD. “Cardiovascular Toxicity of Arsenic”. Subproject PI, 25% effort. (A. Holian, Project Director). 7/2006- 5/2010.
- ◆ NIH/NCRR. COBRE AWARD subcontract. Coffin PI (project 4). 2006-2010.
- ◆ U. Montana. Course Release Reassignment Research Funds. 2011-2013.
- ◆ Laila Pharma Research Collaboration Award. D Coffin, PI. 2013.
- ◆ Laila Pharma Research Collaboration Award. D Coffin, PI. 2013.
- ◆ Montana Board of Research and Commercialization Technology. Subcontract. 2015.
- ◆ University of Montana Research Grant, D. Coffin, PI. AY 2014-2015.

Post-doctoral Fellow Training:

- Dr. Jay Brewster, 1996-1998. NIH Post-doctoral Fellowship. Assistant Professor, Pepperdine University.
- Dr. David Fulgham 1995-1997. NIH Minority Supplement Award. Staff Scientist. Dept. of Public Health and Human Services. State of Montana.

Graduate Student Training:

- ✓ Taren Grass 1999-2004. Ph.D.
- ✓ Wenji He 2001-2004. M.S.
- ✓ Jason Wilham 2006-2007, Ph.D.

Research Associate Training:

- Sherri Widhalm 1993-1996
- Stacy Martin 1995-2000
- Jennifer Toms 1996-1997
- Angela Davis 1995-1997
- Dee Goss 1997-1998
- Rob Greenwell. 2003-2006
- Kindle Lewis. 2006- 2008.

Undergraduate Training

1. Jess Grossman- 1994. Summer student with ACS student award. B.S Biology BYU 1998. Currently: Physician.
2. Tiffany Haddock- 1994. Summer student with ACS student award. B.S. Biology 1998. Now in medical school at Johns Hopkins. Currently: Physician.

3. Scott Haddock- 1996-1997. Summer student 1996 and 1997. ACS student Award 1996. B.S. Biology 1999, Carlton College. Currently: Physician.
4. Sarah Rhoades-Nichols. Summer student with ADA award 1996. Lab assistant with work study 1998-1999. B.S. Biology 1999 U. Montana. Currently: Practicing Atty in patent law.
5. Mike Boysun- 1995. ACS summer student award. B.S. Microbiology from Montana State Univ 1998.
6. Jenell Pribyll. 1995. B.S. Biology, Luther College. 1999. Currently: Physician.
7. Andrea Juedemann- 1996. ACS summer student. Did not continue.
8. Kami Chiotti-1997-1998. Summer student and work study student. BS Biology from University of Great Falls 1998. Currently: Works for Missoula County Health Dept.
9. Jason Wilham. 1995-1999 (HS), 2006-2007 (Grad Student). Cascade High school. Science fair project and ACS summer research fellow award. Awarded full undergrad scholarship from NIH. Currently: NIH/RML Post-doctoral Fellow.
10. Jason Martin. 1998-2000. Hellgate High school student. Lab. Assistant. Working on recombinant DNA technology and cell culture. Currently: Occupational Therapist.
11. Heather Flipowicz. 1999-2000. UM undergrad. Lab Assistant. Worked as a part time lab tech. PCR and cell culture.
12. Jody Duff. 1998-2001. Pharmacy student. Worked as a part time lab tech. PCR and cell culture. NCUR 2000 presentation. Currently: Practicing Pharmacist.
13. David Mountain. 2000-2001. Pharmacy Student. Now: Practicing pharmacist.
14. Tim Jackson. 1998- 2001. Undergrad at U. Great Falls as work study student, continued work as a UM Pharmacy student. Works as part-time lab tech. NCUR 2000 presentation. Currently: Practicing Pharmacist.
15. Hazem Abawi. 1999- 2002. UM Undergrad and pre-pharm. Student project in endothelial cell differentiation. NCUR 2000 presentation. Currently: Practicing Pharmacist.
16. Andre Jendreson 1997, 1999-2000. Work study student at McLaughlin Research Institute then a work-study student at UM; later a graduate student in anthropology. Cell culture, histology and animal care.
17. Stephanie Janson. 2001- 2002. UM Pharmacy student. Mouse husbandry, breeding and genotyping with PCR. Currently: Practicing pharmacist.
18. Kristin Skiff. 2000-2003. UM pharmacy student. Cloning, animal care and genotyping. Transferred to U. Washington School of Pharmacy. Currently: Practicing Pharmacist.
19. Jason Thompson. 2003- 2003. HS and UG student. Lab work and cloning. Currently: UM graduate.
20. Dan Coffin. 2001- 2006. HS & UG student. Lab work, computer maintenance, cloning, mouse husbandry and PCR for genotyping. Currently: Certified Dialysis Technician.
21. Justin Pfau. 2003- 2004. Big Sky HS student/UM undergraduate freshman. Cell culture and animal studies. Currently: Service in Iraq and UM undergrad.
22. Alexandra Antonoli 2003-2004. Butte HS student through science fair. Won international awards in Science Fair. Yale undergrad.
23. Ben Kero. 2003- 2004. HS student. Computer programming and recombinant DNA technology.

24. Jackie Coffin, 2004-2005. HS Student. Animal care and lab assistant. Currently: UM Undergrad.
25. Rose Hardy- 2005. Undergrad and NSF EPSCoR Fellow. In vivo ultrasound for measuring cardiac output. Enrolled in Graduate Program in Public Health.
26. Jung Yong Wang-2005. Undergrad and NSF EPSCoR Fellow. Cell culture and recombinant DNA technology. Graduated in 2007.
27. Alexandra Greer. 2005-2006. Cell differentiation and DNA microarray assays. MAS Jr. Academy and Science Fair HS student. Won national SF awards. Now attending Stanford U.
28. Kerstin Grund. 2005- 2006. HS student. Cell culture hypoxia and DNA microarray experiment for Science Fair and HS science project. Still in HS.
29. Sarah Mitchell. HS Student. 2006- 2007. PCR and animal care. Currently: Allegiance Health Care, Case manager.
30. Jason Leonard. HS Student. 2007. Recombinant DNA technology and stem cell differentiation in cell culture. Currently: undergrad at Reed college.
31. Tarin Richards. 2007, 2008. Cardiovascular Toxicology: Cell culture, mouse genetics, imaging. Currently: Gonzaga undergraduate now applying to medical school.
32. Nicole Marcellus. 2008- 2009. UM Pharmacy Student.
33. Lezni Wicks. 2010. UM Pre-pharmacy student.
34. Shamus McCarthy 2010. UM HHP/pre-med student.
35. Jens Jacobsen. 2011-12. UM Biology student.
36. Camas Allison-Bunnell. 2013-2014. HS student.
37. Iaong Vang. 2013- present. HS student, currently UM pre-med student.

Grant Review Panels

- ✓ NIH/NHLBI RFA on Angiogenesis 1996
- ✓ NIH/NHLBI RFA on Cardiovascular Complications in AIDS 1997
- ✓ NIH Joint RFA on Bioengineering and Mimetics. 1998
- ✓ AHA Northwest Region study section. 1998
- ✓ NIH/NHLBI SCOR on Pediatric Cardiology 1998
- ✓ NIH/NHLBI RFA on Cardiovascular complications from cocaine abuse in HIV Infection. 1998
- ✓ National Science Foundation- Ad Hoc
- ✓ Whirling Disease Foundation- 1998.
- ✓ Whirling Disease Foundation- 2000.
- ✓ NIH/NHLBI Program (SCOR) Project review panel on pediatric cardiology. 2000.
- ✓ NIH/NHLBI Program Project review panel on coronary angiogenesis. 2000.
- ✓ NIH/NHLBI Program Project Review Panel on Pulmonary Angiogenesis 2001.
- ✓ Whirling Disease Foundation- 2001.
- ✓ AHA Great American Research Consortium. Vascular Biology Review Panel. 2000-2003.
- ✓ Whirling Disease Foundation- 2002.
- ✓ NSF EpSCoR State Grant Review Panel- 2002 (Fall).
- ✓ NIH RFA Ad-hoc review panel on Biotechnology- 2002 (Fall)
- ✓ Whirling Disease Foundation- 2003.
- ✓ NIH Dev1 review panel. Ad-Hoc- 2003 (Fall)
- ✓ Whirling Disease Foundation- 2004.
- ✓ NIH/NIEHS Ad Hoc Review Panel for RFA in Stem Cell Toxicology. 2012

Graduate Student Thesis Committees

- ❖ Susan Makin- Montana State University- 1993-1997.
- ❖ Jennifer Shaw- The University of Montana- 1998-2000.
- ❖ Celine Wishcamper- The University of Montana- 1999-2004.
- ❖ Taren Grass- The University of Montana- 2000-2005.
- ❖ Brady Warren- The University of Montana- 2000-2005.
- ❖ Jie Zhao- The University of Montana- 2000-2004.
- ❖ Lucia Muniz–Alonso- The University of Montana- 1999-2001.
- ❖ Melisa Bunderson- The University of Montana- 1999-2003.
- ❖ David Cox- The University of Montana- 2003-present.
- ❖ Flavia Periera- The University of Montana- 2003-present.
- ❖ Wenjie He- The University of Montana-2002-2004.
- ❖ Jason Wilham- The University of Montana- 2004-2008.
- ❖ Amy Erbe- The University of Montana- 2005-2008.
- ❖ Alison Kearns- The University of Montana- 2010-2013.
- ❖ Tracy Brown- The University of Montana- 2010- 2015.

Manuscript reviews for:

- ◆ Development
- ◆ Genomics
- ◆ Microvascular Research
- ◆ Nature Medicine
- ◆ Journal of Molecular & Cellular Cardiology
- ◆ Journal Cell Physiology
- ◆ Endocrinology
- ◆ Circulation
- ◆ Coronary Artery Disease
- ◆ Proceedings of the National Academy of Sciences
- ◆ American Journal of Pathology
- ◆ Anatomical Record
- ◆ Toxicological Sciences
- ◆ Cardiovascular Toxicology
- ◆ J. Biological Chemistry
- ◆ Cardiovascular Toxicology

Publications (Coffin JD and Coffin DJ)

1. Coffin, J.D., McGarry, M.P. and Isseroff, H. (1984). Proline induced hemolytic anemia in fascioliasis. *Proc Soc Exp Biol Med* 177:92-96.
2. Coffin, J.D. and Poole, T.J. (1988). Embryonic vascular development: immunohistochemical identification of the origin and subsequent morphogenesis of the major vessel primordia in quail embryos. *Development* 102:735-748.
3. Poole, T.J. and Coffin, J.D. (1988). Developmental angiogenesis: quail embryonic vasculature. *Scanning Microsc* 2:443-448.
4. Poole, T.J. and Coffin, J.D. (1989). Vasculogenesis and angiogenesis: two distinct morphogenetic mechanisms establish embryonic vascular pattern. *J Exp Zool* 251:224-231.

5. Coffin, J.D., Harrison, J., Schwartz, S. and Heimark, R. (1991). Angioblast differentiation and morphogenesis of the vascular endothelium in the mouse embryo. *Dev Biol* 148:51-62.
6. Coffin, J.D. and Poole, T.J. (1991). Endothelial cell origin and migration in embryonic heart and cranial blood vessel development. *Anat Rec* 231:383-395.
7. Doetschman, T., Shull, M., Kier, A. and Coffin, J.D. (1993). Embryonic stem cell model systems for vascular morphogenesis and cardiac disorders. *Hypertension* 22:618-629.
8. Coffin, J.D., Florkiewicz, R.Z., Neumann, J., Mort-Hopkins, T., Dorn, G.W., 2nd, Lightfoot, P., German, R., Howles, P.N., Kier, A., O'Toole, B.A. and et al. (1995). Abnormal bone growth and selective translational regulation in basic fibroblast growth factor (FGF-2) transgenic mice. *Mol Biol Cell* 6:1861-1873.
9. Carlson, G.A., Borchelt, D.R., Dake, A., Turner, S., Danielson, V., Coffin, J.D., Eckman, C., Meiners, J., Nilsen, S.P., Younkin, S.G. and Hsiao, K.K. (1997). Genetic modification of the phenotypes produced by amyloid precursor protein overexpression in transgenic mice. *Hum Mol Genet* 6:1951-1959.
10. Davis, M.G., Zhou, M., Ali, S., Coffin, J.D., Doetschman, T. and Dorn, G.W., 2nd (1997). Intracrine and autocrine effects of basic fibroblast growth factor in vascular smooth muscle cells. *J Mol Cell Cardiol* 29:1061-1072.
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Book Chapters

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Personal Statement for Research

Douglas Coffin, Ph.D. is a Professor of Molecular Genetics in the Department of Biomedical & Pharmaceutical Sciences, Skaggs School of Pharmacy, at The University of Montana. I joined UM in 1998 after serving as a Scientist at the McLaughlin Research Institute for five years. My research has focused on developmental biology and molecular/developmental genetics: First studying the origins and mechanisms of blood vessel development in avian embryos (chick & quail) and then mammalian cardiovascular, nervous and skeletal system development. We produced the first FGF2 transgenic and null mice and used them to study growth factor regulation of morphogenesis, producing mouse models for human diseases and disorders such as osteoporosis, dwarfism and seizure disorders. My publication record shows expertise in developmental morphogenesis particularly regarding embryonic stem cell differentiation into various lineages during development. There is a strong emphasis on collaborative work both producing and utilizing transgenic and gene targeted mice for FGF2 regulation of morphogenesis. I was on sabbatical for spring 2012, at the University of Washington and the University of Connecticut Health Sciences Center. I was on unpaid leave during the psring 2013 semester, serving as a Representative (HD 93, Missoula) in the Montana legislature. I did, however, continue to teach my on-line Pharmacogenetics course (Phar 430) while serving in the legislature. As a result of my sabbatical and after my leave, my research has taken a new direction, collaboratively working on a project with Dr. Diana Lurie (Dept. BMED, U. Montana) on natural product research. Our project with Laila Pharmaceutical (Chennai, India) focused on use of an Alzheimer's disease transgenic mouse model (5XFAD) to test the efficacy of novel curcumin compounds to mitigate the amyloidosis and neuroinflammation that propagate neurodegeneration in AD.