

## **CURRICULUM VITAE**

Updated: December 2, 2025  
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### **Education**

1967 B.S. McGill University, Montreal, Quebec, Canada  
1971 M.D. McGill University, Montreal, Quebec, Canada

### **Awards**

1971 Cushing Memorial Award in Pediatrics - McGill University  
1994 Research Achievement Award, Canadian Cardiovascular Society  
1996 Julius Comroe Lectureship - American Physiological Society  
1997 Endowed Research Chair, Heart & Stroke Foundation of Ontario  
1999 Award of Merit, Heart & Stroke Foundation of Canada  
2000 MRC Distinguished Scientist Award  
2002 Dunlevie Endowed Research Chair  
2002 Paul Dudley White Lectureship, American Heart Association  
2003 Gill Heart Institute Award for Outstanding Contribution to CV Research  
2004 CIHR-Institute of Circulatory & Respiratory Health Lectureship and Prize  
2004 The American Heart Association Basic Research Prize  
2005 The American Heart Association Dickinson Richards Lecture  
2006 The American Heart Association Distinguished Scientist Award  
2008 American Thoracic Society, Recognition Award for Scientific Accomplishment  
2010 Louis and Artur Lucian Award for Research in Circulatory Diseases, McGill Univ  
2012 Judith Pool Award, North California Chapter of the Assoc. for Women in Science  
2015 Mentor Award of Excellence, Department of Pediatrics, Stanford University  
2016 J. Burns Amberson Lecturer, ATS International Conference, San Francisco, CA  
2016 Robert F Grover Prize, Assembly on Pulmonary Circulation, ATS  
2017 The American Heart Association Distinguished Scientist Lecturer, Anaheim, CA  
2019 Robert Beamish Leadership Award, Univ. of Manitoba, Institute of CVSciences  
2021 ATVB Distinguished Lecturer, AHA Scientific Sessions  
2023 Research Achievement Award, American Heart Association  
2024 Stanford Cardiovascular Institute Faculty Recognition Award

### **Postdoctoral Training**

#### **Internships and Residencies:**

1971-1972 Intern in Pediatrics

- University of Colorado, Medical Center, Denver, Colorado
- 1972-1973 Resident in Pediatrics, University of Colorado Medical Center, Denver, Colorado  
Clinical and Research Fellowships:
- 1974-1975 Clinical Fellow in Pediatric Cardiology  
Texas Children's Hospital, Baylor College of Medicine, Houston, Texas
- 1975-1976 Clinical Fellow in Pediatric Cardiology  
Children's Hospital Medical Center, Harvard Medical School, Boston, Massachusetts
- 1976-1977 Research Fellow in Pediatric Cardiology  
Children's Hospital Medical Center, Harvard Medical School, Boston, Massachusetts

### **Licensure and Certification**

- 1975-1982 Medical License, Massachusetts
- 1976 Diplomate of American Board of Pediatrics
- 1976 Fellow, Royal College of Physicians & Surgeons of Canada (Peds Cardiology)
- 1979 Diplomate of the American Board of Pediatrics Sub-Board of Pediatric Cardiology
- 1981 Fellow of the American College of Cardiology
- 1982-present Medical License, College of Physicians and Surgeons of Ontario, Canada
- 2002-present Medical License, California

### **Current Memberships**

- 1981 – present American College of Cardiology
- 1983 – present Society for Pediatric Research
- 1983 – present American Association of Investigative Pathology
- 1985 – present American Thoracic Society
- 1988 – present American Society of Cell Biology
- 1989 - present American Society for Clinical Investigation
- 1996 – present North American Vascular Biology Organization
- 2003 – present American Heart Association
- 2004 – present American Pediatric Society
- 2009 - present Association of American Physicians

### **Academic Appointments**

- 1977-1978 Instructor in Pediatrics  
Children's Hospital Medical Center, Harvard Medical School, Boston, Massachusetts
- 1979-1982 Assistant Professor in Pediatrics  
Harvard Medical School, Boston, Massachusetts
- 1982-1988 Associate Professor in Pediatrics and Laboratory Medicine & Pathobiology  
University of Toronto, Ontario, Canada
- 1982-2002 Member, Graduate Faculty, Dept. of Laboratory Medicine & Pathobiology  
University of Toronto, Ontario, Canada
- 1988-2002 Professor of Pediatrics and Laboratory Medicine and Pathobiology

1994-2002 University of Toronto, Ontario, Canada  
 Professor, Department of Medicine  
 University of Toronto, Ontario, Canada  
 1996-2002 Member, Graduate Faculty, Institute of Medical Science  
 University of Toronto, Ontario, Canada  
 1982-2002 Senior Associate in Pediatrics and Pathology  
 The Hospital for Sick Children, Toronto, Ontario, Canada  
 1986-1988 Acting Director of Cardiovascular Research Institute  
 The Hospital for Sick Children, Toronto, Ontario, Canada  
 1988-2002 Director of Cardiovascular Research  
 Research Institute, The Hospital for Sick Children, Toronto, Ontario, Canada  
 2002-present Dwight and Vera Dunlevie Professor of Pediatric Cardiology  
 The Vera Moulton Wall Center for Pulmonary Vascular Disease  
 Stanford University School of Medicine, Stanford, California  
 2002-2013 Professor (by courtesy) of Developmental Biology  
 Stanford University School of Medicine, Stanford, California  
 2002-present Graduate Faculty, Developmental Biology  
 Stanford University School of Medicine, Stanford, California  
 2005-2015 Co-Director, Cardiovascular and Pulmonary Sciences Scholarly Concentration  
 Stanford University School of Medicine, Stanford, California  
 2007-present Associate Director for Translational Research – Pediatrics, CV Institute  
 Stanford University School of Medicine, Stanford, California  
 2018-present Director, Basic Science and Engineering Initiative, Betty Irene Moore Children's  
 Heart Center, Stanford University

### **Major Visiting Appointments**

1973-1974 Pediatrician for the Ministry of Health and Central Hospital of the Negev,  
 Beersheba, Israel

### **Major Research Appointments**

1981 National Institutes of Health  
 Study Section for Young Investigator Award  
 1986 American Thoracic Society  
 Program Committee (Pulmonary Circulation)  
 1986-1989 Canadian Heart and Stroke Foundation and Heart and Stroke Foundation of  
 Ontario, Grant Review Study Sections  
 1986-1989 American Heart Association  
 Grant Review Study Section  
 1986-1989 Society for Pediatric Research  
 Executive Council (Developmental Biology)  
 1986-present National Institutes of Health  
 NHLBI Program Project Site Visit Teams Ad Hoc  
 1987-1993 Association of Medical School Pediatric Department Chairmen  
 Pediatric Scientist Training Program, Member of Selection Committee

1987-1989 Searle Pharmaceutical Co.  
Research and Development Consultant

1988- 1991 American Heart Association  
Executive Councils: (i) Cardiovascular Disease in the Young; (ii) Cardiopulmonary and Critical Care

1988-1990 Heart and Stroke Foundation of Ontario  
Vice Chairman of Scientific Review, Research Development Committee, Publications Committee

1988-1991 Medical Research Council of Canada  
Cardiovascular Research Committee A Study Section

1990-1994 National Institutes of Health  
Pathobiochemistry Study Section

1990-1992 American Heart Association  
Cardiopulmonary Program Committee

1991-1994 Medical Research Council of Canada  
Cardiovascular System 'A', Committee Chairman

1991-1992 American Thoracic Society  
Publications Policy Committee

1992-1995 American Heart Association  
Council on Cardiopulmonary and Critical Care Program Chairman for Scientific Sessions

1992-1997 Alberta Heritage Foundation for Medical Research  
Clinical Applications Advisory Committee

1993- 1997 Medical Research Council of Canada  
Committee for Policy, Planning, Analysis and Evaluation

1992-1993 Canadian Cardiovascular Society  
Pediatric Program Chairman

1993-1995 Heart and Stroke Foundation of Ontario, Canada  
Vice Chair of Research Policy

1994-present National Institutes of Health  
Reviewer Reserve

1994 Canadian Society for Clinical Investigation  
Executive Councilor

1994 American Heart Association  
Intercouncil Working Group, Molecular and Gene Therapy

1995-1997 Medical Research Council of Canada  
Chair, Science & Research Advisory Committee

1998-present World Congress of Pulmonary Circulation  
Scientific Advisory Committee

1998-2001 Society for Pediatric Research  
E. Mead Johnson Award Selection Committee

1998 Children's Hospital of Philadelphia  
Chair, External Advisory Board, Pediatric Cardiology Training Program

1999 The Children's Heart Foundation, Chicago

Medical Advisory Board  
 1999-2002 Heart & Stroke/Richard Lewar Centre of Excellence, Toronto, Canada  
 Executive Committee  
 1999-2002 Gairdner Foundation of Canada  
 Co-Chair, Scientific Advisory Panel  
 2000-2002 Heart & Stroke Foundation of Canada  
 Research Policy and Planning Advisory Committee  
 2000-2002 American Heart Association  
 Member-at-large, Executive Committee, Council on Cardiopulmonary and Critical  
 Care  
 2001-2002 Heart and Stroke Foundation of Canada  
 Chair, Scientific Review  
 2001-2002 Doris Duke Foundation  
 Translation Research Advisory Committee  
 2001-2003 Canadian Institutes of Health Research (formerly Medical Research Council of  
 Canada)  
 Circulatory and Respiratory Institute Advisory Board  
 2001-2007 Burroughs Wellcome Fund  
 Translational Research Advisory Committee  
 2002-2004 Gairdner Foundation of Canada  
 Medical Advisory Board  
 2002-present Training Grant Advisory Boards including University of California San Francisco  
 and Gladstone, University of Pennsylvania, Brown University (COBRE), Children's  
 Hospital of Philadelphia, Univ. of Pennsylvania  
 2002-2005 Pulmonary Hypertension Association  
 Scientific Advisory Board  
 2004-present American Thoracic Society  
 Pulmonary Circulation Council  
 2004-2007 American Pediatric Society  
 Executive Council  
 2006-2009 Pulmonary Vascular Research Institute  
 Executive Committee  
 2006 NIH/NHLBI Strategic Working Group integrative Approaches to Pathogenetic  
 Research, Bethesda, Maryland  
 2008-2011 NIH/NHLBI Scientific Advisory Council to the Director  
 2008 – 2016 Max Planck Institute for Heart and Lung Research  
 Scientific Advisory Board of the Max Planck Society  
 2011 - 2017 Children's Discovery Institute, Scientific Advisory Board  
 Washington University School of Medicine  
 2011 - 2016 NHLBI Lung Repair and Regeneration Consortium (LRRC)  
 External Advisory Board  
 2014 - 2016 American Heart Association  
 Chair, Distinguished Scientist Selection Committee  
 2018-present Gladstone Institute Scientific Advisory Board

2019-2021 Amgen Cardiovascular and Metabolism Discovery Research  
Scientific Advisory Board

2020-2023 Medicine by Design Scientific Advisory Board, University of Toronto

2022- present Penn Cardiovascular Institute (CVI) and emerging CHOP CVI Scientific Advisory  
Board, University of Pennsylvania

2022 Tiakis Biotech AG, Medical Advisory Board

2022-2023 Keystone Symposium: Pulmonary Hypertension: State of the Art and Therapeutic  
Opportunities, Organizer

2024-2025 Pfizer Scientific Consultant

2024-present Merck, Scientific Consultant

2025 Ad Hoc Member, Boston Children's Hospital Scientific Advisory Committee

### **Hospital/University Committees**

1980-1982 Harvard Student Financial Aid Committee  
Harvard Medical School, Boston, Massachusetts

1983 Pathology Search Committee  
University of Toronto, Ontario, Canada

1983 Pulmonary Search Committee  
The Hospital for Sick Children, University of Toronto, Ontario, Canada

1985 Equipment Committee, Research Institute  
The Hospital for Sick Children, Toronto, Ontario, Canada

1986 Cardiology Search Committee  
The Hospital for Sick Children, University of Toronto, Ontario, Canada

1987 Graduate Student Committee  
Department of Laboratory Medicine & Pathobiology, University of Toronto, Ontario,  
Canada

1988 Cardiovascular Surgery Search Committee  
The Hospital for Sick Children, Toronto, Ontario, Canada

1988 Phase III Planning Committee  
University of Toronto, Ontario, Canada

1990 Department of Laboratory Medicine & Pathobiology, Promotions Committee  
University of Toronto, Ontario, Canada

1990 Department of Laboratory Medicine & Pathobiology, Search Committee  
University of Toronto, Ontario, Canada

1994 Faculty of Medicine, Graduate Review Committee  
University of Toronto, Ontario, Canada

1995-1997 Chairman, Staff Review Committee, Research Institute  
The Hospital for Sick Children, Toronto, Ontario, Canada

1996-2002 Executive Committee, Cardiovascular Sciences Collaborative Program  
University of Toronto, Ontario, Canada

1996 Search Committee, Pediatrics Chair  
University of Toronto, Ontario, Canada

1996 Search Committee, Neonatology Division Head

University of Toronto, Ontario, Canada  
 1996-2002 Research Committee, Research Institute  
 The Hospital for Sick Children, Toronto, Ontario, Canada  
 1997-2002 Research Committee, Department of Pediatrics  
 The Hospital for Sick Children, Toronto, Ontario, Canada  
 1998-2002 Research Institute, Steering Committee  
 The Hospital for Sick Children, Toronto, Ontario, Canada  
 1998-2002 Research Institute, Chair, Translation Research Committee  
 The Hospital for Sick Children, Toronto, Ontario, Canada  
 1998-2002 Research Institute, Recruitment & Retention Committee  
 The Hospital for Sick Children, Toronto, Ontario, Canada  
 1999-2002 Department of Pediatrics, Grand Rounds Committee  
 The Hospital for Sick Children, Toronto, Ontario, Canada  
 2002-present Selection Committee, Medical Science Training Program (MSTP)  
 Stanford University School of Medicine, Stanford, California  
 2002-2004 Chair, Pediatric Pulmonary Division Chief Search Committee  
 Stanford University School of Medicine, Stanford, California  
 2002-2004 Member, Wall Center Professor Search Committee  
 Stanford University School of Medicine, Stanford, California  
 2004-2005 Member, Department of Medicine, Pulmonary Division Chief Search Committee  
 Stanford University School of Medicine, Stanford, California  
 2004-present Member, Steering Committee, Cardiovascular Institute  
 Stanford University School of Medicine, Stanford, California  
 2005-2015 Co-Director, Cardiovascular and Pulmonary Scholarly Concentration  
 Stanford University School of Medicine, Stanford, California  
 2005 – 2009 Chair, McCormick Lecture Committee  
 Stanford University School of Medicine, Stanford, California  
 2006–present Member, Executive Committee, Cardiovascular Medical Research and Education  
 Fund, Philadelphia, Pennsylvania  
 2009–present Associate Director in Basic Research, Executive Committee, Cardiovascular  
 Institute, Stanford University School of Medicine, Stanford, California  
 2018–present Director, Basic Science and Engineering Program, Betty Irene Moore Children’s  
 Heart Center, Stanford University School of Medicine, Stanford, California  
 2025 Ad Hoc Member, Boston Children's Hospital Scientific Advisory Committee

**Associate Editor**

1999-2002 Pediatric Research  
 1999-2004 Circulation Research

**Editorial Board (past and present)**

Circulation  
 Circulation Research  
 International Journal of Biochemistry & Cell Biology  
 American Journal of Respiratory Cell and Molecular Biology

The Canadian Journal of Cardiology  
Journal of Cardiovascular Pathology  
Molecular Medicine  
American Journal of Physiology: Lung Cellular & Molecular Physiology  
Arteriosclerosis, Thrombosis, and Vascular Biology  
Journal of Clinical Investigation (Consulting Editor)  
Annual Reviews of Physiology (2010-2015)  
Vascular Pharmacology (2021-present)  
Journal of American College of Cardiology: Basic to Translational Science journal (2020-present, Section Editor)  
Reviewer  
American Journal of Cardiology  
American Journal of Pathology  
American Journal of Physiology; Cell Physiology  
American Journal of Physiology: Heart and Circulatory Physiology  
American Journal of Physiology: Lung Cellular and Molecular Physiology  
American Journal of Respiratory Cell & Molecular Biology  
American Review of Respiratory Diseases  
Cardiovascular Research  
Circulation  
Circulation Research  
Development  
Developmental Biology  
European Heart Journal  
Human Molecular Genetics  
Journal of Applied Physiology  
Journal of Biological Chemistry  
Journal of Cell Biology  
Journal of Cell Physiology  
Journal of Clinical Investigation  
Journal of Thoracic and Cardiovascular Surgery  
Laboratory Investigation  
Nature Medicine  
Pediatric Pulmonology  
Pediatric Research  
PNAS  
Nature Communications

### **Major Research Interests**

1. Pulmonary circulation in congenital heart disease
2. Pulmonary hypertension
3. Molecular mechanisms regulating vascular endothelial, smooth muscle cell and inflammatory cell interactions -extracellular matrix interactions
4. Endogenous retrovirus and inflammation

5. Gene regulation, metabolism and epigenetics, high throughput assays, gene regulation, gene therapy transgenic mouse models of altered cardiovascular development and disease

### **Research Support**

- 1979-1982 NIH Grant R01 - HL24418  
Pulmonary Hypertension in Congenital Heart Disease  
(Principal Investigator)
- 1979-1982 NIH Grant R01 - HL2323  
SCOR in Pulmonary Hypertension  
(Co-investigator)
- 1982-1985 Heart and Stroke Foundation of Ontario, (Grant I - 4-14; Grant-in-Aid)  
Pathogenesis of Pulmonary Vascular Disease  
(Principal Investigator)
- 1982-1986 Heart and Stroke Foundation of Ontario, (Grant II – 094; Personnel Award)  
Pathogenesis of Pulmonary Vascular Disease  
(Principal Investigator)
- 1983-1989 Heart and Stroke Foundation of Ontario  
(Research Associate Award)
- 1984-1987 Medical Research Council Of Canada, (Grant MT 8546)  
In Vitro Studies of Ductus Arteriosus Endothelial and Smooth Muscle Cells  
(Principal Investigator)
- 1986-1989 Heart and Stroke Foundation of Ontario  
Endothelial Dysfunction in the Pathogenesis of Pulmonary Vascular Disease  
(Principal Investigator)
- 1987 Bellhouse Products Grant  
Endothelialization of Heart Valves  
(Principal Investigator)
- 1987-1989 Medical Research Council of Canada (Grant MT 8546 - renewal)  
Functional Interactions of Endothelial and Smooth Muscle Cells in the Ductus  
Arteriosus and Fetal Pulmonary Circulation  
(Principal Investigator)
- 1992 - 1994 Heart and Stroke Foundation of Ontario  
Career Investigator
- 1992-1995 Heart and Stroke Foundation of Ontario  
Elastase in Pulmonary Hypertension  
(Principal Investigator)
- 1992-1997 Medical Research Council Of Canada  
Regulation of Fibronectin and Hyaluronan Governs Vascular Smooth Muscle Cell  
Migration and Intimal Proliferation  
(Principal Investigator)
- 1993-1996 Medical Research Council of Canada  
Coordinator of Program Grant  
Interdisciplinary Program in Vascular Development and Disease

1993-1995 Cutter/Canadian Red Cross Society  
Use of the Blood Product Alpha-1 Antitrypsin in the Treatment of  
Bronchopulmonary Dysplasia  
(Principal Investigator)

1994-1997 Heart and Stroke Foundation of Ontario  
Career Investigator

1994-1996 Heart and Stroke Foundation of Ontario  
Regulation of Expression of Elastin and Elastase in Vascular Development  
(Principal Investigator)

1995-1998 Heart and Stroke Foundation of Ontario  
Endogenous Vascular Elastases in the Progression and Regression of Vascular  
Disease  
(Principal Investigator)

1996-2001 Medical Research Council of Canada  
(Coordinator of Program Grant)  
Interdisciplinary Program in Vascular Development and Disease  
(Principal Investigator)

1996-1999 Heart & Stroke Foundation of Ontario  
Regulation of Vasculogenesis by the Elastase Inhibitor Elafin: Studies Using a  
Transgenic Approach  
(Principal Investigator)

1997-1999 Servier  
Are mechanisms Regulating Adipsin and Elastase in Pulmonary Hypertension  
Related to Starvation or Dexfenfluramine  
(Principal Investigator)

1997-1998 PPH Cure Foundation  
Elastase Inhibition, Tenascin Withdrawal and L-Arginine in Preventing Progression  
and Inducing Regression of Pulmonary Vascular Disease  
(Principal Investigator)

1998-2001 Heart & Stroke Foundation Of Canada  
Apolipoprotein A, AML1, Elastase and Tenascin in Pulmonary Vascular Disease  
(Principal Investigator)

1999-2002\* Heart & Stroke Foundation of Canada  
Robert Freedom Endowed Chair for Cardiovascular Research  
\*Funds not transferable to the United States beyond 2002

1999-2002 Heart & Stroke Foundation of Canada  
Regulation of Cardiovascular Remodeling by Elafin and a Novel Vascular  
Chymase: Studies Including a Transgenic Approach  
(Principal Investigator)

1999-2004\*  
(2002) The Hospital for Sick Children Foundation  
Ductus Gene Therapy Fund  
(Principal Investigator)  
\*Funds not transferable to the United States beyond 2002.

2000-2002 University of Toronto, Dales Award  
(Principal Investigator)

2000-2005\*  
(2002) Medical Research Council of Canada  
Elastase Myocardial Remodeling and Progenitor Cells  
(Principal Investigator)  
\*Funds not transferable to the United States beyond 2002.

2000-2005\*  
(2002) Medical Research Council of Canada  
Distinguished Scientist Award  
Elastase and the Extracellular Matrix in Vascular Disease  
\*Funds not transferable to the United States beyond 2002.

2000-2006 NIH R01 (HL062512)  
Chronic Lung Injury After Premature Birth  
(Co- Principal Investigator)

2001-2006\*  
(2002) Canadian Institutes of Health Research (formerly Medical Research Council of  
Canada) Coordinator, Interdisciplinary Program in Cardiovascular Development  
and Disease  
(Principal Investigator) (\$268,931/annum)  
LC-3, Apolipoprotein D and Mechanisms of Neointimal Formation  
(Principal Investigator)  
\*Funds not transferable to the United States beyond 2002.

2001-2006\*  
(2002) Heart and Stroke Foundation of Canada  
AML1, Mts1, Progression and Regression of Pulmonary Vascular Disease  
(Principal Investigator)  
\*Funds not transferable to the United States beyond 2002.

2004-2006 Beckman Foundation for Translation Research, Stanford University  
(Joint award with Dr. Martin Brown)

2006-2014 CMREF/PHBI  
Stanford IPAH Transplant and Preparation Center  
(Principal Investigator)

2007-2008 Scleroderma Research Foundation  
Viral Mediated Pulmonary Hypertension as a Model for Scleroderma  
(Principal Investigator)

2007-2008 National Scleroderma Foundation  
S100A4/Mts1-Induced Pulmonary Hypertension and Scleroderma  
(Principal Investigator)

2007-2013 NIH K12 RFA-HL-07-004:CDP  
Stanford Career Development Program in the Genetics and Genomics of Lung  
Diseases  
(Co-Director; PI: M Krasnow)

2008-2012 NIH R01 HL086631  
Mechanical Ventilation of Newborn Mice: Impact on Alveolarization and Lung Elastin  
(Co-Investigator; PI: RD Bland)

2009-2011 Children's Heart Foundation  
Computationally Guided Design of Biodegradable Drug Eluting Stents for the Treatment and Reversal of Vascular Stenoses in Children with Congenital Heart Defects  
(Principal Investigator)

2009-2011 Brigham and Women's Hospital  
Subaward 104957 on R01 HL060234  
Heme Oxygenase 1/Carbon Monoxide in Lung Vascular Injury  
(Co-Investigator – Stanford Subcontract PI; PI: A.M.K. Choi)

2010-2011 NIH R21 HL098782  
Identifying the Serine Elastase Elevated in Pulmonary Vascular Disease  
(Principal Investigator)

2010-2015 NIH N01-HV-00242  
Proteomics of Inflammation, Immunity and Pulmonary Arterial Hypertension  
Project I: Dysregulated B Cells and PAH  
(PI: GP Nolan; PI of Project I: M Rabinovitch)

2011-2016 NIH/NHLBI U01 RFA HL-11-006 (UHL107393A)  
iPSC Derived EC as Surrogates Using Pulmonary Hypertension as a Prototype Disease  
(PIs: M. Rabinovitch, M. Snyder, J. Wu)

2011–2013 NIH R03 RFA-HL-11-032  
Cell Specific Localization of Altered Gene Expression in Pulmonary Hypertension  
(Principal Investigator)

2013–2019 NIH K12 HL120001  
Stanford Career Development Program in Omics of Lung Diseases  
(PIs: M. Rabinovitch, MP Snyder, MR Nicolls)

2014–2019 NIH R24 HL123767  
Subaward from the Indiana University, Indianapolis, IN (Prime sponsor: NHLBI)  
Pulmonary Hypertension Breakthrough Initiative  
(Co-Investigator – Stanford Subcontract PI; PI: M Geraci)

2015-2019 NIH R01 HL122887  
Integrative Omics as a Discovery Tool for Pulmonary Hypertension  
(PIs: M Rabinovitch, MR Nicolls, MP Snyder)

2017-2022 NIH R01 HL138473  
Endothelial Injury, BMPR2 Dysfunction and Macrophage Activation Cause EndMT and PAH  
(PIs: M Rabinovitch, MR Nicolls)

2011-2024 NIH P01 HL108797  
Cycle II Title: Elafin Therapy for Pulmonary Arterial Hypertension  
Cycle I Title: Elafin Therapy for Lung Diseases

(Program Director; Principal Investigator on Project I; Leader on Administrative Core)

2006-2025 NIH R01 HL087118  
The BMP-PPAR Axis and Pulmonary Hypertension  
(Principal Investigator)

2004-2024 NIH R01 HL074186  
Pulmonary Hypertension in Genetically Modified Mice  
(Principal Investigator)

2020-2030 NIH R38 HL143615-01A1  
Stanford Integrated Cardiovascular/Pulmonary Residency Research Training Program  
(PIs: J Wu, M Fischbein, M Rabinovitch)

2021-2025 NIH R01 HL152134  
High Shear Stress Alters Gene Regulation in Pulmonary Arterial Hypertension  
(Principal Investigator)

2021-2026 NIH UM1 HG011972  
Stanford Center for Connecting DNA Variants to Function and Phenotype  
(Co-Investigator; PI: J Engreitz)

2022-2026 NIH R01 HL141371  
Human iPSC Model for Elucidating Intracellular Crosstalk Signaling in Dilated Cardiomyopathy  
(Co-Investigator; PIs: JC Wu, LS Qi, W Wong)

2022-2026 NIH R01 HL141851  
Modeling Tyrosine Kinase Inhibitor-Induced Vascular Dysfunction Using Human iPSC  
(Co-Investigator; PIs: JC Wu, LS Qi, W Wong)

2023-2026 Advanced Research Projects Agency for Health (ARPA-H) - 1AY1AX000002  
Heart Enabling Advancements through Regenerative Tissue (HEART) Program  
(Co-Investigator; PI: M Skylar-Scott)

2023-2027 NIH R01 HL171609  
Mapping, programming, and correcting gene regulatory sequences for Alagille Syndrome  
(Co-Investigator; PI: J Engreitz)

2024-2027 California Institute for Regenerative Medicine (CIRM)  
Mapping and Modeling Endothelial Cell Fate Decisions for Pulmonary Arterial Hypertension  
(Co-Investigator; PI: X Qiu)

2024-2028 NIH R01 HL138473  
BMP2, Monocytes and Macrophages in Pulmonary Artery Hypertension  
(PIs: M Rabinovitch, MR Nicolls)

2025-2028 NIH R01 HL176822  
Unraveling Proteasome Inhibitor-Induced Cardiovascular Toxicity through Integrative Multiomics  
(Co-Investigator; PI: JC Wu)

- 2025-2029 NIH R01 HL139478  
The SMAD3 signaling network in coronary artery disease risk  
(Co-Investigator; PI: T Quertermous)
- 2025-2026 NIH UG3 HL180990  
1/2 A Phase 2 Study of Elafin (Tipelestat) for the Treatment of Pulmonary Arterial Hypertension (PAH)  
(PIs: M Rabinovitch, R Zamanian)
- 2025-2030 NIH P01 HL180323  
Identifying causal gene programs for vascular disease using high throughput CRISPR genomics  
(Project 3 Director; PI: T Quertermous)

### **Research Trainees (University of Toronto)**

- 1984-1986 Herschel C. Rosenberg, M.D.  
Post-doctoral Research Fellow  
Supported by a Medical Research Council Fellowship  
Topic: Pulmonary Vascular Endothelial Injury, Altered Reactivity and Structural Remodeling: Hemodynamic and ultrastructural studies
- 1984-1985 Wendy Wilson, B.Sc.  
Supported by a Special Student-Graduate Studies  
Topic: Endothelial Derived Smooth Muscle Aligning Factor
- 1984-1989 Livia Todorovich (Todd)-Hunter, Ph.D.  
Graduate Student in Pathology  
Supported by a Canadian Heart Foundation Studentship  
Topic: Elastase Activity and Elastin Synthesis in Pathogenesis of Pulmonary Hypertension: Biochemical and Ultrastructural Studies
- 1986-1989 Sophronia Turner-Gomes, M.D.  
Post-doctoral Research Fellow  
Supported by a Canadian Heart Foundation Fellowship  
Topic: Platelet Activating Factor, Heightened Pulmonary Vascular Reactivity and Mitogenic Activity: Studies in patients and cell cultures
- 1986-1987 Roma Ilkiw, M.D.  
Post-doctoral Research Fellowship  
Supported by a Cardiology Research Fellow (Centennial Fellowship Grant -MRC)  
Topic: Elastase Inhibition and Prevention of Pulmonary Vascular Disease
- 1987-1989 Kazuo Maruyama, M.D.  
Post-doctoral Research Fellow (Japan)  
Supported by a Medical Research Council Fellowship  
Topic: Elastase Inhibition and Progression of Pulmonary Vascular Disease
- 1987-1989 Jay LaBourene, M.D.

- Post-doctoral Research Fellow  
Supported by a Canadian Heart Foundation Fellowship  
Topic: Progressive Pulmonary Venous Obstruction: Hemodynamic biochemical, ultrastructural and cell culture studies
- 1987-1990 Li Zhu, M.D.  
Post-doctoral Research Fellow  
Supported by a Hospital for Sick Children Foundation Award  
Topic: Ductus Arteriosus and Fetal Pulmonary Artery Cells In Culture
- 1987-1990 Toni Bothwell, M.Sc.  
Graduate Student, Department of Pathology  
Supported by a Heart Foundation Studentship  
Topic: Pulmonary Vascular Smooth Muscle Mitogens and Growth Inhibitors
- 1987-1991 Nancy Boudreau, Ph.D.  
Graduate Student, Department of Pathology  
Supported by a Medical Research Council Studentship  
Topic: Extracellular Matrix Alterations and Smooth Muscle Differentiation
- 1990-1991 Jennita Slomp, M.Sc.  
Research Student  
Supported by Heart Foundation scholarship from the Netherlands  
Topic: SPARC Protein and Intimal Proliferation in The Ductus Arteriosus
- 1991-1993 Shin-ichi Oho, M.D.  
Post-doctoral Research Fellow  
Supported by a scholarship from Japan  
Topic: Regulation of Elastase Associated with Intimal Proliferation in Vascular Disease
- 1991-1994 Jun Kobayashi, M.D.  
Post-doctoral Research Fellow  
Supported by Medical Research Council Fellowship  
Topic: Expression and Regulation of Elastase in Endothelial Cells and Vascular Smooth Muscle Cells
- 1991-1998 Bin Zhou, M.D., Ph.D.  
Graduate Student, Department of Pathology  
Supported by Hospital for Sick Children Restracom Scholarship  
Topic: Regulation of Enhanced Fibronectin Translation and increased TGF $\beta$  in the Ductus
- 1992-1995 Sam Shemie, M.D.  
Post-doctoral Research Fellow and Junior Staff in ICU  
Supported by a Ministry of Health Scholarship  
Topic: Regulation of Elastase Gene Expression in Monocrotaline-Induced Pulmonary Hypertension
- 1992-1994 Weimin Hu, M.D., Ph.D.  
Post-doctoral Research Fellow  
Supported by Canadian Heart Foundation Fellowship

- 1993-1995  
Topic: The Interleukin Responsive Element In The Fibronectin Promoter: Relevance to the Post-Cardiac Transplant Coronary Arteriopathy  
Dennis Wigle, M.D., Ph.D.  
Medical Scientist
- 1994-1997  
Topic: Molecular Regulation of Elastase: Cis Elements in the Promoter/Enhancer and Trans-Acting Factors  
Karen Thompson, Ph.D.  
Post-doctoral Research Fellow  
Supported by a Heart & Stroke Foundation of Ontario Fellowship
- 1994-1998  
Topic: Regulation of Growth Factor Activity by Elastase  
Bryce Cowan, M.D., Ph.D.  
Graduate Student, Department of Pathology  
Supported by the Heart & Stroke Foundation of Ontario Studentship
- 1994-1998  
Topic: Cytokine-induction of Fibronectin is Related to Elastase. Molecular and Cellular Mechanisms & Efficacy of Gene Transfer Therapy  
Peter Jones, Ph.D.  
Post-doctoral Research Fellow
- 1995-2001  
Topic: Molecular Mechanisms Regulating Tenascin, Interactions with Fibronectin & Elastase in Vascular Remodeling in Development & Disease: Application of Transgenic Models  
Syed Zaidi, Ph.D.  
Post-doctoral Research Fellow
- 1995-1998  
Topic: Elafin Transgenic Mouse Microtubule Associated Protein LC-3 and Post-Transcriptional Regulation of SMC Motility Genes  
Caiying Guo, Ph.D.  
Post-doctoral Research Fellow
- 1996-1999  
Topic: Cloning a Novel Chymase  
Catherine Mason, M.D., Ph.D.  
Graduate Student, Department of Laboratory Medicine & Pathobiology (formerly Pathology)  
Supported by a Medical Research Council Studentship
- 1996-1998  
Topic: Post-Transcriptional Regulation of Fibronectin in the Development of Ductus Arteriosus Neointimal Formation  
Andrea Burry, M.Sc.  
Graduate Student, Department of Laboratory Medicine & Pathobiology  
Supported by a Heart & Stroke Foundation of Ontario Fellowship
- 1996-2000  
Topic: The Inter-Relation of TGF-, LC3 and Apolipoprotein D in the Fetal Lamb ductus arteriosus  
Kyle Cowan, Ph.D.  
Graduate Student, Department of Laboratory Medicine & Pathobiology  
Supported by a Restracom Award
- 1996-1997  
Topic: Mechanisms of Vascular Cell Apoptosis & Regression of Structural Remodeling in Pulmonary Artery Organ Culture  
Jong-Kyun Lee, M.D.

- Post-doctoral Research Fellow  
Supported by a Scholarship from Yonsei University, Korea  
Topic: Elastase Inhibitors in the Prevention of Myocarditis-Induced  
Cardiomyopathy
- 1996-1999 Yoshihide Mitani, M.D.  
Post-doctoral Research Fellow  
Supported by a Scholarship from MIE University, Japan  
Topic: Dexfenfluramine, Elastase and Adipsin in the Pathobiology of Pulmonary  
Hypertension
- 1997-1999 Stacy O'Blenes, M.D., M.Sc.  
Graduate Student, Department of Laboratory Medicine & Pathobiology  
Supported by a Heart & Stroke Foundation of Ontario Fellowship  
Topic: Reciprocal Regulation of Elastase and Elastase Inhibitors In Vascular  
Biology
- 1997-1999 Agatha Lau, B.Sc., M.Sc.  
Graduate Student, Department of Laboratory Medicine & Pathobiology  
Supported by a Medical Resource Council Studentship  
Topic: Regulation of LC3 by Elastin Peptides: RNA and Tubulin Binding Sites of  
LC3
- 1997-1998 Tiscar Cavelle-Garrido, M.D.  
Post-doctoral Research Fellow (co-supervised with Dr. Lisa Hornberger)  
Supported by a Restracom Award from The Hospital for Sick Children  
Topic: Proliferative Mechanism in Human Fetal Cardiac Myocytes
- 1998-2000 Pascale Dufourcq, Ph.D.  
Post-doctoral Research Fellow  
Supported by a Heart and Stroke Foundation of Canada Fellowship  
Topic: Role of AML1 in Smooth Muscle Cell Migration
- 1998-2000 Haisong Ju, Ph.D.  
Post-doctoral Research Fellow  
Supported by a Medical Research Council of Canada, Heart & Stroke Foundation  
of Canada Fellowship  
Topic: Elafin and Novel MCP-like Gene Knockout Mice: Impact on Vascular  
Development and Disease
- 1999-2001 Caroline Fallery, M.Sc.  
Graduate Student, Department of Laboratory Medicine & Pathobiology  
Topic: LC-3 is Phosphorylated through a MAP Kinase Pathway, Resulting in an  
Increase in Fibronectin mRNA Translation
- 1999-2001 Tilman Humpl M.D.  
Post-doctoral Fellow  
Supported by Department of Pediatrics, The Hospital for Sick Children  
Topic: Targeting Prostacyclin Synthase to the Ductus Arteriosus
- 1999-2002 Hamid Massaeli, Ph.D.  
Post-doctoral Fellow  
Supported by a Heart & Stroke Foundation of Ontario Fellowship

- 2000 Topic: The Human Vascular Chymase Gene  
Rakesh Bhattacharjee, M.D.  
Medical Scientist  
Supported by a McMaster Medical School/Medical Research Council Studentship  
Topic: Caspases have Elastase Activity Critical to Regression of Pulmonary Hypertension
- 1999-2001 Kunio Ohta, M.D.  
Post-doctoral Fellow  
Topic: Elastases Regulate Matrix Metalloproteinases in Inducing Regression of Pulmonary Vascular Disease
- 2000-2001 Robert VanSulyen, M.D.  
Post-doctoral Fellow  
Topic: Cloning EVE (Endogenous Vascular Elastase) from Human Vascular Smooth Muscle Cells
- 2000-2002 Wesley Leung, M.Sc.  
Graduate Student  
Supported by a Restracom Award, Heart & Stroke Foundation of Canada  
Topic: ApoD and Smooth Muscle Cell Migration
- 2000-2002 Jennifer Sargeant, M.Sc., M.D.  
Graduate Student  
Supported by a Heart & Stroke Foundation of Ontario Fellowship  
Topic: Targeted Gene Transfer in Biological Engineering of Congenital Heart Disease
- 2000-2002 Takanori Nakajima, Ph.D.  
Post-doctoral Fellow  
Supported by a Canadian Health of Institute Research Fellowship  
Topic: Progenitor Cells and Myocardial Remodeling
- 2002 Goran Jeremic  
4th year Work Study Student, University of Waterloo  
Supported by funds from HSF/HSC Academic Chair  
Topic: Mts1 and the Pathobiology of Pulmonary Hypertension

### **Research Trainees (University of Toronto and Stanford University)**

- 2000-2004 Sandra Merklinger, Ph.D.  
Graduate Student Institute of Medical Sciences  
Supported by Heart & Stroke/Richard Lewar Centre of Excellence  
Topic:  $\beta$ 3 Intergrin and Apoptosis Regression of Pulmonary Vascular Disease
- 2001-2008 Nesrine El-Bizri, Ph.D.  
Post-doctoral Research Fellow  
Supported by an American Heart Association/Pulmonary Hypertension Association Fellowship  
Topic: BMPR II and the Pathobiology of Pulmonary Vascular Disease

### **Research Trainees (Stanford University)**

- 2002-2004 Allan Lawrie, Ph.D.  
Post-doctoral Research Fellow  
Supported by a Stanford Postdoctoral Fellowship  
Topic: Mts1 and the Pathobiology of Pulmonary Vascular Disease
- 2002-2007 Edda Spiekerkoetter, M.D.  
Post-doctoral Research Fellow  
Supported by an American Heart Association/Pulmonary Hypertension Association Fellowship  
Topic: Cross Talk between S100A4/Mts1 and BMP in Smooth Muscle Cell Migration
- 2004-2005 Eliana Martinez, M.D.  
Post-doctoral Research Fellow  
Supported by a Ludwig Translational Research Program Grant  
Topic: The Role of BMBR II and Endothelial and Smooth Muscle Cell Differentiation from Embryonic Stem Cells
- 2004-2005 Roham T Zamanian, M.D.  
Post-doctoral Pulmonary Hypertension and Research Fellow  
Supported by The Wall Center Foundation  
Topic: Evaluation of Mts1 Levels in Patients with Primary and Secondary Pulmonary Hypertension
- 2004-2006 Georg Hansmann, M.D.  
Post-doctoral Research Fellow  
Supported by an American Heart Association/Pulmonary Hypertension Association Fellowship  
Topic: Links Between Insulin Resistance and Pulmonary Hypertension
- 2004-2007 Nirupama S Deshpande, Ph.D.  
Post-doctoral Research Fellow  
Supported by The Wall Center Foundation  
Topic: Regulation of LC3 Gene Expression in the Developing Nervous System and Vasculature
- 2004-2009 Cristina C Alvira, M.D.  
Post-doctoral Research Fellow  
Supported by a Pediatric Intensive Care Fellowship  
Topic: Maturation Differences in NfκB Activation in Response to Endotoxin, as they Relate to Lung and Vascular Pathobiology
- 2005-2006 Lisa Chyi, M.D.  
Post-doctoral Fellow  
Supported by NIH Training Grant in Neonatology and Developmental Biology  
Topic: Cross Talk between S100A4/Mts1 in Pulmonary Artery Smooth Muscle Proliferation and Endothelial Function
- 2005-2006 Stefan Schellong  
Visiting Researcher  
Supported by a Boehringer Ingelheim Educational Fund and the German National Academic Foundation Fellowship

Topic: The Role of PPAR Gamma and Apolipoproteine in Pulmonary Hypertension  
 2005-2011 Vinicio A. de Jesus Perez, M.D.  
 Post-doctoral Fellow  
 Supported by NIH Training Grant in Pulmonary Medicine (2 yrs) and American Lung Association postdoctoral Fellowship  
 Topic: The Role of the wnt Signaling Pathway in the Development of Pulmonary Arterial Hypertension  
 2006 Alex Cheng  
 Undergraduate Student Researcher  
 Supported by American Heart Association  
 Topic: PPAR gamma protects the pulmonary artery against the development of hypertension  
 2006 Alexandra Bruneau  
 Visiting Researcher  
 Supported by the Wall Center and Ministry of National Education, France  
 Topic: Smooth muscle cell motility is regulated by CLIC4 mediated internalization of S100A4/Mts1 and binding to myosin II  
 2006-2007 Janine M Bekker (Powers), Ph.D.  
 Post-doctoral Fellow  
 Supported by NIH/NHLBI Vascular Medicine Training Grant  
 Topic: LC3, a Microtubule Associated Protein, Regulates Matrix Proteins in Pulmonary Hypertension  
 2006-2007 Katie Lynn Pricola  
 Medical Student Researcher-Medical Scholar, Stanford University School of Medicine  
 Topic: SDF-1 and Pulmonary Hypertension  
 2006-2007 Laura Helena Rubinos  
 Medical Student, Baylor College of Medicine  
 Supported by a Sarnoff Foundation Fellowship  
 Topic: PPAR Gamma in SMC leads to pulmonary hypertension  
 2006-2010 Yu-Mee Kim, Ph.D.  
 Post-doctoral Fellow  
 Supported by an American Heart Association Western Affiliate Postdoctoral Fellowship  
 Topic: Murine Herpes Virus and the Pathobiology of Pulmonary Hypertension  
 2006-2008 Christophe Guignabert, Ph.D.  
 Post-doctoral Fellow  
 Supported by Institut National de la Sante et de la Recherche Medicale (INSERM), France  
 Topic: Molecular & Cellular Effects Of Altered BMP Signaling In The Pulmonary Circulation  
 2007-2009 Thomas Kleisli, M.D.  
 Post-doctoral Fellow

Supported by the Department of Surgery, Maricopa Medical Center, Phoenix, Arizona  
Topic: Regulation of Elastin Synthesis by Members of the Transforming Growth Factor Superfamily

2007-2009 Tero-Pekka Alastalo, M.D., Ph.D.  
Post-doctoral Fellow  
Supported by the Juselius Foundation, Instrumentarium, and the Academy of Finland  
Topic: Impact of Altered Endothelial Cell PPAR Gamma Gene Regulation on Pulmonary Hypertension

2007-2010 Hirofumi Sawada, M.D., Ph.D.  
Post-doctoral fellow  
Supported by a Fellowship from the Department of Pediatrics, Mie University Graduate School of Medicine, Japan  
Topic: Targeted Deletion of AML1 and the Development of Pulmonary Hypertension

2008-2009 Molong Li  
Stanford University - Undergraduate Student Researcher  
Supported by American Heart Association  
Topic: Herpes Virus (gamma) Infection-induced Pulmonary Hypertension in Mts 1

2009-2010 Ying-Ju Lai, PhD  
Post-doctoral Fellow  
Supported by the Children's Heart Foundation  
Topic: Elastin and the Pathobiology of Pulmonary Arterial Diseases

2009-2011 David Pham  
Stanford University - Undergraduate Student Researcher  
Supported by American Heart Association  
Topic: Nitrated Fatty Acids as Modulators of PPARgamma function

2009-2011 Edda Spiekerkoetter, M.D.  
Instructor of Medicine, Pulmonary and Critical Care Division, Stanford Univ. School of Medicine  
Scholar in the Stanford K12 Career Development Program in Genetics and Genomics of Pulmonary diseases  
Topic: High Throughput Screening of Compounds Activating BMPRII

2010 - 2015 Toshie Saito, M.D. (transitioned to an Academic Appointed Research Associate)  
Post-doctoral Fellow  
Supported by NIH grants  
Topic: Elastin, Elastase and Autoimmunity in Pulmonary Hypertension

2011 - 2016 Nancy Ferreira-Tojais, PhD  
Post-doctoral Fellow  
Supported by NIH grants  
Topic: BMPs and Elastin Fiber Assembly

2011 – 2017 Caiyun Li, PhD  
Post-doctoral Fellow

- 2011 Supported by NIH grants  
Topic: Cell-specific PPAR-gamma Mediated Gene Regulation  
Aiqin Cao, PhD  
Post-doctoral Fellow (transitioned to an Academic Appointed Research Associate)  
Supported by NIH grants  
Topic: BMPR2 Loss of Function and ER Stress
- 2011 – 2013 Christopher Rhodes, PhD  
Post-doctoral Fellow  
Supported by NIH grants  
Topic: RNAseq analysis of iPSC Derived versus Native PA Endothelial Cells in Patients with PAH vs. Controls
- 2011 – 2015 Nathaly Sweeney, MD  
Clinical/Research Fellow  
Supported by SOM, Cardiology Department  
Topic: DNA damage in pulmonary hypertension
- 2011 – 2016 Pin-I Chen, PhD (transitioned to an Academic Appointed Research Associate)  
Post-doctoral Fellow  
Supported by NIH grants  
Topic: Beta arrestins at the crossroads of BMPR2 signaling
- 2011 – 2014 Rachel Hopper, MD  
Clinical/Research Fellow  
Topic: The role of HMGA1 in pulmonary hypertension
- 2011 – 2012 Akihito Sasaki, MD, PhD  
Post-doctoral Fellow  
Supported by NIH grant, Tokyo Medical and Dental University, and the Okawa Foundation  
Topic: Elafin: A novel treatment for PH
- 2011 – 2014 Nils Nickel, MD  
Post-doctoral Fellow  
Supported by NIH grants and the Defense Foundation of Germany (DFG)  
Topic: Innate immunity and DNA methylation changes in PH
- 2012 - 2016 Jan K Hennigs, MD  
Post-doctoral Fellow  
Supported by NIH grants and the Defense Foundation of Germany (DFG)  
Topic: Role of P53 in Pulmonary Hypertension
- 2013 - 2014 Isabel Diebold, MD  
Post-doctoral Fellow  
Supported by the German Heart Foundation  
Topic: Oxidant stress and DNA damage in Pulmonary Hypertension
- 2014 – 2017 Kazuya Miyagawa, MD, PhD  
Post-doctoral Fellow  
Supported by Japan Heart Foundation, and The Uehara Memorial Foundation  
Topic: Tunneling nanotubes and mitochondrial rescue dynamics in pulmonary hypertension

- 2014 – 2021 Shalina Taylor, PhD  
Post-doctoral Fellow  
Supported by NIH URM Supplement and an NIH T32 award  
Topic: The role of neutrophils and other inflammatory cells in pulmonary hypertension, and the effect of elafin on neutrophil function
- 2015 –2022 Jan-Renier Moonen, MD, PhD  
Instructor (former Post-doctoral Fellow)  
Supported by the University Medical Center, Groningen, Netherlands  
Topic: Expression analysis of native and iPSC-derived vascular cells in pulmonary hypertension
- 2015 – 2020 Mingxia Gu, MD, PhD  
Instructor (2016 – present) Post-doctoral Fellow (2015-2016)  
Supported by the American Heart Association and NIH  
Topic: Using Patient-Specific iPSC Derived Endothelial Cells to Gain New Insights into Pathobiology and Therapy of FPAH and IPAH
- 2015 – 2021 Dan Li, PhD  
Post-doctoral Fellow  
Supported by the National Institute of Health and American Lung Association  
Topic: Metabolite profiling regulates the smooth muscle cells dysfunction in PAH
- 2015 – 2022 David Marciano, PhD  
Instructor (former Post-doctoral Fellow)  
Supported by NIH T32 and Research Funds, Snyder Lab  
Topic: Profiling cellular metabolism and the molecular mechanisms underlying disease pathogenesis using multi-omics approaches
- 2015 – 2018 James Chappell, PhD  
Post-doctoral Fellow  
Supported by NIH K12 “Omics of Lung Disease” grant and Research Funds, Snyder Lab  
Topic: Endothelial cell biology by generation and interpretation of multi-omic datasets
- 2016 Johanna Altman  
Visiting Student Researcher  
Supported by University of Vienna  
Topic: Studies on B cells by CyTOF in patients with idiopathic and thromboembolic pulmonary arterial hypertension
- 2016 – 2017 Ajay Bhatia, MD  
Clinical Fellow, Cardiothoracic Surgery, Stanford Hospital  
Topic: The impact of disturbed flow on pulmonary arterial endothelial cell function in patients with APAH and CHD
- 2017 Diederik van der Feen, MD (PhD Candidate)  
Visiting Instructor  
Supported by University Medical Center Groningen  
Topic: Identification of vascular molecular profiles associated with the reversibility of flow-induced PAH.

- 2017 – 2020 Shoichiro Otsuki, MD, PhD  
Post-doctoral Fellow  
Supported by the National Institute of Health and Mie University Graduate School of Medicine  
Topic: The role of human endogenous retrovirus K (HERV-K) in PAH PAEC
- 2017 – 2018 Yoon Hong Chun, MD  
Visiting Assistant Professor  
Supported by College of Medicine, The Catholic University of Korea  
Topic: Response of pulmonary arterial hypertension endothelial cells to laminar and disturbed flow
- 2017 – 2018 Shuai Mao, MD  
Visiting Assistant Professor  
Supported by Guangzhou University of Chinese Medicine  
Topic: Human induced pluripotent stem cell-derived vascular smooth muscle cells in pulmonary hypertension: differentiation and therapeutic potential
- 2017 – 2018 Roger Thompson, MRCP, PhD  
Visiting Post-doctoral Fellow  
Supported by Fulbright Fellowship  
Topic: The role of double-stranded RNA in pulmonary vascular remodeling
- 2018 – 2020 Rebecca Harper, PhD  
Post-doctoral Fellow  
Supported by the National Institute of Health  
Topic: Monocyte and macrophage biology in pulmonary hypertension
- 2018 – 2023 Sarasa Isobe, MD, PhD  
Post-doctoral Fellow  
Supported by the National Institute of Health and Japanese Fellowship  
Topic: PPARgamma and DNA damage in pulmonary hypertension\
- 2018 – 2021 Tsutomu Shinohara, MD, PhD  
Visiting Clinical Professor  
Supported by Stanford Research Funds and Japanese Fellowship  
Topic: High shear in PH and Jagged 1 in pulmonary artery obstruction
- 2019 - 2021 Marcy Martin, PhD  
Post-doctoral Fellow  
Supported by: National Institute of Health T32 and Stanford Research Funds  
Topic: Using organoid technology to model pulmonary hypertension
- 2021 – 2023 Jason Szafron, PhD  
Post-doctoral Fellow (co-mentored with Alison Marsden)  
Supported by: Parker B Francis Fellowship  
Topic: Exploring the multi-scale growth and remodeling of pulmonary arteries in pediatric pulmonary hypertension and its corresponding hemodynamic consequences
- 2022-2024 Seo Woo Song, PhD  
Visiting Scholar (joint with Mark Skylar-Scott's Lab)

- Supported by: National Research Foundation of Korea Young Researcher Program (South Korea) and Betty Irene Moore Heart Center Fund  
Topic: high throughput approach to producing fibrin scaffolds that support SMC alignment and growth and endothelial cells that sense flow
- 2022-present Mauro Lago Docampo, PhD  
Post-doctoral Fellow  
Supported by: National Institute of Health and Fundación Ramón Areces  
Topic: aims to understand the impact of TBX4 variation on the interactome, DNA binding, epigenetic regulation, gene expression and function
- 2022-2025 Mir Adil, PharmD, PhD  
Post-doctoral Fellow  
Supported by: National Institute of Health and MCHRI  
Topic: uncovering the mechanism leading to the abnormal increase in the expression of human endogenous retroviruses in myeloid cells
- 2022-present Chongyang Zhang, PhD  
Post-doctoral Fellow  
Supported by: National Institute of Health and American Heart Association  
Topic: Aldehyde dehydrogenase ALDH3A1 and SOX17 are flow responsive factors that regulate gene accessibility and gene regulation
- 2023-2024 Divya Guntur  
Visiting Student Researcher  
Supported by: OeAD- Marietta Blau fellowship and Austrian Marshall Plan Foundation  
Topic: ion channels and iPSCs derived-inflammatory cells from patients suffering from pulmonary arterial hypertension (PAH) to expand the boundaries of PAH research and the opportunities for treatment
- 2024-present Jeonghyun Son  
Post-doctoral Fellow  
Supported by: Ulsan National Institute of Science & Technology, Republic of Korea  
Topic: Biofabricated vascular tubes for disease modeling in pulmonary hypertension
- 2024-2025 Emmanouil Mavrogiannis  
Visiting Student Researcher  
Supported by: University Medical Center Groningen, the Netherlands  
Topic: Inflammasome and HERV activation in pulmonary arterial hypertension
- 2025-present Olga Pushkarev  
Post-doctoral Fellow  
Supported by: National Institute of Health and Swiss National Fund  
Topic: Identification of causal gene programs for pulmonary arterial hypertension with in vivo Perturb-seq.
- 2025-2026 Isabel Blanco Vich  
Visiting Scholar  
Supported by: Hospital Clinic Barcelona

Topic: Characterizing BMPR2 gene mutations and their penetrance in Pulmonary Arterial Hypertension

**Graduate Student Committees**

(University of Toronto, unless otherwise indicated)

- 1986 Michelle Bendeck, Ph.D. student in Pathology
- 1986 Therese Perrault, M.Sc. student in Physiology
- 1987 Tino Piscione, M.Sc. student in Physiology
- 1987 Don Kim, M.Sc. student in Pathology
- 1987 Edward Koo, Ph.D. student in Pathology
- 1987 Steve Circo, Ph.D. student in Physiology
- 1987 Awatif Jamal, M.Sc. student in Pathology
- 1989 Robert Pavolic, M.Sc. student in Biochemistry
- 1989 Yang Wang, Ph.D. student in Physiology
- 1989 Ross Tracey, Ph.D. student in Pharmacology (Univ. of Western Ontario)
- 1989 Aesim Cho, M.Sc. student in Biochemistry
- 1989 Anthony Panos, M.Sc. student, Institute of Medical Sciences
- 1989 Mary Nagai, Ph.D. student in Pathology
- 1990 David Ettenson, Ph.D. student in Pathology
- 1990 David Courtman, Ph.D. student in Pathology
- 1990 Julie Yu, Ph.D. student in Pathology
- 1990 Charlotte Newmann, Ph.D. student in Pathology
- 1991 Bingruo Wu, M.Sc. student in Clinical Biochemistry
- 1992 Ida Di Stefano, M.Sc. student in Pathology
- 1993 Sandra Daley, Ph.D. student in Pathology
- 1993 William Andrade, Ph.D. student in Pathology
- 1993 Robert Stewart, M.Sc. student in Pathology
- 1994 Yvonne Lo, M.Sc. student in Pathology
- 1994 Hariclia Antoniou, M.Sc. student in Pathology
- 1994 Lisa Wong, Ph.D. student in Pathology
- 1996 Fotula Karantzoulis, M.Sc. student in Pathology
- 1996 Joseph Lee, Ph.D. student in Pathology
- 1996 Ilana Bayer, Ph.D. student in Pathology
- 1996 Sharon Tai, M.Sc. student, Institute of Medical Sciences
- 1996 Tim Gray, M.Sc. student in Pathology
- 1997 Robert Diaz, M.Sc. student, Institute of Medical Sciences
- 1997 Mojegan Rezvani, Ph.D., student, Institute of Medical Sciences
- 1997 Ann Opavsky, Ph.D., student, Institute of Medical Sciences
- 1998 Leena Hajra, M.Sc. student in Laboratory Medicine & Pathobiology
- 1998 Frouz Paiwand, M.Sc. student in Laboratory Medicine & Pathobiology
- 1999 Sharon Tai, Ph.D. student in Laboratory Medicine & Pathobiology

### **Examining Committees (External Appraiser)**

- 1994 Agnes Tay, Ph.D., student in Clinical Biochemistry
- 1994 Lea Fialkow, Ph.D., student, Institute of Medical Sciences
- 1995 Sergio Ribeiro, Ph.D., student, Institute of Medical Sciences
- 1996 Reena Sandhu, Ph.D., student in Pathology
- 2005 Chris Murriel, Ph.D., student in Molecular Pharmacology

### **Teaching Experience**

- 1977-1982 Lectureship, Harvard Medical School, Pediatric Pathology, Cardiology and Nuclear Medicine, Boston, Massachusetts
- 1979-1982 Post-doctoral and Medical School teaching, Harvard Medical School for Pathology Residents, Cardiology Residents, Cardiology Fellows and Cardiovascular Surgical Residents, Boston, Massachusetts
- 1982-2002 Post-doctoral, Medical and Graduate School Teaching University of Toronto, Ontario, Canada
- 2002-present Post-doctoral, Medical and Graduate School Teaching, Stanford University School of Medicine, Stanford, California
- 2005- 2015 Co-Director, MED 223 – Cardiovascular and Pulmonary Science Seminar  
Co-Director, Cardiovascular Pulmonary Research Scholarly Concentration for Medical Students

### **Principal Clinical and Hospital Service Positions**

- 1976-1982 Attending physician on cardiac ward and cardiac consulting service  
Children's Hospital Medical Center, Boston, Massachusetts
- 1982-2002 Attending physician on cardiac ward and cardiac consulting service  
Hospital for Sick Children, Toronto, Ontario, Canada
- 1986-1988 Acting Director of Cardiovascular Research  
Research Institute, Hospital for Sick Children, Toronto, Ontario, Canada
- 1988-2002 Director of Cardiovascular Research  
Research Institute, Hospital for Sick Children, Toronto, Ontario, Canada
- 2002-present Pediatric Cardiologist  
Lucile Packard Children's Hospital, Stanford University, Stanford, California
- 2002-present Scientist  
Vera Moulton Wall Center for Pulmonary Vascular Diseases, Stanford University  
School of Medicine, Stanford, California

### **Visiting Professorships and Named Lectureships (Named lectureships are underlined)**

- 1980 University of Colorado, Department of Pediatrics Cardiology, Denver, Colorado
- 1981 University of Michigan, Department of Pediatrics Cardiology, Ann Arbor, Michigan
- 1981 Columbia University, Departments of Pediatrics and Pulmonary Medicine, New York, New- York
- 1983 Mayo Clinic, Department of Pediatric Cardiology, Minneapolis, Minnesota
- 1984 University of British Columbia (Children's Hospital), Departments of Cardiology and Pathology, Vancouver, British Columbia, Canada

- 1985 Bellevue NYU Medical Center, Leo M. Taran Lectureship, New York, New York
- 1986 University of Utah, Departments of Pediatrics and Pathology, Salt Lake City, Utah
- 1986 Vanderbilt University, Department of Pulmonary Medicine and Pediatric Cardiology, Nashville, Tennessee
- 1987 Albert Einstein College of Medicine, Dennison Young Memorial Lectureship, New York, New- York
- 1987 William Rashkind Memorial Lectureship, Philadelphia, Pennsylvania
- 1987 University of Minnesota, Department of Medicine, Minneapolis, Minnesota
- 1987 Yale University Medical School, Department of Pediatrics and Cardiology, New Haven, Connecticut
- 1987 Johns Hopkins Hospital, Departments of Anesthesiology and Pediatrics, Baltimore, Maryland
- 1988 British Heart Foundation Fellowship, London, England
- 1989 University of Southwest Texas at Dallas, Department of Pediatrics, Dallas, Texas
- 1990 University of Minnesota, Department of Pediatrics, Minneapolis, Minnesota
- 1990 Cincinnati Children's Hospital, University of Cincinnati, Cincinnati, Ohio
- 1990 University of Washington, Department of Pediatrics, Seattle, Washington
- 1991 Johns Hopkins University, Richard Rowe Memorial Lectureship, Department of Pediatrics, Baltimore, Maryland
- 1991 Robert Wood Johnson Medical School, Division of Pediatrics, Pulmonary and Critical Care Medicine, New Brunswick, New Jersey
- 1991 Emory University, Dept. of Pediatrics, Frances Glynn Mason Lectureship, Atlanta, Georgia
- 1992 St. Boniface General Hospital Research Centre, University of Manitoba, Women's Hospital Health Sciences Centre, Winnipeg, Manitoba, Canada
- 1992 University of Leiden, Anatomy Department, Leiden, The Netherlands
- 1992 University of Wales at Cardiff, British Society of Toxicology, Cardiff, Wales, United Kingdom
- 1993 University of Padova, Department of Cardiovascular Surgery, Padova, Italy
- 1993 New York University, Cardiology Grand Rounds, New York, New York
- 1993 Children's Hospital of Philadelphia, Ann Newman Lectureship, Philadelphia, Pennsylvania
- 1993 Washington University Medical School, St. Louis, Missouri
- 1993 CIBA Geigy, Basel Switzerland
- 1994 Consultant, Nexagen, Boulder, Colorado
- 1994 Cardiovascular Research Group, University of Calgary, Alberta, Canada
- 1994 Dennison Young Professor, Division of Pediatric Cardiology, Montefiore Medical Center, New York, New York
- 1994 Kenneth Brown Visiting Professor, Toronto Hospital, Toronto, Ontario, Canada
- 1994 Toronto Hospital, Transplantation Day, Toronto, Ontario, Canada
- 1995 St. Elizabeth's Medical Center, Tufts University School of Medicine, Boston, Massachusetts
- 1995 McMaster University, Hamilton, Ontario, Canada
- 1995 Royal Free Hospital, London, England
- 1995 Cardiovascular Research Group, University of Calgary, Alberta, Canada

1995 Department of Pediatrics, University of Utah, Salt Lake City, Utah  
1995 Donald Fyler Lectureship, Department of Cardiology, Children's Hospital, Harvard Medical School, Boston, Massachusetts  
1995 Rene Robaire Memorial Lectureship, McGill University, Montreal, Ontario, Canada  
1996 Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts  
1996 Visiting Scientist, Boston University School of Medicine, Boston, Massachusetts  
1996 Julius Comroe Lectureship, Experimental Biology Meeting, Washington, DC  
1996 Keynote Speaker, Margaret P. Moffat Graduate Research Day, University of Western Ontario, London, Ontario, Canada  
1997 Department of Biochemistry, Queen's University, Kingston, Ontario, Canada  
1997 Department of Pharmacology, University of Sherbrooke, Quebec, Canada  
1998 David W. Smith Memorial Lectureship, The Western Society for Pediatric Research, Carmel, California  
1998 Cazden Visiting Professor, Oregon Health Sciences University, Portland, Oregon  
1998 Visiting Scholar, Ohio State University Medical Center, Columbus, Ohio  
1998 Cleveland Clinic, Featured Lectureship, Cleveland, Ohio  
1998 Children's Hospital Medical Center, Division of Cardiology and the Developmental Biology Group, Cincinnati, Ohio  
1998 Duke University Medical Center, Durham, North Carolina  
1999 Department of Anesthesiology & Division of Pediatric Cardiology, Columbia University, New- York, New York  
1999 Institute for Medicine & Engineering, University of Pennsylvania, Philadelphia, Pennsylvania  
1999 Cardiology Grand Rounds, McGill University, Montreal, Quebec, Canada  
1999 Regina Gluck Memorial Lectureship, North Shore University, Long Island, New York  
1999 Cardiovascular Grand Rounds, Brigham & Women's Hospital, Boston, Massachusetts  
2000 Distinguished Scientist Seminar, University of Mobile, Alabama  
2000 Harold and Marilyn Menkes Memorial Lectureship, The John Hopkins University, Baltimore, Maryland  
2000 Pharmacia, Featured Lectureship, Missouri  
2000 Zuberbuhler Lectureship, Children's Hospital of Pittsburgh, Pennsylvania  
2000 Department of Cell Biology & Anatomy, Mt. Sinai School of Medicine, New York, New York  
2000 Consultant, University of Michigan, Child Health Research Center, Ann Arbor, Michigan  
2001 University of Florida, Gainesville, Florida  
2001 University of New Mexico Health Sciences, Albuquerque, New Mexico  
2001 Vanderbilt University, Nashville Tennessee  
2001 Molecular and Cellular Pathology Seminar and the Cell Adhesion and Matrix Research Center, University of Alabama, Birmingham, Alabama  
2001 Research Day Lectureship, University of North Carolina of Chapel Hill, North Carolina  
2001 International Conference on Pulmonary Hypertension, Vienna, Austria  
2001 R.W. Mead Johnson Pharmaceutical Research Institute, Johnson and Johnson, Springhouse, Pennsylvania  
2002 Pediatric Grand Rounds, New York Presbyterian Hospital, New York, New York

- 2002 Dunlevie Family Lecture, Lucille Packard Children's Hospital, Stanford University, Stanford, California
- 2002 Frontier of Congenital Cardiac Science Conference, Canadian Cardiovascular Society, Dr. Peter Olley Symposium, Edmonton, Alberta, Canada
- 2002 Paul Dudley White International Lectureship, American Heart Association, Chicago, Illinois
- 2002 Millenium Pharmaceutical Roundtable, South San Francisco, California
- 2003 Robert H. Miller Visiting Professorship, University of Florida, Gainesville, Florida
- 2003 Anna Borun and Harry Borun Foundation, Visiting Professorship, University of California Los- Angeles, Los Angeles, California
- 2003 Gill Lectureship in Cardiovascular Science; University of Kentucky, Lexington, Kentucky
- 2003 University of Florida, Visiting Professor, Jacksonville, Florida
- 2003 University of Colorado, Department of Cell Biology and Pediatrics, Denver, Colorado
- 2003 Visiting Professor, Maastricht, Holland
- 2003 Children's Hospital of Los Angeles, Los Angeles, California
- 2003 Frontiers in Heart Failure Research, Distinguished Visitors Seminar Series, Ottawa, Ontario, Canada
- 2004 Pediatric Grand Rounds, Children's Hospital of Philadelphia, Philadelphia, Pennsylvania
- 2004 Pulmonary Grand Rounds, Washington University, St. Louis, Missouri
- 2004 Cardiology Grand Rounds, Department of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania
- 2004 Jefferson Research Day, Potts Lectureship, Thomas Jefferson University, Philadelphia, Pennsylvania
- 2004 Program Summarizer, Aspen Lung Conference, Aspen, Colorado
- 2004 Institute of Circulatory and Respiratory Health Distinguished Lecture and Prize in Cardiovascular Sciences, Vancouver, BC
- 2004 Pediatric Grand Rounds, University of Texas Southwest, Dallas, Texas
- 2005 Medical Grand Rounds and Rheumatology Grand Rounds, Johns Hopkins University School of Medicine, Baltimore, Maryland
- 2005 Medical Grand Rounds - Naimi Lecture at Tufts-New England Medical Center, Boston, Massachusetts
- 2005 Dickinson W. Richards Memorial Lecture, American Heart Association Scientific Sessions, Dallas, Texas
- 2006 Keynote Speaker, the 9th International Workshop on Scleroderma Research, Boston Massachusetts
- 2006 Keynote Speaker, NIH Workshop - Hereditary Hemorrhagic Telangiectasia: Vascular Biology and Pathophysiology, Bethesda, Maryland
- 2006 3rd National Research Forum for Young Investigators in Circulatory and Respiratory Health, Jacques Genest Senior Lectureship, Winnipeg, Canada
- 2006 Keynote Lecturer, 109th Annual Meeting of the Japanese Pediatric Society, Kanazawa, Japan
- 2006 Visiting Professor, University of Rochester/Strong Memorial Hospital, Rochester, New York
- 2006 Pediatric Grand Rounds Vanderbilt University, Nashville, Tennessee

- 2007 Visiting Professor and Awards Banquet Lecturer, Dalhousie University School of Medicine, Halifax, Nova Scotia (Sponsored by the Cardiovascular Surgery Department)
- 2007 Guest Faculty and Keynote Lecturer, University of Pittsburgh Center for Vascular Remodeling and Regeneration Inaugural Retreat, Pittsburgh, Pennsylvania
- 2007 Department of Medicine Grand Rounds, University of Minnesota, Minneapolis, Minnesota
- 2007 Department of Medicine Grand Rounds (Hecht Lectureship), University of Chicago, Illinois
- 2008 Grand Rounds and Research Seminar, Massachusetts General Hospital, Boston, Massachusetts
- 2008 Fellow's Research Day Keynote Lecturer, Dept. of Pediatrics, University of Washington, Seattle, Washington
- 2009 Keynote Lecturer, 2nd Workshop on Vascular Matrix Biology and Bioengineering, Whistler, British Columbia, CANADA
- 2009 Research Seminar for the Pediatrics Division, Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio
- 2009 I. Jerome Flance Lecturer, Washington University School of Medicine, St. Louis, Missouri
- 2009 AHA Visiting Professorship, University of Michigan
- 2009 Robert M. Berne Lectureship, University of Virginia, Charlottesville, Virginia
- 2009 Keynote Lecturer, Joint ZMF & Doctoral Days, Medical University of Graz, Austria
- 2009 Jerry Elliot Memorial Lectureship, New England Conference on Perinatal Research, Chatham, Massachusetts
- 2010 Special Lecture, 27th Annual Conference on High Frequency Ventilation of Infants, Children, and Adults, Snowbird, Utah
- 2010 Keynote Lecturer, 11th International Workshop on Scleroderma Research, Boston, Massachusetts
- 2010 Luis Melo Memorial Lecture in Molecular Cardiology, Queens University Cardiovascular Conference, Queens University, Kingston, Ontario, Canada
- 2011 Lucian Award Lecture, McGill University, Montreal, Quebec, Canada
- 2011 Pfizer Visiting Professorship in Pulmonary Vascular Disease, University of Washington, Seattle, Washington
- 2011 Inaugural Lois T. Ellison Lectureship, Georgia Health Sciences University, Augusta, Georgia
- 2012 7th International Workshop on Cardiovascular Biology and Translational Medicine, Royal College of Physicians, London
- 2012 Giles F. Filley Lecture, Thomas L. Petty Aspen Lung Conference, Aspen, Colorado
- 2012 Speaker, Texas Heart Institute Research Seminar, Houston, Texas
- 2013 Guest Speaker, Ontario-on-a-Chip MATCH Day, University of Toronto, Canada
- 2013 Invited Speaker, Seminar Series, David Geffen School of Medicine at UCLA, Los Angeles, CA
- 2013 Keynote Lecture, Arteriosclerosis, Thrombosis and Vascular Biology Scientific Sessions, Orlando, Florida
- 2013 Lecturer, Cardiology Grand Rounds, University of Pennsylvania Cardiovascular Institute, Philadelphia, Pennsylvania

- 2013 Keynote Lecture, Japanese Pulmonary Circulation Society, 2nd Scientific Meeting, Tokyo, Japan
- 2014 CVI Seminar Series, Boston University, Boston, Massachusetts
- 2014 Pediatric Grand Rounds, NYU Langone Medical Center, New York, NY
- 2014 Lecturer, Genetics Dept. Seminar Series, University of Wisconsin-Madison, Wisconsin
- 2014 Grand Rounds, UCSD School of Medicine, San Diego, California
- 2014 State of the Art Review Lecture, 1st Annual Drug Discovery and Development Symposium for Pulmonary Hypertension, Bethesda-Washington, DC
- 2014 Next Generation Genetic Association Studies PI Meeting, NIH, Bethesda, MD
- 2015 Guest Speaker, Lucille Packard Children's Hospital Fundraising Auxiliary, Stanford, California
- 2015 Speaker, Cardiovascular Research Center Seminar Series, Duke University, Durham, NC
- 2015 Visiting Professor, Children's Discovery Institute Symposium and Pediatrics Grand Rounds, Washington University, St. Louis, Missouri
- 2015 Jack Reeves Lecturer, Grover Conference on Pulmonary Circulation in the "omics" era: New Insights into Pathogenesis, Sedalia, Colorado
- 2015 32nd Annual Laurence H. Green Memorial Lecturer and Lecturer, Cardiovascular Grand Rounds, Brigham and Women's Hospital, Boston, Massachusetts
- 2016 Lecturer, University Lecture Series (ULS), University of Texas, Southwestern Medical Center, Dallas, TX
- 2016 Speaker, 9th International Conference Neonatal & Childhood Pulmonary Vascular Disease, University of California, San Francisco, California
- 2016 Speaker, PACCM Basic & Translational Research in Lung Disease Conference, University of Pittsburgh Medical Center, Pennsylvania
- 2016 Speaker, NHLBI Tenure Track Seminar Series, National Institutes of Health, Bethesda, Maryland
- 2016 Featured Speaker, Sarnoff Cardiovascular Research Foundation's 36th Annual Scientific Meeting, Cambridge, Massachusetts
- 2016 J. Burns Amberson Lecturer, American Thoracic Society International Meeting, San Francisco, California
- 2016 Speaker, Cody Lecture Series, Cincinnati Children's Heart Institute, Cincinnati, Ohio
- 2016 Schaffer Visiting Professorship, Children's Hospital Colorado, Denver, Colorado
- 2016 Speaker, First Annual Cardiovascular Symposium, University of California, Los Angeles
- 2016 Speaker, Medicine Grand Rounds, Stanford University School of Medicine, CA
- 2017 R.L. Johnson Visiting Professorship, Grand Rounds, Univ of Texas Southwestern, Dallas, TX
- 2017 Cardiology Grand Rounds, University of Chicago, Illinois
- 2017 Distinguished Scientist Lecturer, American Heart Association Scientific Sessions, Anaheim, CA
- 2018 Plenary Speaker, 13th John Vane Memorial Symposium on Prostacyclin Science and Pulmonary Vascular Disease
- 2018 Speaker, 1st International Symposium on Pulmonary Artery Reconstruction and Right Ventricle Rehabilitation, Stanford, CA

- 2018 Sol Permutt Memorial Lecture, Johns Hopkins University School of Medicine, Baltimore, MD
- 2019 Speaker, Stanford Single Ventricle Scientific Summit, Stanford, CA
- 2019 Guest Lecturer, University of Pennsylvania Respiration Research Retreat, PA
- 2019 Anandi L Sharma Visiting Professor of CV Med, Mt. Sinai Heart, The CV Institute of Mt. Sinai Hospital and Icahn School of Medicine of Mt. Sinai, NY City, NY
- 2019 Cardiology Grand Rounds, Yale School of Medicine, New Haven, CT
- 2019 Robert Beamish Leadership Award Lecture, 21st Annual ICS Naranjan Dhalla Cardiovascular Awards Day, Institute of CV Sciences, St. Boniface Hospital Albrechtsen Research Centre, University of Manitoba, Rady Faculty of Health Sciences, Winnipeg, Manitoba, CANADA
- 2019 Speaker, Stanford-Penn CV Research Symposium, CVI Institute, Stanford University School of Medicine
- 2020 Speaker, Frontiers in CV Science Seminar Series, Stanford University, CA
- 2020 Speaker, Stanford Pulmonary, Allergy and Critical Care Grand Rounds, Stanford University, CA
- 2021 Keynote Speaker, Ottawa Hospital Research Institute's virtual annual Research Day
- 2022 Keynote Speaker, Brigham and Women's Hospital Lung Research Day
- 2022 Virtual Talk, Ludwig Boltzmann Institute for Lung Vascular Research, Graz Austria
- 2022 Speaker, 11th International Workshop on Scleroderma Research
- 2022 Grand Rounds Speaker, Division of Pulmonary, Allergy & Critical Care Medicine, Stanford University, CA
- 2022 Speaker, Stanford-Penn CV Research Symposium, CVI Institute, University of Pennsylvania
- 2022 Speaker, NHLBI Virtual Workshop on Mitochondria in the Pathogenesis of Lung and Sleep Disorders
- 2022 Speaker, Stanford-Weill Cornell Cardiovascular Research Symposium, Stanford, CA
- 2023 Speaker, 14th Annual Pediatrics Research Retreat, Stanford Univ, Stanford, CA
- 2024 Grand Rounds Speaker, Dept. of Pediatrics, Stanford Univ, Stanford, CA
- 2025 Keynote Speaker, 61st Annual Meeting of Japanese Society of Pediatric Cardiology and Cardiac Surgery, Mie, Japan
- 2026\* Speaker, Davis Heart and Lung Research Institute (DHLRI) Discovery Seminar Series, The Ohio State University, Columbus, Ohio

\* Accepted

#### **Guest Faculty and/or Chair Major Symposia**

- 1981 1st World Congress of Pediatric Cardiology, (London, England)
- 1981 University of Utah, Department of Cardiovascular Surgery, Postgraduate Course: Pediatric Cardiac Surgery, Salt Lake City, Utah
- 1981 Columbia University, Department of Pathology: Postgraduate Course: Biopsy Diagnosis, New-York, New York

- 1983 Second International Symposium on Applied Physiology in Critical Care and Anesthesia with Emphasis on Children, Erasmus University Rotterdam, The Netherlands, Aruba
- 1983 Canadian Cardiovascular Society, Toronto, Ontario, Canada
- 1983 Canadian Thoracic Society, Toronto, Ontario, Canada
- 1984 American Heart Association, Miami, Florida
- 1985 World Congress of Pediatric Cardiology, New York, New York
- 1985 Inter-American Congress of Cardiology, Vancouver, British Columbia, Canada
- 1985 N.I.H. Pulmonary Circulation Workshop, Washington, DC
- 1985 American Academy of Pediatrics, San Antonio, Texas
- 1985 American Heart Association, Washington, DC
- 1985 International Congress of Pediatric Cardiology, Porto Allegre, Brazil
- 1985 Mead Johnson Neonatology Symposium, Marco Island, Florida
- 1986 American College of Cardiology Course, Lake Louise, Alberta, Canada
- 1986 American Thoracic Society Symposium, Kansas City, Missouri
- 1986 International Satellite Symposium on Pulmonary Circulation (International Physiological Society) Madison, Wisconsin
- 1986 Bronchopulmonary Dysplasia Symposium, Aspen, Colorado
- 1986 Pediatric Cardiology Meeting sponsored by Children's Hospital of Pittsburgh, Pennsylvania
- 1986 Grover Conference on Pulmonary Circulation, University of Colorado, Dekkers, Colorado
- 1987 Banff Hypoxia Symposium, Banff, Alberta, Canada
- 1987 American College of Cardiology, New Orleans, Louisiana
- 1987 Conference on Pulmonary Hypertension, University of Paris, France
- 1987 American Thoracic Society Symposium, New Orleans, Louisiana
- 1987 Conference on Perinatal Physiology and Pathophysiology, New York, New York
- 1987 Aspen Lung Conference, Aspen, Colorado
- 1987 Elastin Gordon Conference, Meriden, New Hampshire
- 1987 American Society of Anesthesiologists, Atlanta, Georgia
- 1987 9th International Meeting of Cardiology APIC, St. Malo, France
- 1988 Perinatal Cardiology, University of Albuquerque, New Mexico
- 1988 International Academy of Pathologists, Dublin, Ireland (in conjunction with BHF Fellowship)
- 1988 Perinatal Research Society, San Diego, California
- 1989 Pediatric Cardiopulmonary Update, University of Colorado, (Beaver Creek, Colorado)
- 1989 Mead Johnson Clinical Scholar, San Diego, California
- 1989 N.I.H. Workshop, Washington, DC
- 1989 American Thoracic Society, Cincinnati, Ohio
- 1989 Tokyo University, Pediatric Department Centennial, Tokyo, Japan
- 1989 American Heart Association Annual Meeting, New Orleans, Louisiana
- 1990 American College of Cardiology, New Orleans, Louisiana
- 1990 American Academy of Pathology Cardiovascular Pathology Symposium, Boston, Massachusetts
- 1990 Pediatric Cardiology Symposium, Padova, Italy
- 1990 Pediatric Cardiology Symposium, Pittsburgh, Pennsylvania

- 1990 American Heart Association Symposium on Endothelium
- 1990 American Thoracic Society, Boston, Massachusetts
- 1991 American Heart Association Postgraduate Course
- 1991 American Society of Pediatric Department Chairman, Frontiers in Science Program, San-Diego, California
- 1991 New York Cardiological Society, New York, New York
- 1991 UCLA Pediatric Cardiology Conference, Los Angeles, California
- 1992 American Heart Association-Pulmonary Hypertension Plenary Session, Miami, Florida
- 1992 National Heart Foundation For Infants and Adolescents, Society of Pediatric Cardiology, Ecuador, South America
- 1992 University of Arkansas Pediatric Cardiovascular Surgery Symposium, Little Rock, Arkansas
- 1992 American College of Cardiology Symposium, Atlanta, Georgia
- 1992 Restenosis Summit, Cleveland Clinic, Cleveland, Ohio
- 1992 Children's Hospital, Pulmonary Circulation, The Netherlands
- 1992 National Heart & Lung Institute, Connective Tissue and Lung Disease, London, England
- 1992 American Heart Association Plenary Session, Anaheim, California
- 1993 Conference on Pediatric Cardiology — A Team Approach, Vail, Colorado
- 1993 Congress of Cardiology, Mexico City, Mexico
- 1993 FASEB Symposium Speaker, American Physiological Society, New Orleans, Louisiana
- 1993 American Thoracic Society, San Francisco, California
- 1993 World Congress of Pediatric Cardiology, Paris, France
- 1993 Conference on Primary Pulmonary Hypertension, Florence, Italy
- 1993 Congenital Heart Disease: Postgraduate Course, Chicago, Illinois
- 1993 Gordon Conference on Elastin, Meriden, New Hampshire
- 1993 Newborn Medicine Update, Marina del Rey, California
- 1993 Canadian Atherosclerosis Society, Vancouver, British Columbia, Canada
- 1993 Canadian Cardiovascular Society, Vancouver, British Columbia, Canada
- 1993 American Heart Association Plenary Session, Atlanta, Georgia
- 1994 American Heart Association, Thrombosis Council Conference, Orlando, Florida
- 1994 International Scleroderma Society Meeting, Sydney, Australia
- 1994 Restenosis Summit VI, Cleveland, Ohio
- 1994 Canadian Association of Pathologists, Toronto, Ontario, Canada
- 1994 Symposium on Inflammatory Mechanism of Atherogenesis/ Atherosclerosis, University of Michigan, Ann Arbor, Michigan
- 1994 Xth International Symposium on Atherosclerosis, Montreal, Quebec, Canada
- 1994 Pulmonary Hypertension Advisory Board, Zeneca Pharmaceuticals, Chicago, Illinois
- 1995 Symposium on Cardiovascular Issues of the 90's, Orlando, Florida
- 1995 2nd Symposium on Cardiac Allograft Vasculopathy, St. Louis, Missouri
- 1995 Pulmonary Hypertension Meeting, Vail, Colorado
- 1995 National Institute of Health Workshop – Pulmonary Hypertension, Bethesda, Maryland
- 1995 Consultant, Division of Cardiology, Children Hospital of Philadelphia, Pennsylvania
- 1995 31st Annual Meeting of Japanese Society of Pediatric Cardiology, Utsunomiya, Japan
- 1995 Symposium on Cardiovascular Disease, Seoul, Korea

- 1995 Congenital Heart Disease Symposium, The Hospital for Sick Children, Toronto, Ontario, Canada
- 1995 American Thoracic Society, Postgraduate Course, Seattle, Washington
- 1995 American College of Cardiology Conference, Adults with Congenital Heart Disease, Toronto, Ontario, Canada
- 1995 Great Lakes Lung Conference, Niagara-on-the-Lake, Canada
- 1995 Consultant, Institut de Recherché Internationales Servier, Paris, France
- 1996 12th Annual CNMC Symposium on ECMO and Advanced Therapies for Respiratory Failure, Keystone, Colorado
- 1996 Cardiology Research Rounds, Toronto Hospital, Toronto, Ontario, Canada
- 1996 Institute of Medical Science Annual Science Day, University of Toronto, Ontario, Canada
- 1996 Restenosis Summit VIII, Cleveland Clinic Foundation, Cleveland, Ohio
- 1996 Keynote Speaker, Williams Syndrome International Professional Conference, Philadelphia, Pennsylvania
- 1996 Keynote Plenary Speaker, 9th Annual Meeting of the Mediterranean Association of Cardiology and Cardiac Surgery, Tel Aviv, Israel
- 1996 IXth International Vascular Biology Meeting, Seattle, Washington
- 1997 Experimental Biology Meeting, Symposium on Lung Vascular Injury and Remodeling During Development, New Orleans, Louisiana
- 1997 American Society for Investigative Pathology/North American Vascular Biology Organization Meeting, Symposium on Extracellular Matrix and Vascular Remodeling, New Orleans, Louisiana
- 1997 Symposium for the Society of Cardiovascular Anesthesiologists, Baltimore, Maryland
- 1997 Restenosis Summit IX, Cleveland Clinic Foundation, Cleveland, Ohio
- 1997 Chair & Speaker, American Thoracic Society Workshop, San Francisco, California
- 1997 American College of Cardiology, Congenital Heart Disease Meeting, Toronto, Ontario, Canada
- 1997 XIV Annual Meeting, International Society for Heart Research, Vancouver, British Columbia, Canada
- 1997 Francois Brenot Memorial Symposium on the Pathogenesis of Primary Pulmonary Hypertension, Corsica, France
- 1997 XIth International Symposium on Atherosclerosis, Paris, France
- 1997 Symposium of the Experimental Pathology Section, Royal College Meeting, Vancouver, British Columbia, Canada
- 1997 Symposium on SHR & Cardiovascular Genetics, Montreal, Quebec, Canada
- 1998 American Society for Transplant Physicians Symposium, Cerromar Beach, Puerto Rico
- 1998 IBC's Novel Treatments for Pulmonary Hypertension, San Diego, California
- 1998 American Heart Association, Cardiovascular Function Symposium, Lake Tahoe, Nevada
- 1998 Bristol-Myers Squibb Pharmaceutical Research Institute, Princeton, New Jersey
- 1998 Chair, American Society for Investigative Pathology session on Signal Transduction at the Experimental Biology Meeting, San Francisco, California
- 1998 XIII World Congress of Cardiology Meeting, Porto Alegre, Brazil
- 1998 Amnon Rosenthal Symposium, Michigan Congenital Heart Institute, Ann Arbor, Michigan
- 1998 Primary Pulmonary Hypertension Symposium, Evian, France

- 1998 International Society for Heart & Lung Transplant (ISHLT) on Coronary Allograft Vasculopathy, Washington, DC
- 1998 Society for Pediatric Pathology Interim Meeting, Toronto, Ontario, Canada
- 1998 American Heart Association Workshop on Mechanisms of Target Organ Injury in Hypertension, Philadelphia, Pennsylvania
- 1998 American Society for Histocompatibility & Immunogenetics (ASHI), Vancouver, British Columbia, Canada
- 1998 American Heart Association Scientific Conference on Control Mechanisms in the Fetal and Neonatal Pulmonary Circulation, Sedalia, Colorado
- 1998 Moderator, American Heart Association 71st Scientific Sessions, Dallas, Texas
- 1998 Canadian Society of Atherosclerosis Thrombosis and Vascular Biology Symposium, Ottawa, Ontario, Canada
- 1998 American Thoracic Society Workshop on Airway & Pulmonary Vascular Smooth Muscle Function in Health & Disease, Sundance, Utah
- 1999 2nd Annual Course on Frontiers in Diagnosis & Management of Congenital Heart Disease, Newport, Rhode Island
- 1999 Restenosis Cybersummit, Cleveland, Ohio
- 1999 NIH Chair, Working Group on Primary Pulmonary Hypertension, Bethesda, Maryland
- 1999 Boston University of Medicine, External Advisory Committee, Boston, Massachusetts
- 1999 American College of Cardiology, Congenital Heart Disease in Adults, Toronto, Ontario, Canada
- 1999 Gordon Research Conference on Collagen, New Hampshire
- 1999 NHLBI Working Group on Tissue Genesis/Organogenesis, Bethesda, Maryland
- 1999 Research Industry Day for Cardiovascular and Cancer Research Koffler Institute for Pharmacy Management, University of Toronto, Ontario, Canada
- 1999 (i) 49th Annual Meeting, Korean Pediatric Society, Keynote Lectureship, Plenary Session, (ii) Special Lecture, Yonsei Medical College and (iii) Lecture for members of the Korean Pediatric Society, Seoul, South Korea
- 1999 Moderator, American Heart Association 72nd Scientific Sessions, Atlanta, Georgia
- 1999 Guidant conference on Mechanisms of Restenosis, Atlanta, Georgia
- 1999 23rd International Neonatal Conference, Key Biscayne, Florida
- 1999 10th Annual Day in Transplantation & Immunology, Toronto General Hospital, University of Toronto, Ontario, Canada
- 2000 Society for Pediatric Research, Mead Johnson Award Committee Meeting, New York, New York
- 2000 Gene Therapy Conference on Mother and Child, Salt Lake City, Utah
- 2000 Keystone Symposium on Intracellular Signaling, Breckenridge Colorado
- 2000 Arteriosclerosis, Thrombosis & Vascular Biology (ATVB), Denver/Boulder, Colorado
- 2000 American Thoracic Society Symposia, Toronto, Ontario, Canada
- 2000 Symposium on Arterial Remodeling: Mechanisms and Interventions, Amsterdam, The Netherlands
- 2000 International Society for Heart & Lung Transplant Meeting, Osaka, Japan
- 2000 Canadian Cardiovascular Congress, Vancouver, British Columbia, Canada
- 2000 The Southeastern Pediatric Cardiology Society Meeting, Charlotte, North Carolina

- 2000 American Society for Pharmacology and Experimental Therapeutics, Medical College of Georgia, Augusta, Georgia
- 2000 American Society of Hematology, San Francisco, California
- 2001 Pulmonary Hypertension, Vienna, Austria
- 2001 XVII World Congress of the International Society for Heart Research, Winnipeg, Manitoba, Canada
- 2001 American College of Cardiology, Orlando, Florida
- 2001 2nd International Pediatric Cardiovascular Symposium: Transplantation in Complex CHD, Children's Healthcare of Atlanta, Atlanta, Georgia
- 2001 American Heart Association, Anaheim California
- 2001 Lovelace Respiratory Research Institute Annual Symposium, Santa Fe, New Mexico
- 2001 Canadian Society of Clinical Chemists, Hamilton, Ontario, Canada
- 2001 First Canadian Hypertension Pulmonary Symposium, Toronto, Ontario, Canada
- 2001 Society for Pediatric Research Lung Club, Baltimore, Maryland
- 2001 World Congress of Pediatric Cardiology, Toronto, Ontario, Canada
- 2001 Perinatal Research, Jerry Elliott Memorial Lectureship, Aspen, Colorado
- 2002 International Society for Heart & Lung Transplantation, Satellite Symposium 3: Updates on Pulmonary Hypertension, Washington, DC
- 2002 4th Centenary of William Harvey Graduation Symposium on Advances in Cardiovascular Medicine, Padova, Italy
- 2002 American Pediatric Society, Pediatric Academic Societies & Exposition, Baltimore, Maryland
- 2002 American College of Cardiology, 13th Annual Congenital Heart Disease in Adults Symposium, Stevenson, Washington
- 2002 Western Society for Pediatric Cardiology, Monterey, California
- 2002 Canadian Cardiovascular Society, Peter Olley Symposium, Edmonton, Alberta, Canada
- 2002 American Heart Association, Paul Dudley White International Lectureship, Chicago, Illinois
- 2003 ECMO Symposium, Visiting Professor, Keystone, Colorado
- 2003 Curriculum of Excellence in Neonatology: Respiratory Disorders, Paris, France
- 2003 3rd World Congress of Pulmonary Hypertension, Venice, Italy
- 2003 Elastin and Elastic Fibers Gordon Research Conference, Meriden, New Hampshire, Discussion Leader
- 2003 Pulmonary Hypertension Symposium, Cambridge, England
- 2003 International Society of Atherosclerosis and Satellite Symposium in Fukuoka, Japan
- 2003 18th International Workshop on Surfactant Replacement, Prague, Czech Republic
- 2003 American Heart Association Scientific Session, Orlando, Florida, Moderator
- 2003 Pediatric Academic Societies' Annual Meeting, Seattle, Washington
- 2003 Translational Research in Primary Pulmonary Hypertension, NIH, Bethesda, Maryland
- 2004 Scleroderma Research Foundation Scientific Workshop, San Francisco, California
- 2004 International Vascular Biology Meeting, Toronto, Ontario, Canada
- 2004 Western Society of Pediatric Cardiology Meeting, Napa, California
- 2004 3rd International Developmental Biology of the Lung, Quebec City

- 2004 Burroughs Wellcome Fund, Clinical Scientist Award in Translation Research, Session Moderator "Translational Research Issues"
- 2004 Pulmonary Hypertension Association, Session Moderator and discussant, Miami, Florida
- 2004 Perinatal Biology Meeting, Brown University, Providence Rhode Island, Advisor
- 2004 German Pediatric Cardiac Association Meeting, Weimar, Germany
- 2004 British Pediatric Cardiac Association Meeting, Dublin, Ireland
- 2005 Neonatology 2005, Atlanta, Georgia
- 2005 Experimental Biology and International Union of Physiological Sciences, San Diego, California
- 2005 Pediatric Academic Societies, Washington, District of Columbia
- 2005 American Thoracic Society, San Diego, California
- 2005 American Heart Association, Scientific Sessions 2005, Dallas, Texas
- 2005 Gordon Research Conference, Waterville Valley, New Hampshire
- 2005 New Directions in Neonatology, Würzburg, Germany
- 2005 Annual Symposium in Honor of Dr. Leon Farhi on Pulmonary Function in Health & Disease, Buffalo, New York
- 2006 Keystone Symposium on Molecular Biology of the Vasculature and Atherothrombosis, Keystone, Colorado
- 2006 Sociedad Iberoamericana de Neonatología (SIBEN) Cancun, Mexico
- 2006 4th Annual Retreat of the Molecular Biology and Medicine of the Lung, Giessen, Germany
- 2006 30th Annual Newborn Conference, Miami Beach, Florida
- 2006 American Heart Association, Scientific Sessions 2006 Symposium, Chicago, Illinois
- 2006 NHLBI International PAH meeting "Evolution of Pulmonary Hypertension: Emerging Diseases and Novel Therapeutics" at the National Institutes of Health, Bethesda, Maryland
- 2007 Vascular Biology Symposium (American Society for Investigative Pathology, North American Vascular Biology Organization and Experimental Biology), Washington District of Columbia
- 2007 International Childhood Pulmonary Vascular Disease Conference, UCSF, San Francisco, California
- 2007 Section Leader and Speaker, Gordon Elastin Research Conference, University of New England, Biddeford, Maine
- 2007 Session Chair, "How to Choose an Animal Model of Pulmonary Hypertension" session, American Heart Association Scientific Sessions 2007, Orlando, Florida
- 2007 Pulmonary Hypertension in the Young Conference, Royal College of Physicians, London, UK
- 2008 American Thoracic Society International Convention, State of the Art Talk, Toronto, Ontario, Canada
- 2008 International Symposium on Williams Syndrome, Yale University, New Haven, Connecticut
- 2008 4th World Congress on Pulmonary Hypertension, Dana Point, California
- 2008 Pulmonary Vascular Research Institute Scientific Sessions, Malaga, Spain
- 2008 American Thoracic Society's Grover Conference, Sedalia, Colorado
- 2009 3rd Annual Pulmonary Vascular Research Institute AGM, Mexico City, Mexico

- 2009 Guest Faculty for Research Seminar Series, Division of Pulmonary, Allergy and Critical Care Medicine, Emory University, Atlanta, Georgia
- 2009 Pittsburgh International Lung Conference, Spotlight on Pulmonary Hypertension and Pulmonary Vascular Biology, University of Pittsburgh, Pittsburgh, Pennsylvania
- 2010 Pulmonary Vascular Research Institute Annual Meeting, Workshops, and Debates, Lisbon, Portugal
- 2010 Keystone Symposia on Molecular and Cellular Biology, Hypoxia: Molecular Mechanisms of Oxygen Sensing and Response Pathways, Keystone Resort, Keystone, Colorado
- 2010 Penn Cardiovascular Institute Third Annual Symposium on Cardiovascular Development and Disease, University of Pennsylvania, Philadelphia, Pennsylvania
- 2010 American Thoracic Society International Meeting, New Orleans, Louisiana
- 2010 Biomedicine Lecture Series, National Heart, Lung, and Blood Institute, Bethesda, Maryland
- 2010 Speaker, Harvard Lung Conference, Boston, Massachusetts
- 2010 American Heart Association Scientific Sessions, Chicago, Illinois
- 2010 Research Seminar, Cardiovascular Biomedical Research Unit, University of Sheffield Medical School, Sheffield, UK
- 2011 Advanced Pediatric Cardiac Imaging Symposium, Stanford University, Stanford, California
- 2011 4th International Conference on Neonatal & Childhood Pulmonary Vascular Disease, Plenary Session, University of California, San Francisco, California
- 2011 Pulmonary Vascular Research Institute Annual Meeting, Workshops, and Debates, Panama City, Panama
- 2011 Speaker, 2011 NEO Conference, Orlando, Florida
- 2011 Speaker, University of Alberta, Canada
- 2011 Speaker, Stanford Cardiovascular Institute, Frontiers of Cardiovascular Science Seminar Series, Stanford University, Stanford, California
- 2011 Speaker, Gordon Research Conference: Elastin & Elastic Fibers, Biddeford, Maine
- 2011 Speaker, American Heart Association Scientific Sessions, Orlando, Florida
- 2012 Speaker, American Thoracic Society International Meeting, San Francisco, California
- 2012 Speaker, NAVBO Workshops in Vascular Biology (Developmental Vascular Biology and Genetics and Genomics of Vascular Disease), Pacific Grove, Monterey Peninsula, California
- 2012 Speaker, Scientific Sessions, PHA Conference, Orlando, Florida
- 2012 2nd Munich Lung Conference, Munich Germany
- 2013 Speaker, Gordon Research Conference in Vascular Cell Biology, Ventura, California
- 2013 Speaker, 5th World Symposium on Pulmonary Hypertension, Nice, France
- 2013 Plenary Talk, ISHLT Scientific Meeting, Montreal, Canada
- 2013 Speaker, NAVBO Workshop on Vascular Matrix Biology and Bioengineering, Hyannis Cape Cod, Massachusetts
- 2014 Speaker, Joint Symposium of the Excellence Cluster Cardio-Pulmonary System (ECCPS) and the Pulmonary Vascular Research Institute (PVRI), Bad Nauheim, Germany
- 2014 7th International Conference on Neonatal & Childhood Pulmonary Vascular Disease, Plenary Session, University of California, San Francisco, California

- 2014 Chair & Speaker, American Thoracic Society International Meeting, San Diego, California
- 2014 Operational Safety Monitoring Board (OSMB) for Next Generation Genetic Association Studies, Baltimore, MD
- 2014 Chair, Distinguished Scientists Selection Committee Meeting, AHA Scientific Sessions, Chicago, IL
- 2015 Scientific Advisor, German Center for Lung Research Annual Meeting, Hamburg, Germany
- 2015 Speaker, American Thoracic Society International Meeting, Denver, Colorado
- 2015 Speaker, NAVBO Biology of Signaling in the Cardiovascular System (BSCVS) Workshop, Hyannis, Cape Cod, Massachusetts
- 2015 Speaker, Stanford Cardiovascular Medicine and Research Retreat, Stanford University, Stanford, California
- 2015 Speaker and Moderator, American Heart Association Scientific Sessions, Orlando, Florida
- 2016 Speaker, American Thoracic Society International Meeting, San Francisco, California
- 2017 Speaker, 81st Annual Scientific Meeting of the Japanese Circulation Society
- 2017 Speaker, Angiogenesis and Vascular Disease, Keystone Symposia Conference, Santa Fe, NM
- 2017 Speaker, American Thoracic Society International Meeting, Washington, DC
- 2017 Speaker, American Heart Association Scientific Sessions, Anaheim, CA
- 2018 Speaker, 6th World Symposium on Pulmonary Hypertension, Nice, France
- 2018 Speaker, 6th International Ottawa Heart Conference on Precision Medicine in Cardiovascular Disease, Ottawa, Ontario, Canada
- 2018 Speaker and Chair, American Thoracic Society International Meeting, San Diego, CA
- 2018 Speaker, Scientific Sessions, Pulmonary Hypertension Association's International PH Conference, Orlando, Florida
- 2018 Speaker, Medicine by Design, Global Speaker Series, University of Toronto, Canada
- 2018 Speaker and Moderator, American Heart Association Scientific Sessions, Chicago, IL
- 2019 12th International Conference on Neonatal & Childhood Pulmonary Vascular Disease, Plenary Session, University of California, San Francisco, California
- 2019 Speaker, American Thoracic Society International Meeting, Dallas, TX
- 2019 Speaker, 3rd JCS Council Forum on Basic CardioVascular Research (BCVR), Japan
- 2019 Guest Speaker, Respiratory Institute, Cleveland Clinic, Cleveland, OH
- 2021 Speaker, Live Webinar Series, Pulmonary Vascular Research Institute
- 2021 Distinguished Lecturer, Vascular Discovery: From Genes to Medicine
- 2021 Scientific Sessions A Virtual Experience
- 2021 Virtual Speaker, North American Vascular Biology Organization Seminar
- 2021 Speaker, Scleroderma Research Global Webinar
- 2022 Virtual Speaker, 6th Meeting on Pulmonary Hypertension Research, organized by the Pulmonary Hypertension Program of the Biomedical Research Network Center on Respiratory Diseases (CIBERES)
- 2022 Virtual Speaker, 14th HHT International Scientific Conference
- 2022 Speaker, International Vascular Biology Meeting, Oakland, CA
- 2022 Virtual Speaker, North American Vascular Biology Organization Seminar
- 2023 Speaker, American Thoracic Society International Meeting, Washington, DC

- 2023 Speaker, American Heart Association Integrative Omics Symposium
- 2023 Invited Speaker (Postdoc presented), Gordon Research Conference in Vascular Cell Biology, Ventura Beach, CA
- 2023 Organizer and Speaker, Keystone Symposia - Pulmonary Hypertension: State of the Art and Therapeutic Opportunities, Santa Fe, New Mexico
- 2023 Speaker, American Heart Association Scientific Sessions, Philadelphia, PA
- 2024 Speaker, Pfizer Cardiovascular Symposium
- 2024 Speaker, Cardiology Grand Rounds at Emory/Children's Healthcare of Atlanta, Georgia
- 2024 Speaker, Cardiovascular Institute Frontiers in CV Science, Stanford Univ, Stanford, CA
- 2024 Speaker, University of Pennsylvania
- 2024 Speaker, American Thoracic Society International Meeting, San Diego, CA
- 2024 Speaker, 7th WORLD SYMPOSIUM ON PULMONARY HYPERTENSION – Barcelona, Spain
- 2024 Grand Rounds, Heart Center, Stanford Univ, Stanford, CA
- 2024 Speaker, American Heart Association Scientific Sessions, Chicago, IL
- 2024 Panel Discussion Speaker: Medicine by Design, University of Toronto
- 2025 Speaker, Amgen Cardiometabolic Scientific Lecture Series, San Francisco, CA
- 2025 Speaker, American Heart Association Scientific Sessions, New Orleans, LA
- 2025 Guest Speaker, Merck, South San Francisco, CA

\* Accepted

### Patents

1. Rabinovitch, Marlene. Use of FK506 for the Treatment of Pulmonary Arterial Hypertension. The Board of Trustees of Leland Stanford Junior University, assignee. Patent PCT/US2012035793. 30 Apr. 2012. Print.

### Peer Reviewed Publications

1. Jacobson JR, Gillette PC, Corbett BN, Rabinovitch M, McNamara DG. Intracardiac electrography in endocardial cushion defects. *Circulation* 1976; 54:599-603.
2. Rabinovitch M, Rosenthal A, Sade RM, Castaneda AR, Treves S, Nadas AS. Regional lung function studies and radionuclide angiography in D-transposition of the great arteries. *Pediatr Res* 1977; 11:1117-21.
3. Rabinovitch M, Haworth SG, Castaneda AR, Nadas AS, Reid LM. Lung biopsy in congenital heart disease: A morphometric approach to pulmonary vascular disease. *Circulation* 1978; 58:1107-22.
4. Rabinovitch M, Fischer KC, Gamble WJ, Reid L, Treves S. Thallium-201: Quantitation of right ventricular hypertrophy in chronically hypoxic rats. *Radiology* 1979; 130:223-5.
5. Rabinovitch M, Rowland T, Castaneda AR, Treves S. Thallium-201: Scintigraphy in patients with anomalous origin of the left coronary artery from the main pulmonary artery. *J Pediatr* 1979; 94:244-7.
6. Goldstein JD, Rabinovitch M, Van Praagh R, Reid L. Unusual vascular anomalies causing persistent pulmonary hypertension in a newborn. *Am J Cardiol* 1979; 43:962-8.

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### **Peer Reviewed Publications – In Progress (under review/revision)**

1. BMPR2 Regulates Hypoxic Exosome Signaling to Maintain Vascular Homeostasis. Marciano DP, Harper RL, Viswanathan V, Chappell J, Khan RI, Jung KO, Wang L, Otsuki S, Perrino J, Melemenidis S, Li D, Martin M, Elliott KA, Maydan D, Chu A, Li CG, Pratz G, Rabinovitch M, Snyder MP (Manuscript under revision for Nature Cardiovascular Research)

### **Manuscripts In Preparation:**

none

### **Book Chapters and Requested Articles**

1. Rabinovitch M, Reid L. Quantitative structural analysis of the pulmonary vascular bed in congenital heart defects. In *Pediatric Cardiovascular Disease*. 1980. pp. 149-68.
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