

CURRICULUM VITAE

Ramani Ramchandran PhD

Professor
Department of Pediatrics
Division of Neonatology

OFFICE ADDRESS:

Children's Research Institute
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Milwaukee, WI 53226

EDUCATION:

1987 - 1990 B.Sc. (Biochemistry and Microbiology), SIES College, University of Bombay
1990 - 1992 M.Sc. (Biochemistry), SIES College, University of Bombay
1992 - 1997 Ph.D. (Biochemistry and Molecular Biology), Medical College of Georgia, Augusta, GA

POSTGRADUATE TRAINING AND FELLOWSHIP APPOINTMENTS:

1997 - 2002 Research Fellow, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA

FACULTY APPOINTMENTS:

2002 - 2006 NCI Scholar, Laboratory of Pathology, Center for Cancer Research, NCI, NIH, Rockville, MD
2007 - 2012 Associate Professor, Primary: Department of Pediatrics, Children's Research Institute, Medical College of Wisconsin, Milwaukee, WI
2007 - Present Associate Professor, Secondary: Department of Cell Biology, Neurobiology and Anatomy, Medical College of Wisconsin, Milwaukee, WI
2012 - Present Professor (with Tenure), Pediatrics, Medical College of Wisconsin

ADMINISTRATIVE APPOINTMENTS:

2007 - Present Director, Developmental Vascular Biology Program, Medical College of Wisconsin, Milwaukee, WI

AWARDS AND HONORS:

2001 - Present Ruth L. Kirchstein NRSA Award
2002 - Present NCI Scholar Award
2004 - Present Nominated for Outstanding Mentor Award, NCI, NIH
2010 - Present Donald and Judith Alstadt Research Foundation Award
2012 - Present Clinical & Translational Science Institute – In Recognition of Outstanding Contributions to the Master of Science Program in Clinical & Translational Science, Medical College of Wisconsin
2013 - Present Distinguished Alumnus Award, Medical College of Georgia

MEMBERSHIPS IN HONORARY AND PROFESSIONAL SOCIETIES:

American Association for the Advancement of Science (Past)
American Association for Cancer Research (Past)
American Society of Gene Therapy (Past)
Society for Developmental Biology
Association for Laboratory Automation
North American Vascular Biology Association
American Association of Anatomists

EDITORSHIPS/EDITORIAL BOARDS/JOURNAL REVIEWS:

Editorial Board

Indian Journal of Clinical Medicine
PLoS ONE
Vascular Cell

Journal Review

Archives of Biochemistry and Biophysics
FASEB
Journal of Biological Chemistry
Journal of Nanobiotechnology
Molecular Cancer Research
Molecular and Cellular Biochemistry
Clinical Chemistry
Physiological Genomics
Nature
Blood
Journal of Cellular and Molecular Medicine
BMC Developmental Biology
Molecular Cancer
Circulation Research
PLoS ONE
Neurotoxicology and Teratology
ATVB
Trends in Cardiovascular Medicine
Molecular Cancer Research
PNAS
Journal of Proteomics
Zebrafish
Brain Disorders & Therapy
Scientific Reports
Cancer Research

LOCAL/REGIONAL APPOINTED LEADERSHIP AND COMMITTEE POSITIONS:

2009 - 2011 Member/Grant Reviewer, Research Affairs Committee, Medical College of Wisconsin, Milwaukee, WI
2009 Poster/Abstract Reviewer, MCW Research Day, Medical College of Wisconsin, Milwaukee, WI
2009 - 2011 Reviewer/Ad Hoc Member, Cancer Center Research Grants Committee, Medical College of Wisconsin, Milwaukee, WI
2010 Reviewer, 2010 Pilot Research Innovative Awards (PIR), Children's Research Institute, Milwaukee, WI
2011 Member/Grant Reviewer, Women's Health Research Program Steering Committee, Medical College of Wisconsin, Milwaukee, WI
2011 Grant Reviewer, Digestive Disease Center, Medical College of Wisconsin, Milwaukee, WI
2019 Reviewer, 2019 CRI Multi-Year Innovative Research Grants, Medical College of Wisconsin, Milwaukee, WI
2019 Poster Judge, Cardiovascular Center Retreat 2019, Medical College of Wisconsin, Milwaukee, WI
2019 Poster Judge, Annual Graduate School and Postdoc Research Poster Day, Medical College of Wisconsin, Milwaukee, WI

NATIONAL ELECTED/APPOINTED LEADERSHIP AND COMMITTEE POSITIONS:

2003 Ad Hoc Grant Reviewer, K series, National Institute of Heart, Lung and Blood, Bethesda, MD
2003 - 2004 Special Emphasis Panel Member, R series, Cardiovascular Disease Study Section, National Institutes of Health, Bethesda, MD
2007 Reviewer, National Science Foundation Proposal, Developmental Systems Program, National Science Foundation, Arlington, VA
2008 Ad-Hoc Reviewer, Lytmos Group Inc.
2008 Reviewer, NIH Study Section, SBIR /STTR ZRG1-CB-D, Cell Biology applications, Asynchronous Electronic Discussion, National Institutes of Health, Bethesda, MD
2009 Special Emphasis Panel Reviewer, ZRG1 MOSS-C02 AED, Asynchronous Electronic Discussion,

National Institutes of Health, Bethesda, MD
2009 Ad-Hoc Reviewer, Vascular Cell and Molecular Biology Study Section, National Institutes of Health, Bethesda, MD
2009 Reviewer and Alternate Chair, NIH Study Section, SBIR/STTR, Cell Biology/Instrumentation, Asynchronous Electronic Discussion, National Institutes of Health, Bethesda, MD
2009 Reviewer, Challenge Grant Reviews, National Institutes of Health, Bethesda, MD
2009 Grant Reviewer, Spring 2009 R4 Basic Cell & Molecular Biology 3 Committee, American Heart Association
2009 Grant Reviewer, NIH Study Section, SBIR/IMST-16, Cell Biology, Center for Scientific Review, National Institutes of Health, Bethesda, MD
2010 Ad-Hoc Reviewer, 2010/10 ZRG1 IMST-J (16) B Small Business: Cell Biology and Molecular Imaging -- Study Section (Cell Biology & Molecular Imaging), NIH
2010 Grant Reviewer, Vascular Cell and Molecular Biology Study Section, National Institutes of Health, Bethesda, MD
2010 Chair, Hybrid Symposium Session, 2010 AAA Annual Meeting, Anaheim, CA
2011 Grant Reviewer, Mayo Alzheimer's Disease Research Center, Rochester, MN
2011 - 2017 Chartered Member, Vascular Cell and Molecular Biology (VCMB) Study Section, National Institutes of Health, Bethesda, MD
2011 Member, Vascular Cell and Molecular Biology Study Section, Center for Scientific Review, National Institutes of Health, Bethesda, MD
2011 Grant Reviewer, ZRG1-IMST-J (16) Small Business: Cell Biology and Molecular Imaging Study Section Review, National Institutes of Health, Bethesda, MD
2012 - Present PPG Reviewer, NHLBI
2012 - Present Grant Reviewer, RFA CA 11-011 R1) and 012 (R21) Research Answers to NCI's, NIH
2012 - Present Grant Reviewer, IMST (15) Small Business: Cell, Molecular and Computational Biology, NIH

INVITED LECTURES/WORKSHOPS/PRESENTATIONS:

International

Enigma of long-non-coding RNA in Vertebrate Biology. The Chinese University of Hong Kong, Hong Kong, China, 2010 - Present
Developmental vasculogenesis mechanisms during embryogenesis and disease in vertebrates. Beihang University of Aeronautics and Astronautics, Beijing, China, 2010 - Present
Developmental vasculogenesis mechanisms during embryogenesis and disease in vertebrates. Department of Biology and Center for Chinese Medicine, Hong Kong University of Science and Technology Clear Water Bay Road. Hong Kong, China, 2010 - Present
Vasculogenesis mechanisms during vertebrate embryonic development. AU-KBC Research Centre, Anna University, Chennai, India, 2011 - Present
Tools for a Successful Career in Science. K.J.Somaiya College of Science and Commerce, Somaiya Vidyavihar Complex, Vidyavihar-East, Mumbai, India, 2011 - Present
The role of matrix in tumor metastasis, CSIR-Indian Institute of Chemical Technology, Hyderabad, India, 2013

National

Anti-angiogenic function of two collagen molecules: Endostatin and Restin. National Institutes of Health, Bethesda, MD, 2002 - Present
Anti-angiogenic function of two collagen molecules: Endostatin and Restin. Department of Gastroenterology, BIDMC-Harvard Medical School, Boston, MA, 2002 - Present
Signaling mechanisms of collagen fragments during angiogenesis and embryogenesis. National Institute of Child Health and Development, Bethesda, MD, 2003 - Present
Studying angiogenesis and neurogenesis in zebrafish. National Cancer Institute, Rockville, MD, 2003 - Present
Roundabout4's function and signaling mechanisms in vertebrate vascular development. Gordon Conference on Angiogenesis and Microcirculation, Newport, RI, 2004 - Present
Conservation of mechanism across neural and vascular development in zebrafish. NIDCR, NIH, Bethesda, MD, 2004 - Present
Mechanism conservation across neural and vascular development in zebrafish. RexAhn Corporation, Rockville, MD, 2004 - Present

Functional role of Robo4 gene in zebrafish development. National Cancer Institute, Bethesda, MD, 2004 - Present

Signaling cue for vascular development from axon guidance gene family. University of Kentucky, Lexington, KY, 2005 - Present

Robo4 signaling cues in vascular development. Vascular Biology Faculty and HIF Retreat, Gaithersburg, MD, 2005 - Present

Robo guidance cues in vascular development. Emory University, Atlanta, GA, 2005 - Present

Axon guidance gene function in vertebrate vascular development. National Institute of Standards and Technology, Gaithersburg, MD, 2006 - Present

Zebrafish: A model organism fishing discoveries swimmingly! Charles River Laboratory Zebrafish Workshop, The Comus Inn, Dickerson, MD, 2006 - Present

Lessons for vascular development from roundabout axon guidance gene family. Medical College of Georgia, Augusta, GA, 2006 - Present

Functional Interplay of a kinase and a phosphatase gene in vertebrate vascular development and disease. Dartmouth Medical School, Hanover, NH, 2008 - Present

Intricacy of vascular development in zebrafish. Department of Biological Sciences, University of Delaware, Newark, DE, 2009 - Present

Dusp-5: a putative target for vascular disease. Caliper Life Sciences, San Francisco, CA, 2010 - Present

Vascular Development in Vertebrates. Physiology and Biophysics, University of Louisville School of Medicine, Louisville, KY, 2010 - Present

Nogo-B receptor is essential for angiogenesis in vivo via Akt pathway. American Heart Association, San Francisco, CA, 2010 - Present

Vasculogenesis mechanisms in a developing vertebrate. Cardiovascular Seminar Series, University of Virginia Health System, Charlottesville, VA, 2010 - Present

Transcriptional mechanisms regulating embryonic angiogenesis, Department of Biochemistry & Molecular Biology at Wayne State University, School of Medicine, Detroit, MI, 2011 - Present

The role of sox and robos in angiogenesis, 5th Mayo Clinic Angiogenesis Symposium, Minneapolis, MN, 2012 - Present

Transcriptional regulation of etv-2 during cardiovascular development in vertebrates, University of Kansas Medical Center, Kansas City, KS, 2012 - Present

Serendipitous discovery implicates signaling molecules in vascular, Physiology Department, Georgia Health Sciences University, Augusta, GA, 2012 - Present

Novel therapeutic targets for vascular anomalies, Temple University School of Medicine, Philadelphia, PA, 2012 - Present

Novel targets for the treatment of pediatric vascular tumors and anomalies, Emory University School of Medicine, Atlanta, GA, 2012 - Present

The Role of MMP-17 Ortholog in Embryonic Zebrafish Development, American Society for Matrix Biology and the Society for Glycobiology, San Diego, CA, 2012 - Present

Transcriptional Regulation of Roundabout4 (Robo4) in the Developing Vasculature, Biochemistry Department, Georgia Health, Augusta, GA, 2012 - Present

Regional

A serendipitous discovery of a novel signaling pathway in vascular development and disease. 3rd Mayo Clinic Angiogenesis Symposia, Rochester, MN, 2008 - Present

Developmental vasculogenesis mechanisms in vertebrates. Department of Molecular Cardiology, Lerner Research Institute, Cleveland Clinic Foundation, Cleveland, OH, 2009 - Present

Vasculogenesis mechanisms in development and disease. Department of Pharmacology, University of Illinois College of Medicine, Chicago, IL, 2009 - Present

Vasculogenesis mechanisms in embryonic development and disease. Division of Biological Sciences, University of Missouri-Columbia, Columbia, MO, 2009 - Present

Vascular development in a developing vertebrate embryo and disease. GE Health Care Research Institute, Waukesha, WI, 2009 - Present

Vasculogenesis mechanisms in a developing vertebrate. 2010 Mayo Angiogenesis Symposia, Mackinac Island, MI, 2010 - Present

A Robo:Sox nexus in vascular development. Children's Environmental Health Sciences Core Center, External Advisory Committee Meeting, Intercontinental Hotel, Milwaukee, WI, 2010 - Present

Small molecule discovery targeting vascular anomalies, Vascular Birthmarks Foundation Conference, New

York, NY, 2012 - Present

Local

Signaling cue for vascular development from axon guidance gene family. Children's Research Institute, Medical College of Wisconsin, Milwaukee, WI, 2006 - Present

Angioblast development in vertebrates. Children's Research Institute, Medical College of Wisconsin, Milwaukee, WI, 2007 - Present

Vascular function of a novel serine threonine kinase unravels multiple steps in vertebrate angioblast development. Blood Research Institute, Milwaukee, WI, 2007 - Present

Angioblast development in vertebrates. Human and Molecular Genetics Center, Medical College of Wisconsin, Milwaukee, WI, 2007 - Present

Developmental Vascular Biology Program. Graduate School, Medical College of Wisconsin, Milwaukee, WI, 2007 - Present

Snrk-1 and Dusp-5 function in vascular development and disease, Department of Pharmacology and Toxicology, Medical College of Wisconsin, Milwaukee, WI, 2008 - Present

Novel Signaling Molecules and Pathways in Vertebrate Angioblast Development and Disease. Department of Biochemistry, Medical College of Wisconsin, Milwaukee, WI, 2008 - Present

Functional Interplay of a Kinase and a Phosphatase Gene in Vertebrate Vascular Development and Disease. Herma Heart Center, Children's Hospital of Wisconsin, Milwaukee, WI, 2008 - Present

Scientific Career - Skills Necessary for Success! Postdoctoral Education, Medical College of Wisconsin, Milwaukee, WI, 2009 - Present

Developmental Vascular Biology Program. Open House with Convocation. Graduate School, Medical College of Wisconsin, Milwaukee, WI, 2009 - Present

Developmental Vascular Biology Program. IDP Lunch Series. Graduate School, Medical College of Wisconsin, Milwaukee, WI, 2009 - Present

Navigation of vessels: lessons learned from axon guidance. Department of Physiology, Medical College of Wisconsin, Milwaukee, WI, 2009 - Present

Developmental Vascular Biology Program. IDP Mini-Symposium. Graduate School, Medical College of Wisconsin, Milwaukee, WI, 2009 - Present

Vasculogenesis mechanisms in vertebrates. CBNA Presentation, Medical College of Wisconsin, Milwaukee, WI, 2010 - Present

How to make sense of anti-sense RNA? CRI Noon Conference, Medical College of Wisconsin, Milwaukee, WI, 2010 - Present

Early mechanistic steps of vasculogenesis process revealed in zebrafish. June Multidisciplinary Research Conference, Medical College of Wisconsin, Milwaukee, WI, 2010 - Present

Successful Strategies for Science and Life. Summer Research Lecture Series, Medical College of Wisconsin, Milwaukee, WI, 2010 - Present

Functional characterization of Snrk-1 gene in developing vasculature-an update. CVRC Works-in-Progress, Medical College of Wisconsin, Milwaukee, WI, 2010 - Present

2011 Targeting Dusp-5: An emerging option for treating vascular anomalies. CTSI Seminar Presentation, Medical College of Wisconsin, Milwaukee, WI, 2011 - Present

Bridging the gap from targets to drugs (Valley of Death): A proposal for a SE WI Drug Development Core. Medical College of Wisconsin, Milwaukee, WI, 2011 - Present

Small Molecule Identification for a Vascular Target: Dusp-5. Pediatric Surgery Multidisciplinary Research Conference, Medical College of Wisconsin, Milwaukee, WI, 2011 - Present

Insights on Aortic Coarctation Defects from Studying Embryonic Vasculogenesis Process in Zebrafish. Children's Research Institute Scientific Symposium, Medical College of Wisconsin, Milwaukee, WI, 2011 - Present

COMMITTEE SERVICE:

Medical College of Wisconsin

1993 - 1997 Member, Student Government Association, Medical College of Georgia, Augusta, GA

1994 President, Medical College of Georgia, MCG International Club, Augusta, GA

1994 Graduate School Member, Student Judicial Committee, Medical College of Georgia, Augusta, GA

1995 - 1997 Graduate School Representative, Student Services Committee, Medical College of Georgia, Augusta, GA

2007 - 2009 Member, Genetics Division, Medical College of Wisconsin, Milwaukee, WI
2007 - Present Head, Developmental Vascular Biology Program, Medical College of Wisconsin, Milwaukee, WI
2007 - Present Member, Interdisciplinary Program in Biomedical Sciences (IDP Program), Medical College of Wisconsin, Milwaukee, WI
2008 Member, Developmental Biology Division, Medical College of Wisconsin, Milwaukee, WI
2008 Member-Cell Biology Web Design Committee, Medical College of Wisconsin, Milwaukee, WI
2009 Member, Cardiovascular Center, Medical College of Wisconsin, Milwaukee, WI
2009 - Present Co-Chair with Dr. Ravi Misra, Vascular Biology Interest Group, Medical College of Wisconsin, Milwaukee, WI
2009 Full Member, NIEHS Children's Environmental Health Sciences Center, University of Wisconsin-Milwaukee, Milwaukee, WI
2009 Member, MCW Graduate School Nominating Committee, Medical College of Wisconsin, Milwaukee, WI
2009 Member, Post-Doctoral Steering Committee, Medical College of Wisconsin, Milwaukee, WI
2009 Member, Cancer Center, Medical College of Wisconsin, Milwaukee, WI
2009 Affinity Group Leader, Vascular Biology, Medical College of Wisconsin, Milwaukee, WI
2010 Member, Office of Research Innovation Task Force #3, Medical College of Wisconsin, Milwaukee, WI
2010 Member, CTSI Clinical Scientist Mentoring Team, Medical College of Wisconsin, Milwaukee, WI
2010 Member, Research Core Facilities Committee, Medical College of Wisconsin, Milwaukee, WI
2010 Member, CVC Scientific Advisory Committee, Medical College of Wisconsin, Milwaukee, WI
2011 Research Member, MCW Cancer Center in the Cancer Cell Biology Research Program, Medical College of Wisconsin, Milwaukee, WI
2012 - Present Member, Women's Health Research Program (WHRP) Advisory Group, Medical College of Wisconsin

MCW TEACHING ACTIVITIES:

Medical Student Education

2007 Cell Signaling, Topic: Vascular and Axon Guidance Signaling, Advanced Cell Biology Course, Medical College of Wisconsin, Milwaukee, WI
2008 Developmental and Stem Cell Biology, Topic: Genetic Core of Development and LPM, Medical College of Wisconsin, Milwaukee, WI
2008 - 2010 Mechanisms of Cellular Signaling, Topic: Angiogenesis and Development of Vasculature, Medical College of Wisconsin, Milwaukee, WI
2008 - 2010 Advanced Molecular Genetics (of Cancer), Topic: Cancer Angiogenesis, Medical College of Wisconsin, Milwaukee, WI
2010 Advanced Cell Signaling, Topic: Targeting Signaling Pathways in Angiogenesis (Avastin), Medical College of Wisconsin, Milwaukee, WI
2011 Methods in Grant Preparation, Medical College of Wisconsin, Milwaukee, WI
2011 - 2012 Taught - Advanced Molecular Genetics: Angiogenesis and Metabolism

MCW STUDENTS, FACULTY, RESIDENTS AND CLINICAL/RESEARCH FELLOWS MENTORED:

High School Students

- 2012 BriAnna Williams, Mentor, Medical College of Wisconsin

Undergraduate Students

2006 Philip Loscombe, (Summer), MCW
2007 Annie Kroll, (Summer), MCW
2010 Codie Vassar, (Summer), MCW
2010 Suzanna Sellars, (Summer), MCW
2010, Diversity Summer Health-Related Research Educational Program (DSHREP), Medical College of Wisconsin
2011 Marguerite Cullen, (Summer), MCW
2011 Scott Brunson, (Summer), MCW

- 2010 Codie Vassar, Mentor, Medical College of Wisconsin
- 2007 Annie Kroll, Mentor, Medical College of Wisconsin
- 2011 Marguerite Ullen, Mentor, Medical College of Wisconsin
- 2012 Andrew Straszewski, Mentor, Medical College of Wisconsin
- 2010 Suzanna Sellars, Mentor, Medical College of Wisconsin
- 2012 Raman Kutty, Mentor, Medical College of Wisconsin
- 2012 Colin Stair, Mentor, Medical College of Wisconsin
- 2011 Scott Brunson, Mentor, Medical College of Wisconsin

Medical Students

- 2007 Xiaoguang Ma, Rotation, MCW
- 2007 Ann DeLaForest, Rotation, MCW
- 2007 Abby Kroken, Rotation, MCW
- 2009 Amber Petersen, Rotation, MCW
- 2009 Kevin Wright, Rotation, MCW
- 2011 Scott Brunson, Trainee, MCW

Graduate Students

- 2007 Aaron Mull, Trainee, MCW
- 2009 - 2012 Noah Leigh, Trainee, MCW

Committees

- 2008 Stephanie Cossette, Member, Graduate Thesis Committee, MCW
- 2008 Kerry Veth, Member, Graduate Thesis Committee, MCW
- 2009 Adam Gastonguay, Member, Graduate Thesis Committee, MCW
- 2009 Mika Nagaoka, Member, Mock Proposal Committee, IDP Program, MCW
- 2009 Kurt Kolander, Member, Graduate Thesis Committee, MCW
- 2010 Emily Walker, Member, Mock Proposal Committee, IDP Program, MCW
- 2010 Noah Leigh, Member, Graduate Thesis Committee, MCW

PhD Students Advised

- 2009, PhD in Basic and Translational Science Program, MCW
- 2011 Bret Kelso, T-32 Mentor Committee, Physiology/NA/Biotechnology and Bioengineering, Medical College of Wisconsin

Postdoctoral Researchers

- 2007 - 2010 Kallal Pramanik, Ph.D., MCW
- 2007 - Present Keguo Li, Ph.D., MCW
- 2007 - Present Changzoon Chun Ph.D., MCW
- 2007 - Present Ganesh Samant, Ph.D, MCW
- 2009 - 2010 Indranil Sinha, Ph.D., MCW
- 2010 - Present Srividya Suryanarayana, Ph.D., MCW
- 2010 - Present Marcus Schupp, Ph.D., MCW
- 2011 - Present Anil Challa, Ph.D., MCW
- 2011 - Present Padmanabhan Vakeel, Ph.D., MCW

EXTRAMURAL STUDENTS, FACULTY, RESIDENTS, AND CLINICAL/RESEARCH FELLOWS

MENTORED:

High School Students

- 2004 Swati Rushi, (Summer)
- 2005 Krupa Nataraj, (Summer)
- 2005 Teresa Gomez, (Summer)

Undergraduate Students

- 2003 Rebecca Hassel, (Summer)
- 2004 - 2005 Robert Kao
- 2004 David Rhee, (Summer)

2005 Galen Nelson, (Summer)
2006 Shobhit Singla, (Summer)
- 2006 Philip Loscombe, Mentor, Harvard

Medical Students

2001 - 2002 Jeffrey Hyo Chung, Mentor, Harvard Medical School
2011, Research Mentor, CREST Research and Teaching Symposium, Milwaukee School of Engineering

Graduate Students

2005, Thesis External Reader, Guru Nanak Dev University, Punjab, India
2006 Galen Nelson, Thesis Advisor, Bethel University, St. Paul, MN

Students Advised

2005 Robert Kao, Thesis Advisor, Boston College

Postdoctoral Researchers

2000 - 2002 Venkatesha Shivalingappa, Ph.D.
2003 Dayadevi Jirage, Ph.D.
2004 - 2006 Sukhbir Kaur, Ph.D.

Clinical/Research Fellows

2000 - 2002 Research Fellows, Supervisor, Harvard Medical School

INTERNATIONAL ELECTED/APPOINTED LEADERSHIP AND COMMITTEE POSITIONS::

2009 Grant Reviewer, Call for Young Researchers, The Center for Scientific Review of the National Institutes of Health, Italian Ministry of Health, Directorate for Health and Technologies Research, Italy
2010 Grant Reviewer, Dutch Cancer Society, Amsterdam, Holland

BIBLIOGRAPHY

Refereed Journal Publications/Original Papers

1. Thirugnanam K, Cossette S, Lu Q, Chowdhury SR, Harmann LM, Gupta A, Spearman A, Sonin DM, Bordas M, Kumar SN, Pan AY, Simpson PM, Strande JL, Bishop E, Zou MH and **Ramchandran R**. Cardiomyocyte-specific SNRK prevents inflammation in the heart. JAHA 2019 In press.
2. Chowdhury TA, Li K, **Ramchandran R**. Lessons learned from a lncRNA odyssey for two genes with vascular functions, DLL4 and TIE1. Vascul Pharmacol. 2019 Mar;114:103-109. PMID: PMC6436643
3. Gupta A, Brahmabhatt J, Syrlybaeva R, Bodnar C, Bodnar N, Bongard R, Pokkuluri PR, Sem DS, **Ramchandran R**, Rathore R, Talipov MR. Role of Conserved Histidine and Serine in the HCXXXXXRS Motif of Human Dual-Specificity Phosphatase 5. J Chem Inf Model. 2019 Apr 22;59(4):1563-1574.
4. Eisa-Beygi S, Benslimane FM, El-Rass S, Prabhudesai S, Abdelrasoul MKA, Simpson PM, Yalcin HC, Burrows PE, **Ramchandran R**. Characterization of Endothelial Cilia Distribution During Cerebral-Vascular Development in Zebrafish (Danio rerio). Arterioscler Thromb Vasc Biol. 2018 Dec;38(12):2806-2818. PMID: PMC6309420
5. Chowdhury TA, Koceja C, Eisa-Beygi S, Kleinstiver BP, Kumar SN, Lin CW, Li K, Prabhudesai S, Joung JK, **Ramchandran R**. Temporal and Spatial Post-Transcriptional Regulation of Zebrafish *tie1* mRNA by Long Noncoding RNA During Brain Vascular Assembly. Arterioscler Thromb Vasc Biol. 2018 Jul;38(7):1562-1575. PMID: PMC6023729
6. Prabhudesai S, Koceja C, Dey A, Eisa-Beygi S, Leigh NR, Bhattacharya R, Mukherjee P, **Ramchandran R**. Cystathionine γ -Synthase Is Necessary for Axis Development *in Vivo*. Front Cell Dev Biol. 2018;6:14. PMID: PMC5820354
7. Lu Q, Xie Z, Yan C, Ding Y, Ma Z, Wu S, Qiu Y, Cossette SM, Bordas M, **Ramchandran R**, Zou MH. SNRK (Sucrose Nonfermenting 1-Related Kinase) Promotes Angiogenesis In Vivo. Arterioscler Thromb Vasc Biol. 2018 Feb;38(2):373-385. PMID: PMC5785416

8. Kutty RG, Talipov MR, Bongard RD, Lipinski RAJ, Sweeney NL, Sem DS, Rathore R, **Ramchandran R**. Dual Specificity Phosphatase 5-Substrate Interaction: A Mechanistic Perspective. *Compr Physiol*. 2017 Sep 12;7(4):1449-1461.
9. Hopp EE, Cossette SM, Kumar SN, Eastwood D, **Ramchandran R**, Bishop E. Sucrose Non-Fermenting Related Kinase Expression in Ovarian Cancer and Correlation with Clinical Features. *Cancer Invest*. 2017 Aug 09;35(7):456-462. PMID: PMC6167932
10. **Ramchandran R**, Chaluvally-Raghavan P. miRNA-Mediated RNA Activation in Mammalian Cells. *Adv Exp Med Biol*. 2017;983:81-89.
11. Bongard RD, Lepley M, Thakur K, Talipov MR, Nayak J, Lipinski RAJ, Bohl C, Sweeney N, **Ramchandran R**, Rathore R, Sem DS. Serendipitous discovery of light-induced (In Situ) formation of an Azo-bridged dimeric sulfonated naphthol as a potent PTP1B inhibitor. *BMC Biochem*. 2017 May 31;18(1):10. PMID: PMC5452347
12. Kutty RG, Xin G, Schauder DM, Cossette SM, Bordas M, Cui W, **Ramchandran R**. Dual Specificity Phosphatase 5 Is Essential for T Cell Survival. *PLoS One*. 2016;11(12):e0167246. PMID: PMC5147890
13. Cossette SM, Bhute VJ, Bao X, Harmann LM, Horswill MA, Sinha I, Gastonguay A, Pooya S, Bordas M, Kumar SN, Mirza SP, Palecek SP, Strande JL, **Ramchandran R**. Sucrose Nonfermenting-Related Kinase Enzyme-Mediated Rho-Associated Kinase Signaling is Responsible for Cardiac Function. *Circ Cardiovasc Genet*. 2016 Dec;9(6):474-486. PMID: PMC5177517
14. Talipov MR, Nayak J, Lepley M, Bongard RD, Sem DS, **Ramchandran R**, Rathore R. Critical Role of the Secondary Binding Pocket in Modulating the Enzymatic Activity of DUSP5 toward Phosphorylated ERKs. *Biochemistry*. 2016 Nov 08;55(44):6187-6195.
15. Palen K, Weber J, Dwinell MB, Johnson BD, **Ramchandran R**, Gershan JA. E-cadherin re-expression shows in vivo evidence for mesenchymal to epithelial transition in clonal metastatic breast tumor cells. *Oncotarget*. 2016 Jul 12;7(28):43363-43375. PMID: PMC5190029
16. Iden M, Fye S, Li K, Chowdhury T, **Ramchandran R**, Rader JS. The lncRNA PVT1 Contributes to the Cervical Cancer Phenotype and Associates with Poor Patient Prognosis. *PLoS One*. 2016;11(5):e0156274. PMID: PMC4883781
17. Rana U, Liu Z, Kumar SN, Zhao B, Hu W, Bordas M, Cossette S, Szabo S, Foeckler J, Weiler H, Chrzanowska-Wodnicka M, Holtz ML, Misra RP, Salato V, North PE, **Ramchandran R**, Miao QR. Nogo-B receptor deficiency causes cerebral vasculature defects during embryonic development in mice. *Dev Biol*. 2016 Feb 15;410(2):190-201. PMID: PMC4767500
18. Kilari S, Cossette S, Pooya S, Bordas M, Huang YW, **Ramchandran R**, Wilkinson GA. Endothelial Cell Surface Expressed Chemotaxis and Apoptosis Regulator (ECSCR) Regulates Lipolysis in White Adipocytes via the PTEN/AKT Signaling Pathway. *PLoS One*. 2015;10(12):e0144185. PMID: PMC4686900
19. Saha S, Chakraborty PK, Xiong X, Dwivedi SK, Mustafi SB, Leigh NR, **Ramchandran R**, Mukherjee P, Bhattacharya R. Cystathionine γ -synthase regulates endothelial function via protein S-sulfhydration. *FASEB J*. 2016 Jan;30(1):441-56. PMID: PMC4684530
20. Neumann TS, Span EA, Kalous KS, Bongard R, Gastonguay A, Lepley MA, Kutty RG, Nayak J, Bohl C, Lange RG, Sarker MI, Talipov MR, Rathore R, **Ramchandran R**, Sem DS. Identification of inhibitors that target dual-specificity phosphatase 5 provide new insights into the binding requirements for the two phosphate pockets. *BMC Biochem*. 2015 Aug 19;16:19. PMID: PMC4545774
21. LaDisa JF Jr, Bozdag S, Olson J, **Ramchandran R**, Kersten JR, Eddinger TJ. Gene Expression in Experimental Aortic Coarctation and Repair: Candidate Genes for Therapeutic Intervention? *PLoS One*. 2015;10(7):e0133356. PMID: PMC4514739
22. Hoepfner LH, Sinha S, Wang Y, Bhattacharya R, Dutta S, Gong X, Bedell VM, Suresh S, Chun C, **Ramchandran R**, Ekker SC, Mukhopadhyay D. RhoC maintains vascular homeostasis by regulating VEGF-induced signaling in endothelial cells. *J Cell Sci*. 2015 Oct 01;128(19):3556-68. PMID: PMC4647168
23. Sampath V, Menden H, Helbling D, Li K, Gastonguay A, **Ramchandran R**, Dimmock DP. SIGIRR genetic variants in premature infants with necrotizing enterocolitis. *Pediatrics*. 2015 Jun;135(6):e1530-4. PMID: PMC4444800
24. Li K, Chowdhury T, Vakeel P, Kocejka C, Sampath V, **Ramchandran R**. Delta-like 4 mRNA is regulated by adjacent natural antisense transcripts. *Vasc Cell*. 2015;7:3. PMID: PMC4409748
25. Rajasimha HK, Shirol PB, Ramamoorthy P, Hegde M, Barde S, Chandru V, Ravinandan ME, **Ramchandran R**, Haldar K, Lin JC, Babar IA, Girisha KM, Srinivasan S, Navaneetham D, Battu R,

- Devarakonda R, Kini U, Vijayachandra K, Verma IC. Organization for rare diseases India (ORDI) - addressing the challenges and opportunities for the Indian rare diseases' community. *Genet Res (Camb)*. 2014 Aug 13;96:e009. PMID: PMC7044965
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Books, Chapters, and Reviews

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Abstracts

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