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EDUCATION and TRAINING

- 1999-02 : Post-Doctoral Fellow, Department of Physiology, University of Tennessee Health Sciences Center, Memphis, TN, USA
- 1996-98 : Post-Doctoral Fellow, Department of Medicine II, Klinikum Grosshadern, Ludwig-Maximilians University, Munich, Germany
- 1991-96 : PhD. (Pharmaceutical Sciences), College of Pharmaceutical Sciences, Mangalore University, India
- 1989-91 : Master of Pharmacy, College of Pharmaceutical Sciences, Mangalore University, India
- 1985-89 : Bachelor of Pharmacy, College of Pharmaceutical Sciences, Mangalore University, India

PROFESSIONAL EXPERIENCE

- 2014- : Professor of Pharmacology, University of Wyoming, Laramie, WY
- 2011-14 : Director, Biomedical Sciences Graduate Program, University of Wyoming, Laramie, WY
- 2008- : Director, Center for Cardiovascular Research and Alternative Medicine, University of Wyoming, Laramie, WY
- 2008- : Associate Professor of Pharmacology, University of Wyoming, School of Pharmacy, Laramie, WY
- 2002-08 : Assistant Professor of Pharmacology, University of Wyoming, School of Pharmacy, Laramie, WY

AWARDS, HONORS and POSITIONS

- 2010 : Inter-professional Award, College of Health Sciences, University of Wyoming
- 2008 : Excellence in Teaching Award, Alpha Nu Chapter of Phi Lambda Sigma, University of Wyoming, School of Pharmacy
- 2008 : Teacher of the Year Award, Awarded by the Class of 2008, University of Wyoming, School of Pharmacy
- 2006 : Adjunct faculty, Graduate Neurosciences Program, Molecular and Cellular Life Sciences Program, and Zoology/Physiology Graduate Program, University of Wyoming
- 2003- : Adjunct Professor, University of Washington, Seattle, WA
- 2006 : New Investigators Award, College of Health Sciences, University of Wyoming
- 2006 : Honorary Member, Phi Lambda Sigma Leadership Honorary Society, University of Wyoming
- 2006-07 : Board Member, Wyoming Division Community Board of American Heart Association
- 2005 : Inaugural Center for Cardiovascular Research and Alternative Medicine Outstanding Researcher Award, University of Wyoming
- 1998 : Simon Wolff Research Foundation Fellowship, United Kingdom
- 1997 : NATO Advanced Study Institute Fellowship
- 1996 : Sir Dorabji Tata Trust Award, New Delhi, India
- 1996 : Deutsche Forschungsgemeinschaft Post-Doctoral Grant

PUBLICATIONS (Peer-reviewed articles)

Note: * Graduate Student; ** Post-doctoral Fellow; # High-school student; ## Undergraduate

1. Hua Y*, **Nair S** (2014) Proteases in cardiometabolic diseases: Pathophysiology, molecular mechanisms and clinical applications *Biochim Biophys Acta - Molecular Basis of Disease* (in press)
2. Kandadi MR**, Panzhinskiy E*, Roe ND*, **Nair S**, Hu D, Sun A. Deletion of Protein Tyrosine Phosphatase 1B Knockout Rescues against Myocardial Anomalies in High Fat Diet-Induced Obesity: Role of AMPK-Dependent Autophagy. *Biochim Biophys Acta* (in press)
3. Zhu X, Hu N, Chen X, Zhu MZ, Dong H, Xu X, Luo F, Hua Y, **Nair S**, Samson WK, Xiong L, Ren J. Neuronostatin Attenuates Myocardial Contractile Function through Inhibition of Sarcoplasmic Reticulum Ca-ATPase in Murine Heart. *Cell Physiol Biochem*. 33:1921-19, 2014
4. Panzhinskiy E*, Lapchak PA, Topchiy E, Lehmann TE, Ren J, **Nair S**. A Novel Neurotrophic Curcumin Analog Mitigates Obesity-Associated Insulin Resistance. *J Pharmacol Exp Ther*. 349: 248-57, 2014
5. Xu X*, Hua Y*, **Nair S**, Ren J. Macrophage Migration Inhibitory Factor Deletion Exacerbates Pressure Overload-Induced Cardiac Hypertrophy through Mitigating Autophagy. *Hypertension*. 63: 490-9, 2014
6. Panzhinskiy E*, Ren J, **Nair S**: Protein tyrosine phosphatase 1B and insulin resistance: Role of endoplasmic reticulum stress/reactive oxygen species/nuclear factor kappa B axis, *PLoS One*. 18: e77228, 2013
7. Kandadi MR**, Hua Y*, Zhu M, Turdi S*, Nathanielsz PW, Ford SP, **Nair S**, Ren J: Influence of Gestational Overfeeding and Obesity on Myocardial Pro-inflammatory Mediators in Fetal Sheep Heart. *J Nutr Biochem*. 23:1982-90, 2013
8. Ceylan-Isik A**, Kandadi MR**, Chicco AJ, Ren J, **Nair S**: Apelin Alleviates High-Fat Diet-Induced Myocardial Contractile Dysfunction. *J Mol Cell Cardiol*. 63: 4-13, 2013
9. Hua Y*, Dolence J**, Ramanan S##, Ren J, **Nair S**: Bisdemethoxycurcumin inhibits PDGF-induced vascular smooth muscle cell motility and proliferation. *Mol Nutr Food Res* 1611-1618, 2013
10. Panzhinskiy E*, Ren J, **Nair S**: Protein Tyrosine Phosphatase 1B as a Therapeutic Target in Obesity Related Conditions. *Curr Med Chem*. 21: 2609-25, 2013
11. Hua H*, Xu X*, Shi GP, Ren J, **Nair S**: Cathepsin-K Knockout Attenuates Pressure Overload-Induced Cardiac Hypertrophy and Dysfunction. *Hypertension*. 61: 1184-92, 2013
12. Dong M*, Hu N, Hua Y*, Xu X*, Kandadi MR**, Guo R, Jiang S, **Nair S**, Hu D##, Ren J: Chronic Akt activation attenuated lipopolysaccharide-induced cardiac dysfunction via Akt/GSK3 β -dependent inhibition of apoptosis and ER stress. *Biochim Biophys Acta*. 1832: 848-863, 2013
13. Panzhinskiy E*, Hua Y*, Culver B, **Nair S**: Endoplasmic reticulum stress up-regulates protein-tyrosine phosphatase 1B expression and impairs glucose uptake in cultured myotubes. *Diabetologia*, 16: 598-608, 2013
14. Hua Y*, Zhang Y, Dolence J**, Shi GP, Ren J, **Nair S**: Cathepsin K Knockout Mitigates High-Fat Diet-Induced Cardiac Hypertrophy and Contractile Dysfunction. *Diabetes*, 62: 498-509, 2013
15. Ceylan-Isik AF**, Dong M, Zhang Y, Dong F, Turdi S*, **Nair S**, Yanagisawa M, Ren J: Cardiomyocyte-specific deletion of endothelin receptor A rescues aging-associated cardiac hypertrophy and contractile dysfunction: Role of autophagy. *Basic Res Cardiol*, 108:335, 2013
16. Xu X*, Hua Y*, **Nair S**, Zhang Y, Ren J: Akt2 knockout preserves cardiac function in high-fat diet-induced obesity by rescuing cardiac autophagosome maturation. *J Mol Cell Biol*, 5:61-63, 2013
17. **Nair S** and Ren J.: Autophagy and cardiovascular aging: Lessons learned from rapamycin. *Cell Cycle*, 11: 2092-2099, 2012

18. Hua H^{*}, Clark S, Ren J, **Sreejayan N**: Molecular mechanisms of chromium in alleviating insulin resistance. *J. Nutr. Biochem*, 23: 313-319, 2012
19. Palanichamy K^{**}, **Sreejayan N**, Ontko A: Overcoming cisplatin resistance using gold (III) mimics: Anticancer activity of novel gold(III) polypyridyl complexes. *J Inorg Biochem*, 106: 32-42, 2011
20. Ceylan-Isik AF^{**}, **Sreejayan N**, Ren J.: Endoplasmic reticulum chaperon tauroursodeoxycholic acid alleviates obesity-induced myocardial contractile dysfunction *J. Mol. Cell Cardiol*. 50: 107-116, 2011
21. Kandadi MR^{*}, Unnikrishnan MK, Warriar AK, Du M, Ren J, **Sreejayan N**: Chromium (d-phenylalanine)₃ alleviates high fat-induced insulin resistance and lipid abnormalities. *J Inorg Biochem*. 105: 58-62, 2010
22. **Sreejayan N**, Marone PA, Lau FC, Yasmin T, Bagchi M, Bagchi D: Safety and toxicological evaluation of a novel chromium(III) dinicotino-cystinate complex. *Toxicol Mech Methods*, 20: 321-33, 2010
23. Zhao J^{*}, Yue W, Zhu MJ, **Sreejayan N**, Du M: AMP-activated protein kinase (AMPK) cross-talks with canonical Wnt signaling via phosphorylation of β -catenin at Ser 552. *Biochem. Biophys. Res. Commun*. 395: 146-151, 2010
24. Hua Y^{*}, Kandadi MR^{*}, Zhu M, Ren J, Sreejayan N: Tauroursodeoxycholic Acid Attenuates Lipid Accumulation in Endoplasmic Reticulum-Stressed Macrophages. *J Cardiovasc Pharmacol*, 55: 49-55, 2010.
25. Kandadi MR^{*}, Rajanna PK, Unnikrishnan MK, Boddu SP, Hau Y, Li J, Du M, Ren J, Sreejayan N: 2-(3,4-Dihydro-2H-pyrrolium-1-yl)-3oxoindan-1-olate (DHPO), a novel, synthetic small molecule that alleviates insulin resistance and lipid abnormalities. *Biochem Pharmacol*. 79: 623-31, 2010
26. Zhao P^{*}, Wang J, Ma H, Xiao Y, He L, Tong C, Wang Z, Zheng Q, Dolence EK, Sreejayan N, Ren J, Li J: A newly synthetic chromium complex-chromium (D-phenylalanine)₃ activates AMP-activated protein kinase and stimulates glucose transport. *Biochem Pharmacol* 77:1002-1010, 2009
27. Dong F^{*}, Hua Y, Zhao P, Ren J, Du M, Sreejayan N: Chromium Supplement Inhibits Skeletal Muscle Atrophy in Hindlimb Suspended Mice. *J Nutr Biochem* 12: 992-999, 2009
28. Sreejayan N, Yang X^{**}, Palanichamy K^{**}, Dolence K, Ren J: Antioxidant properties of argpyrimidine. *Eur J Pharmacol* 593:30-35, 2008
29. Sreejayan N, Dong F^{*}, Kandadi MR^{*}, Yang XP^{**}, Ren J: Chromium alleviates glucose intolerance, insulin resistance, and hepatic ER stress in obese mice. *Obesity* 16:1331-1337, 2008
30. Ren J, Duan JH, Thomas DP, Yang XP^{**}, Sreejayan N, Sowers JR, Leri A, Kajstura J, Gao F, Anversa P: IGF-I alleviates diabetes-induced RhoA activation, eNOS uncoupling, and myocardial dysfunction. *Am J Physiol -Reg Integr Comp Physiol* 94: R793-R802, 2008
31. Liu Y, Dolence J^{**}, Ren J, Rao M, Sreejayan N: Inhibitory effect of dehydrozingerone on vascular smooth muscle cell function. *J Cardiovasc Pharmacol* 52: 422-429, 2008
32. Jungst C, Sreejayan N, Zundt B, Muller I, Spelsberg FW, Huttli TP, Kullak-Ublick GA, del Pozo R, Jungst D, von Ritter C: Ursodeoxycholic acid reduces lipid peroxidation and mucin secretagogue activity in gallbladder bile of patients with cholesterol gallstones. *Eur J Clin Invest* 38:634-639, 2008
33. Dong F^{*}, Kandadi MR^{*}, Ren J, Sreejayan N: Chromium (D-phenylalanine)₃ supplementation alters glucose disposal, insulin signaling, and glucose transporter-4 membrane translocation in insulin-resistant mice. *J Nutr* 138:1846-1851, 2008
34. Stratton MS^{##}, Yang X^{**}, Sreejayan N, Ren J: Impact of insulin-like growth factor-I on migration, proliferation and Akt-ERK signaling in early and late-passages of vascular smooth muscle cells. *Cardiovasc Toxicol* 7:273-281, 2007
35. Sreejayan N, Yang X^{**}: Isolation and functional studies of rat aortic smooth muscle cells. *Methods Mol Med* 139:283-292, 2007

36. Li Q, Yang X^{**}, Sreejayan N, Ren J: Insulin-like growth factor I deficiency prolongs survival and antagonizes paraquat-induced cardiomyocyte dysfunction: role of oxidative stress. *Rejuvenation Res* 10:501-512, 2007
37. Jungst C, Sreejayan N, Eder MI, von Stillfried N, Zundt B, Spelsberg FW, Kullak-Ublick GA, Jungst D, von Ritter C: Lipid peroxidation and mucin secretagogue activity in bile of gallstone patients. *Eur J Clin Invest* 37:731-736, 2007
38. Fang CX^{*}, Yang XP^{**}, Sreejayan N, Ren J: Acetaldehyde promotes rapamycin-dependent activation of p70(S6K) and glucose uptake despite inhibition of Akt and mTOR in dopaminergic SH-SY5Y human neuroblastoma cells. *Exp Neurol* 203:196-204, 2007
39. Dong F^{*}, Yang XP^{**}, Sreejayan N, Ren J: Chromium (D-phenylalanine)₃ improves obesity-induced cardiac contractile defect in ob/ob mice. *Obesity* 15:2699-2711, 2007
40. Dong F^{*}, Li Q, Sreejayan N, Nunn JM, Ren J: Metallothionein prevents high-fat diet induced cardiac contractile dysfunction: role of peroxisome proliferator activated receptor gamma coactivator 1 alpha and mitochondrial biogenesis. *Diabetes* 56:2201-2212, 2007
41. Yang XP^{**}, Thomas DP, Zhang XC, Culver BW, Alexander BM, Murdoch WJ, Rao MNA, Tulis DA, Ren J, Sreejayan N: Curcumin inhibits platelet-derived growth factor-stimulated vascular smooth muscle cell function and injury-induced neointima formation. *Arterioscler Thromb Vasc Biol* 26:85-90, 2006
42. Yang XP^{**}, Li SY, Dong F, Ren J, Sreejayan N: Insulin-sensitizing and cholesterol-lowering effects of chromium (D-Phenylalanine)₃. *J Inorg Biochem* 100:1187-1193, 2006
43. Yang X^{**}, Doser TA, Fang CX, Nunn JM, Janardhanan R^{**}, Zhu M, Sreejayan N, Quinn MT, Ren J: Metallothionein prolongs survival and antagonizes senescence-associated cardiomyocyte diastolic dysfunction: role of oxidative stress. *FASEB J* 20:1024-1026, 2006
44. Wold LE, Ceylan-Isik AF^{**}, Fang CX^{*}, Yang XP^{**}, Li SY, Sreejayan N, Privratsky JR, Ren J: Metallothionein alleviates cardiac dysfunction in streptozotocin-induced diabetes: Role of Ca²⁺ cycling proteins, NADPH oxidase, poly(ADP-Ribose) polymerase and myosin heavy chain isozyme. *Free Rad Biol Med* 40:1419-1429, 2006
45. Li SY^{**}, Yang X^{**}, Ceylan-Isik AF^{**}, Du M, Sreejayan N, Ren J: Cardiac contractile dysfunction in Lep/Lep obesity is accompanied by NADPH oxidase activation, oxidative modification of sarco(endo)plasmic reticulum Ca²⁺-ATPase and myosin heavy chain isozyme switch. *Diabetologia* 49:1434-1446, 2006
46. Fang CX^{*}, Doser TA, Yang X^{**}, Sreejayan N, Ren J: Metallothionein antagonizes aging-induced cardiac contractile dysfunction: role of PTP1B, insulin receptor tyrosine phosphorylation and Akt. *Aging Cell* 5:177-185, 2006
47. Yang XP^{**}, Zhu MJ, Sreejayan N, Ren J, Du M: Angiotensin II promotes smooth muscle cell proliferation and migration through release of heparin-binding epidermal growth factor and activation of EGF-receptor pathway. *Mol Cells* 20:263-270, 2005
48. Yang XP^{**}, Sreejayan N, Ren J: Views from within and beyond - Narratives of cardiac contractile dysfunction under senescence. *Endocrine* 26:127-137, 2005
49. Yang XP^{**}, Palanichamy K^{**}, Ontko AC, Rao MNA, Fang CX, Ren J, Sreejayan N: A newly synthetic chromium complex - chromium (phenylalanine)₃ improves insulin responsiveness and reduces whole body glucose tolerance. *FEBS Letts* 579:1458-1464, 2005
50. Li SY, Du M, Dolence EK, Fang CX^{*}, Mayer GE, Ceylan-Isik AF, LaCour KH, Yang X, Wilbert CJ, Sreejayan N, Ren J: Aging induces cardiac diastolic dysfunction, oxidative stress, accumulation of advanced glycation endproducts and protein modification. *Aging Cell* 4:57-64, 2005
51. Yigzaw Y, Poppleton HM, Sreejayan N, Hassid A, Patel TB: Protein-tyrosine phosphatase-1B (PTP1B) mediates the anti-migratory actions of sprouty. *J Biol Chem* 278:284-288, 2003

52. Sreejayan N, Lin Y, Hassid A: NO attenuates insulin signaling and motility in aortic smooth muscle cells via protein tyrosine phosphatase 1B-mediated mechanism. *Arterioscler Thromb Vasc Biol* 22:1086-1092, 2002
53. Chang Y, Ceacareanu B, Dixit M, Sreejayan N, Hassid A: Nitric oxide-induced motility in aortic smooth muscle cells: role of protein tyrosine phosphatase SHP-2 and GTP-binding protein Rho. *Circ Res* 91:390-397, 2002
54. Sreejayan N, Wittig BM, von Stillfried N, Hennis MS, Meyer G, Stieber P, Lamerz R, von Ritter C: Human biliary mucin binds to E-selectin: a possible role in modulation of inflammation. *Am J Physiol Gastrointest Liver Physiol* 280:G1043-1048, 2001
55. Wildhirt SM, Schulze C, Conrad N, Sreejayan N, Reichensperner H, von Ritter C, Reichart B: Reduced myocardial cellular damage and lipid peroxidation in off-pump versus conventional coronary artery bypass grafting. *Eur J Med Res* 5:222-228, 2000
56. Sreejayan N, von Ritter C: Lipid peroxidation in bile: Role of bile acids and the effect on biliary epithelial cell function. *Pathophysiol* 5 225-232, 1999
57. Ganesh Pai C, Sreejayan N, Rao MN: Evidence for oxidant stress in chronic pancreatitis. *Ind J Gastroenterol* 18:156-157, 1999
58. Sreejayan N, von Ritter C: Effect of bile acids on lipid peroxidation: The role of iron. *Free Rad Biol Med* 25:50-56, 1998
59. Sreejayan N, Rao MNA, Priyadarsini KI, Devasagayam TPA: Inhibition of radiation-induced lipid peroxidation by curcumin. *Int J Pharm* 151:127-130, 1997
60. Sreejayan, Rao MNA: Nitric oxide scavenging by curcuminoids. *J Pharm Pharmacol* 49:105-107, 1997
61. Guha SN, Priyadarsini KI, Devasagayam TPA, Sreejayan N, Rao MNA: Hydroxyl radical reactions of (4-hydroxy, 3-methoxy-5-bromophenyl) pentenone, a curcuminoid antioxidant. *Rad Phy Chem* 49:43-46, 1997
62. Sreejayan N, Rao MNA: Free radical scavenging activity of curcuminoids. *Arzneimittel-Forschung/Drug Res* 46:169-171, 1996
63. Subramanian M*, Sreejayan N*, Rao MNA, Devasagayam TPA, Singh BB: Diminution of Singlet Oxygen-Induced DNA-Damage by Curcumin and Related Antioxidants. *Mutat Res* 311:249-255, 1994 (* equal first authorship)
64. Sreejayan N, Rao MNA: Curcuminoids as Potent Inhibitors of Lipid-Peroxidation. *J Pharm Pharmacol* 46:1013-1016, 1994
65. Sreejayan N, Rao MNA: Curcumin Inhibits Iron-Dependent Lipid-Peroxidation. *Int J Pharm* 100:93-97, 1993
66. Sreejayan N, Rao MNA: Oxygen free radical scavenging by Momordica charantia extract. *Fitoterapia* LXII:344-346, 1991

TECHNICAL REPORT:

1. **Sreejayan N.**, Chromium and Nutritional Supplement. Encyclopedia of Metalloproteins, Eds: Uversky VN, Kretsinger RH, Permyakov E.A., Springer Sciences, Edition 1, pp 627-630, 2013

PRESENTATIONS (Refereed Abstracts):

Note: * Graduate Student; ** Post-doctoral Fellow; #High-school student; ##Undergraduate

1. Hua Y*, Shi GP, Ren J, **Nair S.** Cathepsin K Deficiency Attenuates Starvation-Induced Cardiac Autophagy and Apoptosis; American Heart Association Scientific Sessions, Nov 17-19, Dallas, TX, 2013; Abstract: *Circulation* 128: A14091, 2013, ORAL presentation.

2. Kandadi MR*, Panzhinskiy E*, Roe N*, **Nair S**, Ren J, Protein Tyrosine Phosphatase 1B Knockout Attenuates Obesity-Associated Cardiac Dysfunction. American Heart Association Scientific Sessions, Los Angeles, CA, Nov 3-7, 2012. Abstract: *Circulation* 126: A15595, 2012, POSTER presentation.
3. Panzhinskiy E*, Hua Y*, Ren J, **Nair S**. “Endoplasmic Reticulum Stress Regulates Protein-Tyrosine Phosphatase 1B Expression and Cellular Glucose Uptake. American Heart Association Scientific Sessions, Los Angeles, CA, Nov 3-7, 2012. Abstract: *Circulation* 126: A17023, 2012. POSTER presentation
4. Xu X*, Hua Y*, **Nair S**, Ren J, Cardiac Macrophage Migration Inhibitory Factor Activates Mitophagy to Prevent the Exacerbation of Pressure Overload-Induced Hypertrophic Cardiomyopathy in Mice. American Heart Association Scientific Sessions, Los Angeles, CA, Nov 3-7, 2012. Abstract: *Circulation* 126:A13344, 2012, POSTER presentation.
5. Panzhinskiy E*, Ren J and Vincent J, **Nair S** “A Novel Endogenous Chromium Binding Peptide Augments Glucose Uptake and Insulin Signaling in Myotubes” 72nd Scientific Sessions, American Diabetes Association, Pennsylvania, PA, Jun 8-12, 2012; Abstract: *Diabetes* 61:A410-A443; 2012, POSTER presentation.
6. Panzhinskiy E*, Lapchak P, Ren J, **Nair S**. “A Novel Neuroprotective Compound Alleviates Obesity-Associated Glucose Intolerance and Improves Insulin Signaling”. Experimental Biology Meeting, San Diego, CA, Apr 21-25, 2012 (*Panzhinskiy was selected for ASPET travel grant), Abstract: *FASEB J* 26:672.7, 2012, POSTER presentation.
7. Ceylan-Isik A**, Zhao H*, Ren J, **Nair S**, “Cardiac specific deletion of endothelin-1 receptor-A rescues the heart from high-fat diet-induced cardiac dysfunction via regulating autophagy. American Heart Association, Scientific Sessions, Orlando, FL, Nov 12-16, 2011, Abstract: *Circulation* 124: A13865, 2011, ORAL presentation.
8. Hua Y*, Dolence J**, Ren J, Shi, GP, **Nair S**, “Cathepsin K Knockout Mitigates High Fat Diet-Induced Cardiac Dysfunction. American Heart Association, Scientific Sessions, Orlando, FL, Nov 12-16, 2011, Abstract: *Circulation* 124: A13630, 2011, ORAL presentation.
9. Ceylan Isik AF**, Ren J, **Sreejayan N**. The Chemical Chaperone Tauroursodeoxycholic Acid Alleviates Cardiac Contractile Dysfunction in Obesity: Role of Endoplasmic Reticulum-Stress in Cardiac Functionality. Experimental Biology Meeting, Anaheim, CA, Apr 24-28, 2010, Abstract: *FASEB J*. 24, 573.8, 2010, POSTER presentation.
10. Kandadi MR*, Prabhakar KR, Unnikrishnan MK, Li J, Ren J, and **Sreejayan N**. A Newly Synthetic Small Molecule-DHPO Alleviates Insulin Resistance Via Activation of AMP-Activated Protein Kinase. American Diabetes Association Meeting, Orlando, FL, Jun 25-29, 2009; Abstract: *Diabetes* 58: A491-A491, 2009, POSTER presentation.
11. Hua Y*, Kandadi MR, Ren J, and **Sreejayan N**. Ursodeoxycholic Acid Attenuates LDL Uptake in Macrophages. Basic Cardiovascular Sciences Conference, Keystone CO, Jul 28-31, 2008; Abstract: *Circ Res* 103: E49-50, 2008, POSTER presentation.
12. **Sreejayan N**, Dong F*, Kandadi MR*, Ren J. Chromium (D-phenylalanine)₃ supplementation improves glucose disposal, insulin signaling and glut-4 membrane translocation in a dietary mouse model of insulin resistance. 68th American Diabetes Association Meeting, San Francisco, Jun 6-10, 2008; Abstract: *Diabetes*. 57: A598-A598, 2008, POSTER presentation.
13. **Sreejayan N**. and Ren J. Inhibitory effect of dehydrozingerone on vascular smooth muscle cell functions. Experimental Biology Meeting, Washington DC, Apr 28-May 2, Abstract: *FASEB Journal*. 21: 259, 2007, POSTER presentation.
14. Li Q*. Yang XP**, **Sreejayan N**, and Ren J. Insulin-like growth factor I deficiency prolongs survival and antagonizes paraquat-induced cardiomyocyte dysfunction: Reactive oxygen species and aging gene in heart. American Heart Association Scientific Sessions, Orlando, FL, Nov 4-7, 2007, Abstract: *Circulation*. 116: 274-275, 2007, POSTER presentation.
15. Austin KE, Kirk V, **Sreejayan N**, Murdoch W, and Alexander B. Curcumin induced changes in TP53 and cyclin D1 enhance cytotoxic effect of cisplatin in human ovarian cancer cells. 40th Annual

Society of Study of Reproduction Meeting, Jul 21-25, 2007, San Antonio, TX, Abstract: *Biol of Repr* 157-158, 2007, POSTER presentation.

16. **Sreejayan N**, Yang XP**, Dolence EK, Ren J, and Palanichamy K**. Argpyrimidine: A biological antioxidant? 66th Scientific Sessions American Diabetes Association Meeting, June 9-13, Washington, DC; Abstract: *Diabetes*. 55: A475-A475, 2006, POSTER presentation.
17. **Sreejayan N**, Yang XP**, Thomas DP, Zhang SX, Culver BW, Ren J, and Tullis D. Curcumin attenuates neointimal development and collagen content following arterial injury in rats. 2nd Annual Symposium of the AHA Council on Basic Cardiovascular Sciences - Targeting Heart Failure: New Science, New Tools, New Strategies, July 24-27, 2005, Keystone, CO, Abstract: *Circ Res* 97: E19-E19, 2005, POSTER presentation.
18. **Sreejayan N**. Curcumin attenuates platelet-derived growth factor-induced migration and proliferation of aortic smooth muscle cells. 4th Annual Conference on Arteriosclerosis Thrombosis and Vascular Biology, Washington DC, May 8-10, 2003. Abstract: *Arterioscl Thromb Vasc Biol*. 23: A28-A29, 2003, POSTER presentation.
19. Chang YZ, Dixit M, **Sreejayan N**, Ceacareanu B, and A.I. Hassid. Nitric oxide stimulated vascular smooth muscle cell motility: Role of SHP2 and RhoA. 56th Annual Fall Conference and Scientific Sessions of the Council for High Blood Pressure Research in Association with the Council on Kidney in Cardiovascular Disease, Dallas, TX, Sept 25-28, 2002, Abstract: *Hypertension*. 40: 436-436, 2002, POSTER presentation.
20. **Sreejayan N**, Lin Y, Hassid A. Nitric oxide increases *c-Src* activity via tyrosine dephosphorylation in aortic smooth muscle cells. 39th American Society of Cell Biology Annual Meeting, Washington D.C., Dec 11-15, 1999, Abstract: *Molecular Biology of the Cell*. 10: 50a-50a, 1999, (poster presentation), POSTER presentation.
21. Wildhirt, S.M., C. Schulze, H. Reichenspurner, N. Conrad, G. Rieder, D.H. Boehm, **Sreejayan N**, C. Von Ritter, A. Welz, and B. Reichart. Gen expression vasoaktiver mediatoren, myokardiale lipid peroxidation und marker der kardiomyozyten-schadigung bie minimal invasiven (MIDCAB), port-access und konventionellen herzchirurgischen eingriffen. Abstract: *Thoracic and Cardiovascular Surgeon* 46: 189-190, 1998, POSTER presentation.
22. von Ritter C, **Sreejayan N**, Müller I, Meyer G, Jüngst D. Ursodeoxycholic acid reduces lipid peroxidation and mucin secretagogue activity of human bile in cholesterol gallstone disease. American Gastroenterology Meeting, New Orleans, LA, May 15-19, 1998. Abstract: *Gastroenterology*. 114: A548-A549, 1998, ORAL presentation.
23. **Sreejayan, N.** and C. von Ritter. Effect of bile acids on lipid peroxidation: Role of iron. American Gastroenterology Meeting, New Orleans, LA, May 15-19, 1998, Abstract: *Gastroenterology*. 114: A542-A542, 1998, ORAL presentation.
24. **Sreejayan N**, von Stillfried N, Wittig BM, Stieber P, von Ritter C. Human biliary mucin binds to E-selectin: A possible role in modulation of inflammation and tumor metastasis. Abstract: *Tumor Biology* 19: 51, 1998, POSTER presentation.

PRESENTATIONS (Other):

Note: * Graduate Student; ** Post-doctoral Fellow; #High-school student; ##Undergraduate

1. **Nair S**, “Role of Functional Food in Diabetes and Insulin Resistance” Institute of Food Technology, New Orleans, Invited Talk, June 20, 2014
2. **Nair S**, “Mammalian Target of Rapamycin and Muscle Growth” Institute of Food Technology, Pre-conference workshop, New Orleans LA, June 20, 2014, Invited Lecture
3. **Nair S**, Nutraceuticals – Industry Academic Partnership” Sabinsa Corporation, New Jersey, May 12, 2014.
4. **Nair S**, Role of mTOR in skeletal muscle growth. International Food Technology Annual Meeting, Chicago, IL, Jul 13-16, 2013, INVITED ORAL presentation.

5. Schilz JR*, Reddy KJ, **Nair S**, Johnson TE, Tjalkens RB, Krueger KP, Clark S. Adsorption of Arsenic by Cupric Oxide Nanoparticles from Uranium In Situ Recovery Bled Water and Effects on Cell Viability. 12th International Conference on Biogeochemistry of Trace Elements, Jun 16-20, 2013, Athens, GA, POSTER presentation
6. **Nair S**, Targeting Cathepsin K in Cardiovascular Disease, Co-InBRE Retreat, Fort Collins, CO, Jan 26, 2013, ORAL presentation.
7. **Nair S**, “Blind Men and the Elephant- Molecular mechanisms of the Insulin-potentiating Effects of Chromium” College of Health Sciences, 19th Annual Research Day, University of Wyoming, Laramie, WY, Apr 12, 2013, ORAL presentation.
8. Hua Y*, Ren J, **Nair S**. Cathepsin K Knockout Alleviates Streptozocin-Induced Cardiac Dysfunction. College of Health Sciences Grand Round and 18th Annual Research Day, University of Wyoming, Laramie, WY, Apr 12, 2012, POSTER presentation.
9. **Nair S**, Chromium in the Treatment of Insulin Resistance: Molecular Mechanisms and Future Directions, University of Alabama, Tuscaloosa, AL, Oct 10, 2012, INVITED ORAL presentation.
10. Panzhinskiy E*, Lapchak PA, Ren J, **Nair S**. Novel neuroprotective curcuminoid alleviates glucose intolerance and improves insulin signaling. College of Health Sciences Grand Round and 18th Annual Research Day, University of Wyoming, Apr 12, 2012, POSTER presentation.
11. Panzhinskiy E*, Vincent JB, Ren J, **Nair S**. A Novel Endogenous Chromium Binding Peptide Augments Glucose Uptake and Insulin Signaling in Myotubes. College of Health Sciences Grand Round and 18th Annual Research Day, University of Wyoming, Laramie, WY, Apr 12, 2012, POSTER presentation.
12. Hua Y*, Xu X*, Shi GP, Ren J, **Nair S**. “Cathepsin K Knockout Attenuates Abdominal Aortic Constriction-Induced Cardiac Hypertrophy” The 4th Biennial National IDeA Symposium, Washington, DC, Jun 25-27, 2012, POSTER presentation. Note: Poster selected for special ORAL presentation.
13. Panzhinskiy E*, Kandadi MR*, Vincent JB, Ren J, **Nair S**. “Insulin-Potentiating Properties of a Novel Endogenous Chromium Binding Peptide” The 4th Biennial National IDeA Symposium, Washington, DC, Jun 25-27, 2012, POSTER presentation.
14. **Nair S**, Role of Cathepsin in Cardiac Dysfunction. Metabolic Disorders Research Consortium Meeting, Seattle, WA, May 17-18, 2012, ORAL presentation.
15. **Sreejayan N**, “Novel Chromium complexes as Insulin Sensitizers” Institute of Food Technologies Meeting, Chicago Jul 17-20, 2010, INVITED ORAL presentation.
16. **Sreejayan N**, “Strategies to Alleviate of Insulin Resistance”, 5th International Symposium on Diet and Health, Niigata, Japan, Oct 30-Nov 1, 2010, INVITED ORAL presentation.
17. **Sreejayan N**, New Generation Chromium Complexes as Insulin Sensitizers, Colorado State University, Fort Collins, CO, Apr 16, 2010, INVITED ORAL presentation.
18. Dolence J**, Hua Y*, Ren J, **Sreejayan N**, “Targeting Cathepsin-K Attenuates Cardiomyocyte Hypertrophy”, CHS Grand-Round, University of Wyoming, WY, Apr 16, 2010, POSTER presentation.
19. **Sreejayan N**, Hua Y*, Kandadi MR*, Ren J. Cross-talk between Endoplasmic Reticulum Stress, Protein-tyrosine Phosphate-1B (PTP-1B) and Insulin Signaling Pathways: Potential Targets for Therapeutic Intervention in Type-2 Diabetes, CHS Grand-Round, University of Wyoming, WY, Apr 16, 2010, POSTER presentation.
20. Thompson E*, Ceylan Isik AF**, **Sreejayan N**, Ren J. The Role of the Apelin Receptors in Obesity-induced Cardiac Dysfunction, CHS Grand-Round, University of Wyoming, WY, Apr 16, 2010, POSTER presentation.
21. Kandadi MR*, Ceylan-Isik A**, Ren J, **Sreejayan N**, Tauroursodeoxycholic Acid Inhibits Obesity-induced Apoptosis in Liver, Western Region COBRE-INBRE Scientific Conference, Big Sky, Montana, Sept 16-19, 2009, POSTER presentation.

22. **Sreejayan N**, Kandadi MR*, Du M, Ren J, Chromium (D-phenylalanine)₃ Alleviates High Fat-Induced Insulin Resistance and Lipid Abnormalities, Western Region COBRE-INBRE Scientific Conference, Big Sky, Montana, Sept 16-19, 2009, POSTER presentation.
23. Hua Y*, Ceylan-Isik A**, Ren J, **Sreejayan N**, ER-Stress Up-regulates Protein-tyrosine Phosphatase-1B in Obesity Western Region COBRE-INBRE Scientific Conference, Big Sky, Montana, Sept 16-19, 2009, POSTER presentation.
24. Hua Y*, Ceylan-Isik AF**, Ren J and **Sreejayan N**. ER-Stress Up-regulates Protein tyrosine Phosphatase-1B in Obesity, CHS Grand Rounds, University of Wyoming, Laramie, WY Apr 4, 2009, Data based, POSTER presentation.
25. Ceylan-Isik AF**, Bui Q#, **Sreejayan N**, The Chemical Chaperon Tauroursodeoxycholic acid Alleviates Cardiac Contractile Dysfunction in Obesity. CHS Grand Rounds, University of Wyoming, Laramie, WY, Mar 27, 2009, POSTER presentation.
26. **Sreejayan N**, Insulin Potentiating Activity of Novel Chromium Complexes, 4th Annual Congress of International Drug Discovery Science and Technology, Dalian, Peoples Republic of China, May 25 - 28, 2006, INVITED ORAL presentation.
27. **Sreejayan N**, "Curcumin Attenuated PDGF-Induced Vascular Smooth Muscle Migration, Proliferation and Collagen Synthesis- Potential Role in Treating Restenosis", Animal Sciences Department Seminar Series, University of Wyoming, Laramie, WY, Sept 10, 2005, ORAL presentation.
28. **Sreejayan N**, Harnessing chromium in the fight against diabetes: 11th Annual College of Health Sciences Research Day (Grand Rounds), University of Wyoming, Laramie WY, Apr 22nd, 2005, ORAL presentation.
29. **Sreejayan N**, Molecular Mechanisms of the Anti-migratory effects of Phosphotyrosine Phosphatase 1B on Aortic Smooth Muscle Cells, Cardiovascular Disease Research Division, J.L. Chambers Biomedical/Biotechnology Research Institute, North Carolina Central University, Nov 3rd, 2004, INVITED ORAL presentation.
30. **Sreejayan N**, Yang X, Palanichamy K, Ontko A.C, Rao MNA, Fang CS, Ren J, A newly Synthetic Chromium Complex - Chromium (phenylalanine)₃ Improves Insulin Responsiveness and Reduces Whole Body Glucose Tolerance. First Annual Symposium of the American Heart Association's Council on Basic Cardiovascular Sciences: Stress Signals, Molecular Targets, and the Genome, Stevenson, WA, Jul 14-18, 2004, POSTER presentation.
31. **Sreejayan N**, Oxidants, Antioxidants and Human Diseases, Molecular Bioscience Department, Pacific Northwestern, National Laboratories, Richland, WA, Sept 24, 2002, INVITED ORAL presentation.
32. **Sreejayan N**, Bile acid, oxidant Stress and Hepatobiliary Diseases, Department of Pharmacology, University of Tennessee, Memphis, TN, Aug 13, 2000, ORAL presentation.
33. **Sreejayan, N.** and von Ritter C Effect of bile acids on lipid peroxidation, Role of iron NATO ASI on DNA Damage and Repair, Cellular Protection and Biological Consequences," Antalya, Turkey, Oct 1997, POSTER presentation

BOOK CHAPTERS

1. Panzhinskiy E*, Culver B, Ren J, **Nair S**. Role of Mammalian Target of Rapamycin (mTOR) in Muscle Growth. In: *Nutrition and Enhanced Sports Performance: Recommendations for Muscle Building*, Eds. Bagchi D, **Nair S**, Sen CK.(eds) Elsevier/Academic Press, 2013, pp 217-227
2. **Sreejayan, N.**, Yang, X**. Isolation and functional studies of rat aortic smooth muscle cells. *Vascular Biology Protocols* Eds. **Sreejayan N** and Ren J, 283-93, 2007, Humana Press, New Jersey.
3. Devasagayam TPA, **Sreejayan N**, Curcumin as Antioxidant. In: *Micronutrients and Health: Molecular Biological Mechanisms*. Eds: Nesaretnam K, Packer, L., pp 42-59, 2001, AOCS Press, IL
4. **Sreejayan N**, von Ritter R. *Bile acids and lipid peroxidation*. *Advances in DNA damage and repair*. Dizdaroglu M; Ed., p 471-472, 1999, Kluwer Academic Press, The Netherlands.

BOOKS EDITED:

1. Nutrition and Enhanced Sports Performance: Recommendations for Muscle Building, Eds. Bagchi D, **Nair S**, Sen CK.(eds), Academic Press ISBN: 978-0123964540; 2013
2. Nutritional and Therapeutic Intervention of Diabetes and Metabolic Syndrome, Eds. Bagchi D and **Sreejayan N**, Elsevier, Academic Press/Elsevier, ISBN: 978-0-12-385084-6; 2012
3. Vascular Biology Protocols (Methods in Molecular Medicine Series), Eds. **Sreejayan N** and Ren J, Humana Press, New Jersey, USA (2007) ISBN: 978-1-58829-870-6; 2007

RESEARCH GRANTS:

Funded Grants:

1. Source: Cepham Pharmaceuticals; Title: Preclinical studies to Assess Efficacy of a Novel Proprietary Formulation Fenfuro[®] to improve insulin sensitivity; Period: 01/03/2014-12/31/2014; Aggregate amount: \$36,000; PI: Nair, S; Type of grant: Research; Status: Ongoing
2. Source: Sabinsa Corporation; Title: Pilot Clinical Trial to Assess Efficacy of a Novel Proprietary Formulation to Augment Insulin Sensitivity; Period: 01/01/2014-12/31/2014; Aggregate amount: \$40,870.00; PI: **Nair, S**; Type of grant: Research; Status: Ongoing
3. Source: UW Program for Reestablishing Research Competitiveness; Title: Targeting Cathepsin K in Heart Disease; Aggregate Amount: 11,000; PI: **Nair S**; Period: 01/01/2014-12/31/2014; Type of grant: Research; Status: Ongoing
4. Source: NIH-InBRE (P20RR016474); Title: Targeting ER-Stress to Alleviate Insulin Resistance; Period: 07/01/2010-4/30/2014; Aggregate amount: \$400,000.00; PI for pilot project: **Nair, S**; PI of InBRE: Ren, J; Type of grant: Research; Status: Ongoing
5. Source: UW-CSU Collaborative Research Grant- ; Title: Pilot Clinical Study Evaluating the Efficacy of a Nutraceutical Novel Formulation to Increase Insulin Sensitivity and Augment Energy Expenditure in Overweight/Obese Human Adults; Aggregate Amount: 100,000; PI: **Nair S** and Bell C; Period: 05/01/2013-04/30/2015; Type of grant: Research; Status: Ongoing;
6. Source: Faculty Grant-in-Aid, University of Wyoming; Title: Novel Endogenous Chromium Binding Peptide Alleviates Insulin Resistance; Aggregate amount: \$7,500; Period: 07/01/2013-06/30/2014, PI: Nair, S; Type of grant: Research; Status: Ongoing
7. Source: NIH InBRE/Bioinformatics: In-silico assessment of the interaction of chromium-binding peptide with insulin receptor; Aggregate Amount: \$5,000; Period: 04/01/2013-03/30/2015; PI: **Nair, S**; Type of grant: Research; Status: Ongoing
8. Source: Iovate Health Sciences; Title: Antiobesity Activity of Novel Proprietary Formulation; Period: 06/01/2011-05/30/2012; PI: **Nair, S**; Aggregate Amount: \$30,000.00; Type of grant: Research; Status: Ongoing
9. Source: University of Washington; Travel award to participate in the “Regional Metabolic Disorders Research Consortium” at Seattle Children’s Research Institute, University of Washington, Seattle, WA, May 17-18, 2012; PI: **Nair, S**; Aggregate Award: \$1200; Type of grant: Travel; Status: Completed
10. Source: College of Health Sciences, University of Wyoming; Title: Targeting apelinergic system in diabetic cardiomyopathy; Aggregate Award: \$3000; Period: 6/01/2012-5/30/2013; PI: **Nair, S**; Type of grant: Research; Status: Completed.
11. Source: College of Health Sciences, University of Wyoming; Title: Targeting Cathepsin K in Obesity Associated Cardiac Contractile Dysfunction. PI: Nair S; Travel grant of \$500 to attend the American Diabetes Association Meeting, 2012; PI: **Nair, S**; Type of grant: Travel; Status: Completed
12. Source: College of Health Sciences, University of Wyoming; Title: Targeting Cathepsin-K in Cardiac Hypertrophy; Aggregate Amount: \$ 7,500; Period: 07/1/2010-06/30/2011; Type of grant: Research; PI: **Nair, S**; Status: Completed.

13. Source: Interhealth Nutraceuticals; Title: Novel Chromium Amino Acid Complexes as Insulin Sensitizers, Aggregate Award: \$65,000; Period: 07/01/2009-06/30/2011, PI: **Sreejayan, N**; Type of grant: Research; Status: Completed.
14. Source: American Diabetes Association, Junior Faculty Award (AMDIAB47595); Title: Chromium Phenylalanine as Insulin Sensitizer; Period: 07/01/2005-06/30/2008; Aggregate Amount: \$400,341.00; PI: **Sreejayan, N**; Type of grant: Research; Status: Completed.
15. Source: National Institutes of Health (NIH PA03-053-1R15AT002903-01); Title: Novel chromium complex improves insulin-signaling; Aggregate Amount: \$213,000.00; Period 07/01/2005-06/30/2007; PI: **Sreejayan, N**; Type of grant: Research; Status: Relinquished due to overlap with ADA grant
16. Source: NASA, EPSCoR (NASA41150PHRM); Title: Insulin Resistance in Space Flight; Period of funding: 07/01/2006-12/31/2007; Aggregate Amount: \$42,150.00; PI: **Sreejayan, N**; Type of grant: Research; Status: Completed.
17. Source: Wyoming NASA Space Grant Consortium; Title: Insulin-resistance under micro-gravity conditions; Aggregate Amount: \$10,000.00. Period: 06/01/2005-12/30/2005; PI: Sreejayan, N; Type of grant: Research; Status: Completed.
18. Source: National Institutes of Health COBRE (DHHSNIHLC3910); Title: Spatiotemporal Nitric Oxide Gradients; Aggregate: \$247,000.00; Period: 01/12/2002– 06/30/2005; PI: **Sreejayan, N** (pilot project); PI of COBRE: Rose, J; Status: Completed.
19. Source: AHA Southeast Affiliate Post-doctoral fellowship (0020397B); PI: **Sreejayan, N**; Mentor: Hassid A. Title: Nitric Oxide and Insulin Signaling; Aggregate Amount: 60,000 Period of funding: 06/01/00-07/30/02; Status: Completed

Funded Grants (as collaborator):

1. Source: Wyoming Legislature's In-Situ Recovery of Uranium Research Program Title: Use of nanoparticles to extract contaminants such as arsenic from production bleed water, and to determine extraction efficacy using in-vitro cell-based toxicological test systems; Aggregated amount: 150,000; Period: 07/1/2010-06/30/2014; PI: Clark S; CoPIs: Reddy KJ, **Nair S**, Schilz S, Johnson T, Tjalkens R, Type of grant: Research; Status: Ongoing.

Funded Grants (as a mentor):

1. Source: Wyoming EPSCoR; Title: Role Cathepsin K in Vascular Calcification, Applicant: Cai, S (PharmD student); Period: 01/01/2014-05/31/2014; Aggregate Amount: \$750; Status: Ongoing
2. Source: Wyoming EPSCoR; Title: Role of MIF in the Heart, Applicant: Ren, S (Pre-pharmacy student); Period: 01/01/2014-05/31/2014; Aggregate Amount: \$750; Status: Ongoing
3. Source: College of Health Sciences, UW; Title: Role of Cathepsin K in Cardiovascular Disease Aggregate Amount: \$2000.00. Period: 01/01/2012-06/30/2012; PI: Hua Y (graduate student, Type of grant: Research; Status: Completed.
4. Source: Wyoming EPSCoR; Title: Modulation of cardiomyocyte apoptosis by cathepsin K Kinases; Applicant: Davinson D (PharmD student); Period: 08/01/12-06/2013; Aggregate Amount: \$600; Status: completed
5. Source: Wyoming EPSCoR; Title: Effects of Chromium Complexes on cAMP-mediated Kinases; Applicant: Maris JR (Pharm D student); Period:08/01/05-12/01/05 Aggregate Amount: \$600, Status: completed
6. Wyoming EpSCoR; Title: Inhibition of PDGF-signal by Curcumin in Rat Aortic Smooth Muscle Cells; Applicant: Storey J (undergraduate student); Period:08/01/04-12/01/04; Aggregate Amount: \$600, Status: completed
7. Source: University of Wyoming College of Health Research Committee ; Title: Anti-migratory effects of curcumin; Applicant: Yang X (post-doctoral fellow), Aggregate Amount: \$2,500.00; Period: 01/01/04-06/30/05; Status: completed

Grant applications under review:

1. Agency: The Iacocca Foundation; Title: Targeting Apelinergic Signaling in Diabetic Cardiomyopathy, Amount: \$148,685.00; Period: 06/01/2014-05/30/2016, Submitted on 01/30/2014
2. Source: NIH, R15; Title: Role of Apelin in Diabetic cardiomyopathy; PI: **Nair S**; Period: 01/01/2013-12/31/2017; Aggregate Award: 353,750.00 Status: A1 application submitted on 6/25/13, Original submission received a priority score of 32.
3. Source: NIH, R01; Title: Structure and insulin potentiation activity of chromium-binding peptide; Multi-PI: **Nair S** and Vincent JB and; Period: 1/01//2014-12/31/2018; Amount: 800,000; Status: under review
4. Source: NIH R01; Title: PUFA Metabolism and Phospholipid Remodeling in Heart Failure; PI: Chicco, A. Collaborator: Nair, S. Subcontract Award: \$207,725.00 Status: under review.

PROFESSIONAL MEMBERSHIP AND ACTIVITIES:**Professional Membership**

- 2003-present : American Heart Association
- 2004-present : American Diabetes Association
- 2014-present : American Society of Pharmacology and Experimental Therapeutics

Grant Reviewer (ad hoc)

- 2014 : Government of Ontario Early Researcher Award (Ad hoc)
- 2014 : Diabetes UK- Ad hoc
- 2013 : American Heart Association, ATVB Study Section
- 2013 : European Diabetes Association
- 2013 : Study Section Member, National Center for Advancing Translational Sciences Special Emphasis Panel, TRND – 3 ZTR1 DPI-6 (01)
- 2011 : InBRE Summer Undergraduate Proposal Review (17 proposals)
- 2010-present : Institute of Translational Health Sciences, University of Washington
- 2010 : United Kingdom Diabetes Association
- 2011 : UW/NIEHS Center for Ecogenetics and Environmental Health
- 2009-11 : Natural Sciences and Engineering Research Council (Discovery Grant), Canada
- 2009 : Review (external prior to submission) of University Nevada COBRE proposal
- 2007 : UW Agricultural Experiment Station's competitive grants program
- 2006 : American Diabetes Association

Editorial Board:

- 2009-present : International Journal of Physiology, Pathophysiology and Pharmacology
- 2010-present : Recent Patents in Cardiovascular Drug Discovery

Book Proposal Review:

1. Preformulation Concepts for Formulation Development, Wiley Blackwell
2. Obesity: Epidemiology, Pathophysiology, and Prevention, Taylor and Francis Group/CRC Press

Other Service (National):

1. Invited to Participate in the Foreign Pharmacy Graduate Equivalency Examination® and the Pharmacy Curriculum Outcomes Assessment, conducted by the *National Association of Boards of Pharmacy*, 24-25, 2013, Mount Prospect, IL.

Manuscript reviewer (ad-hoc)

American Journal of Physiology – Heart and Circulatory Physiology (4)
American Journal of Physiology - Lung Cellular and Molecular Physiology (2)
American Journal of Physiology– Endocrine and Metabolism (5)
American Journal of Physiology- Renal Physiology (1)
Atherosclerosis Thrombosis and Vascular Biology (2)
BBA - Molecular Basis of Disease (7)
Biochemical Pharmacology (6)
Biology and Medicine (1)
Bioorganic and Medicinal Chemistry (1)
Circulation Research (3)
Clinical and Experimental Pharmacology and Physiology (1)
Critical Reviews in Biochemistry & Molecular Biology (1)
Diabetes (2)
Diabetes and Metabolism Research Reviews (2)
Diabetes Spectrum (1)
Diabetologia (6)
Drug and Chemical Toxicology (2)
Endocrine (2)
Environmental Toxicology and Pharmacology (2)
European Journal of Nutrition (3)
European Journal of Pharmacology (2)
Experimental Physiology (3)
Free Radicals in Medicine and Biology (4)
Hypertension (2)
International Journal of Biological Sciences (1)
Journal of Agriculture and Food Chemistry (1)
Journal of American College of Nutrition (8)
Journal of Applied Physiology (3)
Journal of Inorganic Biochemistry (8)
Journal of Cardiovascular Pharmacology and Therapeutics (1)
Journal of Functional Foods (13)
Life Sciences (6)
Journal of Translational Medicine (1)
Molecular Nutrition and Food Research (2)
Obesity (2)
International Journal of Biological Sciences (1)
International Journal of Biological Macromolecules (2)
International Journal of Nutrition and Metabolism (1)
International Journal for Recent Patents on Endocrine Metabolic & Immune Drug Discovery (1)
Mini-Reviews in Medicinal Chemistry (1)
Neurosignals (1)
Vitamin and Nutrition Research (1)
Pharmacological Report (1)
Physiological Genomics Planta Medica (1)
PLoS One (7)
Recent Patents on Cardiovascular Drug Discovery (4)
Toxicology Mechanisms and Methods (5)
Trends in Cardiovascular Medicine (2)

PATENT

1. Nair Sreejayan, Jun Ren, Xiaoping Yang (2007) Application of Chromium-amino acid complexes in the treatment of diabetes and other diseases (US Patent # 7,271,278 B2). The patent has been licensed to a Pharmaceutical Company for product development.

POST-DOCTORAL FELLOWS:

1. Yang, Xiaoping, Ph.D. Post-doctoral fellow, 12/2003-06/2006 ; Current Affiliation: Assistant Professor, Department of Stem Cell Biology and Regenerative Medicine, Cleveland Clinic, OH, USA
2. Dong, Feng, Ph.D., Post-doctoral fellow, 12/2009-3/2011; Current Affiliation: Assistant Professor, Department of Stem Cell Biology and Regenerative Medicine, Cleveland Clinic, OH, USA
3. Ceylan Isik, Asli F., Post-Doctoral Fellow, 06/2008-07/2011; Current Affiliation: Assistant Professor, Ankara University Faculty of Pharmacy, Department of Pharmacology, Ankara, Turkey
4. Janardhanan, Rajiv Ph.D., Post-doctoral fellow, 6/2004-4/2005; Current Affiliation: Prof & Head, Department of Vascular Biology, Ameti University, New Delhi, India
5. Palanichamy, Kamalakannan PhD., Post-doctoral (part-time), 06/2005-7/2006; Current Affiliation: Assistant Professor, Radiation Oncology, James Cancer Centre, The Ohio State University Medical School, Columbus, OH, USA
6. Warriar, Ajaya S. PhD, , 08/2006-01/2007; Current Affiliation: Laboratory Director, University of West Virginia, Morgantown, WV, USA

GRADUATE/MASTERS/UNDERGRADUATE RESEARCH COMMITTEE:

1. Choi KJ, Title: Prophyryns as spectroscopic sensors for biomolecular and environmental Sensing” Advisor: Dr. Balaz; Role: External Committee Member; Program: Chemistry, Graduated 06/06/14
2. Wolff MA, Title: mRNA transcripts in MI; Advisor: Stayton, M. Role: Committee member; Program: MS in Molecular Biology, Ongoing
3. Dingess, PM, Title: Role of Cathepsin K in neurobehavioral aspects. Advisor: Brown, T; Role: Committee Member, Program: Graduate Program in Neurosciences, Ongoing
4. Panzhinskiy E; Committee Chair: Nair S; Program: Molecular and Cellular Life Sciences Graduate Program; Dissertation title: ER Stress in Cardiovascular Disease; Status: Completed, May 2013; Current Affiliation: Post-Doctoral Fellow (Dr. James Johnson’s Lab), Diabetes Research Group Laboratory of Molecular Signalling in Diabetes, University of British Columbia, Vancouver, Canada
5. Pitynski, D. Committee Chair: Skinner D, Graduate Neurosciences Program; Dissertation title: Link Between high-salt diet and reproduction; External Committee Member: Nair S. Status: Ongoing
6. Lu Z; Committee Chair: Fox J; Committee member: Nair S; Graduate Neurosciences Program; Title: Role of metals in Huntington’s disease, Program: Graduate Neurosciences Program; Status Ongoing.
7. Hua Y; Committee Chair: Nair S; Program: Biomedical Graduate Science; Dissertation title: Role of Cathepsin K in Heart Failure. Status: Ongoing
8. Wang, C; Committee Chair: Ren, J; Co-chair: Nair S: Program: Molecular and Cellular Life Sciences Graduate Program; Dissertation title: TBD; Status: Ongoing
9. Koratala, M; Committee Chair: Patrick Johnson; Program: Program: Molecular and Cellular Life Sciences Graduate Program; Thesis title: ER Stress in Cardiovascular Disease; Status: Ongoing Biomedical Sciences Graduate Sciences: Dissertation: Three dimensional growth and mobility of vascular smooth muscle cells. Status: Ongoing.
10. Xu X; Chair: Ren J; Committee Member: Nair, S, Program: Biomedical Graduate Sciences; Dissertation Title: Autophagy and cardiovascular disease; Status: Completed, May 2013
11. Xue Y; Chair: Zhu M, Committee Member: Nair, S; Program: Masters in Nutrition and Immunology; Dissertation: TNF- α signaling in bacterial infection of gut; Status: Graduated, 2013
12. Zhang H; Chair: Zhu M; Committee member: Nair S; Program: Molecular and Cellular Life Sciences; Dissertation: Toll-like receptor signaling in the gut; Status: Graduated, 2013
13. Schlitz J; Chair: Clark S; Committee Member: Nair, S; Program: Biomedical Graduate Sciences, Dissertation: Use of nanoparticles to extract contaminants such as arsenic from production bleed water, and to determine extraction efficacy using in-vitro cell-based toxicological test systems; Status: Ongoing

14. Topchiy E; Chair: Lehmann TE; External committee member: Nair, S; Program: Chemistry Title: Structural studies of the peptides/Ab-complex of malarial parasite; Status: Ongoing
15. Toh-Boyo GM; Chair: Dutta D; External Committee Member: Nair, S; Program: Chemistry Dissertation title: Flow-Counterbalanced Capillary Electrophoresis, Status: Graduated, 2013
16. Li Y, Chair: Lehmann T; External Committee Member: Nair, S; Program: Chemistry; Dissertation title: Study of metalol-bleomycin complexes through NMR and molecular dynamics; Status: Completed, 2012
17. Roe ND, Chair: Ren J; Committee Member: Nair, S; Molecular and Cellular Life Sciences Graduate Program, Committee; Dissertation title: eNOS uncoupling in the Heart; Status: Completed, Feb 2013
18. Yanagisawa N, Chair: Dutta D; External Committee Member: Nair, S; Program: Chemistry Dissertation title: Miniaturization of Flow-Counterbalanced Capillary Electrophoresis; Status: Graduated, August 2013
19. Yan Xu; Chair: Du M; Co-chair: Sreejayan N, Program: Molecular and Cellular Life Sciences Graduate Program, Dissertation title: Obesity, insulin signaling and fetal programming; Status: Graduated, July 2011
20. Dane J, Chair: Flynn W; Committee Member: Nair, S; Program: Graduate Neurosciences Program, Dissertation title: Neurokinin signaling Status: Completed: June 2011
21. Huang Y; Chair: Du M; External committee member: Nair, S; Program: Animal Sciences; Dissertation title: Maternal obesity and fetal programming; Status: Completed, June 2012
22. Nurmat T, Chair: Ford S; External committee member: Nair, S; Program: Molecular and Cellular Life Sciences; Thesis title: Maternal obesity and fetal programming; Status: Graduated, 2012
23. Tong J; Chair: Du M; External Committee Member: Nair, S; Program: Molecular and Cellular Life Sciences Graduate Program, Dissertation title: Maternal Obesity, AMPK and Fetal Skeletal Muscle Development, Status: Graduated, January 2010
24. Jiao Y; Chair: Sun Q, Committee member: Nair, S; ; Program: Graduate Neuroscience Program, Dissertation title: Activity-dependent Plasticity of Neocortical Inhibitory Networks, Status: Graduated, 2012
25. Zhang L; Chair: Ford S; Committee Member: Nair, S; Dissertation title: Effect of maternal obesity on fetal pancreatic development; Program: Animal Sciences Graduate Program; Status: Graduated, June 2010
26. Kandadi M, Chair: Unnikrishnan MK; Co-chair: Nair, S; Program: Pharmaceutical Sciences (Manipal University); Dissertation title: Antidiabetic activity of a novel AMPK-activator DHPO; Status: Graduated, July 2010
27. Xiaochun Z, Chair: Culver B; Committee member: Nair, S; Program: Graduate Neurosciences Program; Dissertation title: Obesity induced neuronal inflammation; Status: Graduated, February 2007
28. Jain S, Chair: Bruce MA; External committee member: Nair, S; Dissertation title: Math Anxiety in Elementary School kids, Program: Education; Status: Graduated, June 2005
29. Brown K, Chair: Thomas DP; External committee member: Nair, S; Program: MS in Kinesiology and Health, Dissertation title: Does gender affect cardiac AMPK activation in response to exhaustive Exercise? Status: Graduated, July 2012
30. Adetoye, M; Chair: Skinner D; Committee member: Nair, S; Program: Graduate Neurosciences Program; Dissertation title: Regulation of Photoperiodic Prolactin Secretion; Status: Graduated, August 2009
31. Kuzmanov AP; Chair: Broughton S; External committee member: Nair, S; Program: Master of Science in Food Science and Human Nutrition; Dissertation title: Do omega-3 fatty acids affect hormones related to polycystic ovary syndrome infertility?; Status: Graduated, July 2009
32. Armstrong CJ; Chair: Thomas DP; External committee member: Nair, S; Program: MS in Kinesiology and Health; Dissertation title: Role of AMPK in exercise training; Status: Graduated, July 2010

33. Waggy E; Chair: Thomas D; External committee member: Nair, S; Major: MS in Kinesiology and Health; Dissertation title: AMPK in exercise training; Status: Graduated, December 2010
34. Fang CF; Chair: Ren J; Committee member: Nair, S; Program: MS in Zoology-Physiology
Dissertation Title: Aldehyde dehydrogenase in the heart; Status: Graduated, June 2005

UNDERGRADUATE/HIGH SCHOOL/SUMMER STUDENT ROTATIONS:

1. Olivia Rogers, Undergraduate, Zoology Physiology Program, 08/01/2013-
2. Songling Cai, PharmD. Student, 12/01/2013-
3. Sidney Ren, High School Student, 06/01/2013-
4. Dawn Davison 01/11/2012-
5. Danielle Obando, High School student, Summer 2013
6. Esmeralda Soto, High School student, Summer 2013
7. Kaycee Perez, High School student, Summer 2012
8. Alexzandria Steiner, High School student, Summer 2012
9. Haoyu Zhao, Undergraduate student (Nursing Program), 02/2010-06/2010
10. Nandini Chitoor, Graduate Student Rotation, 08-11/2010
11. Archit Bhise, High School student, 06-07/2008
12. Jessica Caps, High School student, 06-07, 2006
13. Shantelle Fritz, High School student, 06-07/2009
14. Leah Kyle, Graduate student rotation, 08/06-10/06
15. Allison Lauwers, Pharm D. Student, 12/2003-6/2004
16. Lindsey Poppe, Pharm D., student, 08-12/2008
17. Jacalyn Rose Maris, Undergraduate, 8/2005-01/2006
18. Mhd Reza, Haraz, High school student, 08-10/2008; (won first place in Wyoming State Fair)
19. Shalini Ramanan,, High school student, 10-12/20092009 (Received \$ 10,000 from Davidson Institute for her excellence in research- amount paid toward tuition at Brown University and coauthored a paper)
20. Joshua Storey, Undergraduate Student, 1/2004-6/2005
21. Matthew Stratton, Undergraduate, 08-12/2006

EXAMINER FOR FOREIGN UNIVERSITIES:

1. PhD Thesis Evaluation. Candidate: Menezes CM, "Phytochemical and Pharmacological Investigation of fruits of Ficus glomerata Roxb. and Syzygium Cumini Linn." Nitte University, India
2. External Examiner for the University of West Indies, ST. Augustine, Trinidad and Tobago, West Indies (Fall and Spring Semester) for Pharmacology (PHAR2209) and Applied Therapeutics II (PHAR 3206) exams (2010-date)
3. PhD. Dissertation: "Role of Protein Tyrosine Phosphatase SHP2 in Chronic Hyperinsulinemia Induced Endothelial Inflammation" Indian Institute of Technology, Chennai, India. Title of the thesis, Jan 2, 2014
4. PhD Dissertation: Evaluation of Drug-Drug Interactions and Drug-Induced Hepatotoxicity Using In-Vitro Methods" Indian Institute of Technology, Bombay, India, 2012
5. PhD Dissertation: "Novel Method of Standardization of a Traditional Drug Terminalia Chebula Retz Using Fuzzy Logic and Modern Analytical Tool Coupling", Birla Institute of Technology, Mesra, Ranchi India.
6. PhD Dissertation: "Antioxidant, Antiinflammatory and Phytochemical Screening of Important Plants Used as Immunomodulators" Manipal Academy of Higher Education, Manipal, India
7. PhD Thesis: "Synthesis and characterization of substituted Cinnoline derivatives", Vinayaka Mission University, Tamil Nadu, India

TEACHING:

Note: Courses were team taught; I taught ~50% of the lectures in Fall and Spring sessions of the pharmacology lecture (PHCY 6230 and PHCY 6231). I also serve as the course coordinator for

Pharmacology I (PHCY 6230) and Biomedical Sciences Seminar (BMS 5985). Additionally, I served as a course-coordinator for the Seminars in Neurosciences course ZOO 5715. As an adjunct faculty of the Graduate Neurosciences Program, I routinely participate in the Seminars in Neurosciences Course which is scheduled every Monday from 5.00-7.00 p.m. both in the Fall and Spring Semesters (not included in the list below). About 15 graduate and masters students attend these seminars.

Course Number	Course Name	Year	Credit Hours	Number of Students
PHCY 4470	Fundamentals of Pharmacology	2014	4	106
BMS5980	Dissertation Research	2014	1	2
BMS 5985	Biomedical Sciences Seminar	2014	1	6
PHCY 6231	Pharmacology II	2014	4	45
BMS 5985	Biomedical Sciences Seminar	2013	1	8
PHCY6230	Pharmacology I	2013	4	50
BMS 5985	Biomedical Sciences Seminar	2012	1	8
ZOO5715	Seminars in Neurosciences	2012	1	15
PHCY6312	Clinical Toxicology	2012	4	48
PHCY6230	Pharmacology I	2012	4	50
PHCY6231	Pharmacology II	2012	4	50
PHCY6312	Clinical toxicology	2012	4	50
PHCY6230	Pharmacology I	2011	4	50
PHCY6231	Pharmacology II	2011	4	45
BMS 5985	Biomedical Sciences Seminar	2011	1	6
PHCY6550	Adv. Cardiovascular Physiology & Pharmacology	2011	3	07
PHCY6230	Pharmacology I	2010	4	50
PHCY6231	Pharmacology II	2010	4	50
PHCY6312	Clinical toxicology	2010	4	50
PHCY6230	Pharmacology I	2009	4	50
PHCY6231	Pharmacology II	2009	4	50
PHCY6312	Clinical toxicology	2009	4	50
PHCY6230	Pharmacology I	2008	4	50
PHCY6231	Pharmacology II	2008	4	50
PHCY6312	Clinical toxicology	2008	4	50
PHCY6102	Biopharmaceutics and Pharmacokinetics	2008	4	50
ANSC5061	Cell Signaling	2008	3	08
PHCY6230	Pharmacology I	2007	4	50
PHCY6231	Pharmacology II	2007	4	50
PHCY6312	Clinical toxicology	2007	4	50
HM 6520	Molecular and Cellular Basis of Diseases	2007	4	10
PHCY4470	Pharmacology	2007	4	30
PHCY6230	Pharmacology I	2006	4	50
PHCY6231	Pharmacology II	2006	4	50
PHCY6312	Clinical toxicology	2006	4	50
HM 6520	Molecular and Cellular Basis of Diseases	2006	4	10
PHCY4470	Pharmacology	2006	4	30
PHCY6230	Pharmacology I	2005	4	50
PHCY6231	Pharmacology II	2005	4	50
PHCY6312	Clinical toxicology	2005	4	50
HM 6520	Molecular and Cellular Basis of Diseases	2005	4	10
PHCY4470	Pharmacology	2005	4	30
PHCY6230	Pharmacology I	2004	4	50
PHCY6231	Pharmacology II	2004	4	50

PHCY6312	Clinical toxicology	2004	4	50
HM 6520	Molecular and Cellular Basis of Diseases	2004	4	10
PHCY4470	Pharmacology	2004	4	30
PHCY6230	Pharmacology I	2003	4	50
PHCY6231	Pharmacology II	2003	4	50
PHCY6312	Clinical toxicology	2003	4	50
HM 6520	Molecular and Cellular Basis of Diseases	2003	4	10
PHCY4470	Pharmacology	2003	4	30

CONTINUING EDUCATION (provided to others):

1. Sreejayan N, Antibiotics in Dental Practice, Wyoming Dental Association Meeting, Laramie, WY, June 19, 2013 (oral)
2. Overview of antibiotics, Pharmacy Reflective Week, 2006

ADVISING:

Year	Number of Advisees
2013	12 (Pharm. D)
2012	8 (Pharm. D)
2010	6 (Pharm. D)
2009	9 (Pharm. D)
2008	8 (Pharm. D)
2007	8 (Pharm. D)
2006	6 (Pharm. D)
2005	8 (Pharm. D)
2004	6 (Pharm. D)
2003	8 (Pharm. D)

UNIVERSITY SERVICE:

University of Wyoming

- 2012- : Director, Biomedical Sciences Graduate Program
- 2010- : Member, Graduate Council
- 2010 : External Member, Molecular Biology Faculty Search Committee
- 2008- : Director, Center for Cardiovascular Research and Alternative Medicine
- 2009- : Member, Institutional Animal Care and Use Committee*
- 2008 : External Member, Faculty Search Committee, Comparative Physiology
- 2007 : External Member, Faculty Search Committee, Chemistry Department
- 2006 : Ad-hoc member, Biology Curriculum Development Committee
- 2006-09 : Admission Committee, Molecular and Cellular Life Sciences Graduate Program

(*Involves inspection of facilities and reviewing of protocols. The number of protocols to review has substantially increased during the recent years e.g. Seventy-three new and revised protocols were reviewed for the period Jan-Jun 2013)

College of Health Sciences

- 2008- : Ad-hoc member, Advisory Committee Microscopy Core Facility
- 2005 : Microbial Biology Content Committee (ad-hoc)

Division/School

- 2014 : Member, Pathophysiology Faculty Search Committee
- 2013 : Ad hoc Member, Medicinal Chemistry Faculty Search Committee
- 2012 : Ad hoc External Member, Molecular Biology Faculty Search Committee

2011- : Member, Curriculum and Instruction Committee
2011 : Member, Toxicology Faculty Search Committee
2010 : Chair, Pharmaceutics Faculty Search Committee
2008- 10 : Chair, Space and Equipment Committee
2007-08 : Member, School of Pharmacy, Curriculum Development Committee
2007-08 : Member, School of Pharmacy, Students Affair Committee
2007 : Member, Toxicology Faculty Search Committee
2003-07 : Member, Space and Equipment Committee
2003 : Member Animal Care subcommittee