

CURRICULUM VITAE

Updated: November 24, 2023
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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 Cardiovascular 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 University
2012 Judith Pool Award, North California Chapter of the Association 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, American Thoracic Society
2017 The American Heart Association Distinguished Scientist Lecturer, Anaheim, CA
2019 Robert Beamish Leadership Award, Univ. of Manitoba, Institute of Cardiovascular Sciences
2021 ATVB Distinguished Lecturer, AHA Scientific Sessions
2023 Research Achievement Award, American Heart Association

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 of the Royal College of Physicians and Surgeons of Canada (Pediatric 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 University of Toronto, Ontario, Canada
1994-2002	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-	Graduate Faculty, Cancer Biology Program 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, Cardiovascular 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
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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
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
1998-2001	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
2001-2005 and 2007-present	Burroughs Wellcome Fund Translational Research Advisory Committee
2002-2004	Gairdner Foundation of Canada Medical Advisory Board
2002-present	University of California San Francisco, University of Pennsylvania, Brown University (COBRE), Children's Hospital of Philadelphia Scientific Advisory Board to NIH Training Grants
2002-present	Pulmonary Hypertension Association Scientific Advisory Board
2004-present	American Thoracic Society Pulmonary Circulation Council
2004-present	American Pediatric Society Executive Council
2006-present	Pulmonary Vascular Research Institute Executive Committee
2006-present	4th World Congress of Pulmonary Circulation Scientific Advisory 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	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: <i>Pulmonary Hypertension: State of the Art and Therapeutic Opportunities</i> , Organizer
2024	7 th World Symposium on Pulmonary Hypertension, Task Force Member of Pathobiology and mechanism of disease

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

Associate Editor

1999-2002	<i>Pediatric Research</i>
1999-2004	<i>Circulation Research</i>

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
4. 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 <i>Pulmonary Hypertension in Congenital Heart Disease</i> (Principal Investigator)
1979-1982	NIH Grant R01 - HL2323 <i>SCOR in Pulmonary Hypertension</i> (Co-investigator)
1982-1985	Heart and Stroke Foundation of Ontario, (Grant I - 4-14; Grant-in-Aid) <i>Pathogenesis of Pulmonary Vascular Disease</i> (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)
- 2006-2024 NIH R01 HL087118
The BMP-PPAR γ Axis and Pulmonary Hypertension
(Principal Investigator)
- 2004-2024 NIH R01 HL074186
Pulmonary Hypertension in Genetically Modified Mice
(Principal Investigator)
- 2020-2024 NIH R38 HL143615-01A1
Stanford Integrated Cardiovascular/Pulmonary Residency Research Training Program
(PIs: J Wu, M Fischbein, M Rabinovitch)
- 2021-2024 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 HL165420
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)

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 β 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
Topic: *The Interleukin Responsive Element In The Fibronectin Promoter: Relevance to the Post-Cardiac Transplant Coronary Arteriopathy*
- 1993-1995 Dennis Wigle, M.D., Ph.D.
Medical Scientist
Topic: *Molecular Regulation of Elastase: Cis Elements in the Promoter/Enhancer and Trans-Acting Factors*
- 1994-1997 Karen Thompson, Ph.D.
Post-doctoral Research Fellow
Supported by a Heart & Stroke Foundation of Ontario Fellowship
Topic: *Regulation of Growth Factor Activity by Elastase*
- 1994-1998 Bryce Cowan, M.D., Ph.D.
Graduate Student, Department of Pathology
Supported by the Heart & Stroke Foundation of Ontario Studentship
Topic: *Cytokine-induction of Fibronectin is Related to Elastase. Molecular and Cellular Mechanisms & Efficacy of Gene Transfer Therapy*
- 1994-1998 Peter Jones, Ph.D.
Post-doctoral Research Fellow
Topic: *Molecular Mechanisms Regulating Tenascin, Interactions with Fibronectin & Elastase in Vascular Remodeling in Development & Disease: Application of Transgenic Models*
- 1995-2001 Syed Zaidi, Ph.D.
Post-doctoral Research Fellow
Topic: *Elafin Transgenic Mouse Microtubule Associated Protein LC-3 and Post-Transcriptional Regulation of SMC Motility Genes*
- 1995-1998 Caiying Guo, Ph.D.

- Post-doctoral Research Fellow
Topic: *Cloning a Novel Chymase*
- 1996-1999 Catherine Mason, M.D., Ph.D.
Graduate Student, Department of Laboratory Medicine & Pathobiology (formerly Pathology)
Supported by a Medical Research Council Studentship
Topic: *Post-Transcriptional Regulation of Fibronectin in the Development of Ductus Arteriosus Neointimal Formation*
- 1996-1998 Andrea Burry, M.Sc.
Graduate Student, Department of Laboratory Medicine & Pathobiology
Supported by a Heart & Stroke Foundation of Ontario Fellowship
Topic: *The Inter-Relation of TGF- β , LC3 and Apolipoprotein D in the Fetal Lamb ductus arteriosus*
- 1996-2000 Kyle Cowan, Ph.D.
Graduate Student, Department of Laboratory Medicine & Pathobiology
Supported by a Restracom Award
Topic: *Mechanisms of Vascular Cell Apoptosis & Regression of Structural Remodeling in Pulmonary Artery Organ Culture*
- 1996-1997 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
Topic: *The Human Vascular Chymase Gene*
- 2000 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 BMPR 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
Supported by NIH grants
Topic: *Cell-specific PPAR-gamma Mediated Gene Regulation*
- 2011 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*

	<i>vs. Controls</i>
2011 – 2015	Nathaly Sweeney, MD Clinical/Research Fellow Supported by SOM, Cardiology Department Topic: <i>DNA damage in pulmonary hypertension</i>
2011 – 2016	Pin-I Chen, PhD (transitioned to an Academic Appointed Research Associate) Post-doctoral Fellow Supported by NIH grants Topic: <i>Beta arrestins at the crossroads of BMPR2 signaling</i>
2011 – 2014	Rachel Hopper, MD Clinical/Research Fellow Topic: <i>The role of HMGA1 in pulmonary hypertension</i>
2011 – 2012	Akihito Sasaki, MD, PhD Post-doctoral Fellow Supported by NIH grant, Tokyo Medical and Dental University, and the Okawa Foundation Topic: <i>Elafin: A novel treatment for PH</i>
2011 – 2014	Nils Nickel, MD Post-doctoral Fellow Supported by NIH grants and the Defense Foundation of Germany (DFG) Topic: <i>Innate immunity and DNA methylation changes in PH</i>
2012 - 2016	Jan K Hennigs, MD Post-doctoral Fellow Supported by NIH grants and the Defense Foundation of Germany (DFG) Topic: <i>Role of P53 in Pulmonary Hypertension</i>
2013 - 2014	Isabel Diebold, MD Post-doctoral Fellow Supported by the German Heart Foundation Topic: <i>Oxidant stress and DNA damage in Pulmonary Hypertension</i>
2014 – 2017	Kazuya Miyagawa, MD, PhD Post-doctoral Fellow Supported by Japan Heart Foundation, and The Uehara Memorial Foundation Topic: <i>Tunneling nanotubes and mitochondrial rescue dynamics in pulmonary hypertension</i>
2014 – 2021	Shalina Taylor, PhD Post-doctoral Fellow Supported by NIH URM Supplement and an NIH T32 award Topic: <i>The role of neutrophils and other inflammatory cells in pulmonary hypertension, and the effect of elafin on neutrophil function</i>
2015 –2022	Jan-Renier Moonen, MD, PhD Instructor (former Post-doctoral Fellow) Supported by the University Medical Center, Groningen, Netherlands Topic: <i>Expression analysis of native and iPSC-derived vascular cells in pulmonary hypertension</i>
2015 – 2020	Mingxia Gu, MD, PhD Instructor (2016 – present) Post-doctoral Fellow (2015-2016) Supported by the American Heart Association and NIH Topic: <i>Using Patient-Specific iPSC Derived Endothelial Cells to Gain New Insights into Pathobiology and Therapy of FPAH and IPAH</i>
2015 – 2021	Dan Li, PhD Post-doctoral Fellow Supported by the National Institute of Health and American Lung Association Topic: <i>Metabolite profiling regulates the smooth muscle cells dysfunction in PAH</i>
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-present 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-present Mir Adil, PharmD, PhD
Post-doctoral Fellow
Supported by: National Institute of Health
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
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*

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, <u>Leo M. Taran Lectureship</u> , 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, <u>Dennison Young Memorial Lectureship</u> , New York, New-York
1987	<u>William Rashkind Memorial Lectureship</u> , 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, <u>Richard Rowe Memorial Lectureship</u> , 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, <u>Frances Glynn Mason Lectureship</u> , 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, <u>Ann Newman Lectureship</u> , 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, 11 th 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, 14 th Annual Pediatrics Research Retreat, Stanford Univ, Stanford, CA

* Accepted

Guest Faculty and/or Chair Major Symposia

1981	1 st 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 Alegre, 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 Recherche 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, Cerrimar 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 Neonatologia (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, University of Pennsylvania
- 2024* Speaker, 7th WORLD SYMPOSIUM ON PULMONARY HYPERTENSION – Barcelona, Spain

* 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-20: 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.
7. **Rabinovitch M**, Gamble WJ, Nadas AS, Reid L. Rat pulmonary circulation after chronic hypoxia: Hemodynamic and structural features. *Am J Physiol* 1979; 236:H818-27.
8. **Rabinovitch M**, Haworth SG, Vance Z, Vawter G, Castaneda AR, Nadas AS, Reid LM. Early pulmonary vascular changes in congenital heart disease studied in biopsy tissue. *Human Pathol* 1980, 11(5Suppl):499-509.
9. **Rabinovitch M**, Keane JF, Fellows KE, Castaneda AR, Reid L. Quantitative analysis of the pulmonary wedge angiogram in congenital heart defects: A correlation with hemodynamic data and morphometric findings in lung biopsy tissue. *Circulation* 1981, 63:152-64.
10. **Rabinovitch M**, Castaneda AR, Reid L. Lung biopsy with frozen section as a diagnostic aid in patients with congenital heart defects. *Am J Cardiol* 1981, 47:77-84.
11. **Rabinovitch M**, Gamble WJ, Miettinen OS, Reid L. Age and sex influence on pulmonary hypertension of chronic hypoxia and in recovery. *Am J Physiol* 1981, 240:H62-72.
12. **Rabinovitch M**, Fischer KC, Treves S. Quantitative Thallium-201 myocardial imaging in assessing the right ventricular pressure in patients with congenital heart defects. *Br Heart J* 1981 45:198-205.
13. Murphy J, **Rabinovitch M**, Goldstein JD, Reid LM. The structural basis of persistent pulmonary hypertension of the newborn infant. *J Pediatr* 1981, 98:962-7.
14. Fujii A, **Rabinovitch M**, Mathews EC. A case of spontaneous resolution of idiopathic pulmonary hypertension. *Br Heart J* 1981, 46:574-577.
15. **Rabinovitch M**, Herrera-DeLeon V, Castaneda AR, Reid L. Growth and development of the pulmonary vascular bed in patients with tetralogy of Fallot with and without pulmonary atresia. *Circulation* 1981, 64:1234-49.
16. Fujii A, **Rabinovitch M**, Keane JF, Fyler DC, Treves S. Radionuclide angiographic assessment of pulmonary vascular reactivity in patients with left to right shunt and pulmonary hypertension. *Am J Cardiol* 1982, 49:356-61.
17. **Rabinovitch M**, Grady S, David I, VanPraagh R, Sauer U, Buhlmeyer K, Castaneda AR, Reid L. Compression of intrapulmonary bronchi by abnormally branching pulmonary arteries associated with absent pulmonary valves. *Am J Cardiol* 1982, 50:804-13.
18. **Rabinovitch M**, Konstam MA, Gamble WJ, Papanicolaou N, Aronovitz M, Treves S, Reid L. Changes in pulmonary blood flow affect vascular response to chronic hypoxia in rats. *Circ Res* 1983, 52:432-41.
19. Jaffin BW, Gundel WD, Capless MA, Castaneda AR, **Rabinovitch M**, Wackers FJ. Aneurysm of the pulmonary artery as a cause of severe chest pain. *Arch Intern Med* 1983, 143:1484-5.
20. Penkoske PA, Westerman GA, Marx GR, **Rabinovitch M**, Norwood WI, Castaneda AR. Transposition of the great arteries and ventricular septal defect: Results with the senning operation and closure of the ventricular

- septal defects in infants. *Ann Thorac Surg* 1983, 36:281-8.
21. Fried R, Meyrick B, **Rabinovitch M**, Reid L. Polycythemia and the acute response in awake rats following chronic hypoxia. *J Appl Physiol* 1983, 55:1167-72.
 22. Freedom R, Moes C, Pelach A, Smallhorn J, **Rabinovitch M**, Olley PM, Williams W, Trusler G, Rowe R. Bilateral ductus arteriosus (or remnant): An analysis of 27 patients. *Am J Cardiol* 1984, 53:884-91.
 23. **Rabinovitch M**, Keane JF, Norwood WI, Castaneda AR, Reid L. Vascular structure in lung biopsy tissue correlated with pulmonary hemodynamic findings after repair of congenital heart defects. *Circulation* 1984, 69:655-67.
 24. Vogel M, Ash J, Rowe R, Trusler G, **Rabinovitch M**. Congenital unilateral pulmonary vein stenosis complicating transposition of the great arteries. *Am J Cardiol* 1984, 54:166-71.
 25. Todd L, Mullen M, Olley PM, **Rabinovitch M**. Pulmonary toxicity of monocrotaline differs at critical periods of development. *Pediatr Res* 1985, 19:731-7.
 26. Cloutier A, Ash JM, Smallhorn JF, Williams WG, Trusler GA, Rowe RD, **Rabinovitch M**. Abnormal distribution of pulmonary blood flow after the Glenn shunt or Fontan procedure: Risk of development of arteriovenous fistulae. *Circulation* 1985, 72:471-9.
 27. Wilson W, Mullen M, Olley PM, **Rabinovitch M**. Hyperoxia induced pulmonary vascular and lung abnormalities in young rats and potential for recovery. *Pediatr Res* 1985, 19:1059-67.
 28. Fried R, Falkovsky G, Newburger J, Gorchakova AI, **Rabinovitch M**, Gordonova MI, Tyler D, Reid L, Burakovsky V. Pulmonary arterial changes in patients with ventricular septal defects and severe pulmonary hypertension. *Pediatr Cardiol* 1986, 7:147-54.
 29. **Rabinovitch M**, Bothwell T, Hayakawa BN, Williams WG, Trusler GA, Rowe RD, Olley PM, Cutz E. Pulmonary artery endothelial abnormalities in patients with congenital heart defects and pulmonary hypertension: A correlation of light with scanning electron microscopy and transmission electron microscopy. *Lab Invest* 1986, 55:632-53.
 30. Wilson WL, Bothwell T, **Rabinovitch M**. A pulmonary artery endothelial factor causes unidirectional alignment of smooth muscle cells. *Tissue Cell* 1987, 19:177-82.
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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)
2. Activation of Circulating Classical Dendritic Cells is Linked to an Endogenous Retroviral Response in Idiopathic Pulmonary Arterial Hypertension. T Saito, Zhou X, Chen S-Y, Ferrian S, Nishimura T, Nair RV, Otsuki S, Angelo RM, Zamanian RT, Haddad F, Ariza ME, Nolan GP, Fantl W, Snyder MP, Rabinovitch M. (Manuscript under revision for Clinical and Translational Medicine)
3. High-Dimensional Single-Cell Mapping in Pulmonary Arterial Hypertension Vascular Lesions. Ferrian S, McCaffrey E, Saito T, Greenwald N, Bruce T, Rabinovitch M*, Angelo M* (*co-corresponding authors)

(Manuscript under revision for Am J Resp Crit Care Med; preprint available at: doi: <https://doi.org/10.1101/2022.12.03.518033>)

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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