

**CURRICULUM VITAE**

**Date of Revision:** January 24, 2021

**Name:** Hyung J. Chun, MD, FAHA

**Position:** Associate Professor of Medicine (Cardiology) and Pathology with Tenure

**School:** Yale University School of Medicine

**Education:**

A.B. with Honors Biochemical Sciences, Harvard College, Cambridge, MA  
(*magna cum laude*) (Graduated in 3 years with Advanced Standing), 1992-1995

MD Johns Hopkins University School of Medicine, Baltimore, MD, 1996-2002  
(Leave of Absence between 1999-2001 for HHMI-NIH Cloisters Program)

**Career/Academic Appointments:**

1999-2001 Howard Hughes Medical Institute-NIH Research Scholars Program, NIH, Bethesda, Maryland

2002-2003 Intern, Internal Medicine, Stanford University School of Medicine, Stanford, California

2003-2004 Resident, Internal Medicine, Clinical Investigator Pathway, Stanford University School of Medicine, Stanford, California

2004-2009 Fellow in Cardiovascular Medicine, Stanford University School of Medicine, Stanford, California

2008-2009 Chief Fellow in Cardiovascular Medicine, Stanford University School of Medicine, Stanford, California

2008-2009 Instructor of Medicine, Division of Cardiovascular Medicine, Stanford University School of Medicine, Stanford, California (\*concurrent w/ last year of fellowship training)

2008-2009 Staff Physician, Cardiology Division, VA Palo Alto Health Care Systems, Palo Alto, California (\*concurrent w/ last year of fellowship training)

2009-2015 Assistant Professor, Department of Internal Medicine (Cardiology), Yale School of Medicine, New Haven, Connecticut

2015-2019 Associate Professor, Department of Internal Medicine (Cardiology), Yale School of Medicine, New Haven, Connecticut

2017 Visiting Scholar, University of Cambridge, St. Catharine's College, Cambridge, U.K. (7/2017-8/2017)

2017-present Secondary appointment in Department of Pathology

2019-present Associate Professor with Tenure, Department of Internal Medicine (Cardiology), Yale School of Medicine, New Haven, Connecticut

**Administrative Positions:**

2010-2015 Director, Cardiovascular Fellows' Clinic, Yale School of Medicine, New Haven, Connecticut

2015-present Director of Translational Research, Pulmonary Vascular Disease Program, Yale School of Medicine, New Haven, Connecticut

2016-present Co-director, Vascular Biology Training Program (T32), Yale University, New Haven, Connecticut

2016-present Selection Committee, Cardiology Fellowship, Yale University

2017-2019 Co-founder and member of scientific advisory board, Verso Therapeutics, LLC (for development of novel therapeutics for pulmonary arterial hypertension, seed funded by Atlas Ventures)

2018-present Leadership Committee, American Heart Association 3CPR Council

2019-present Committee on Scientific Session Program, American Heart Association

2019-present Merit Review Committee, Section of Cardiovascular Medicine, Yale School of Medicine

2019-present Co-founder and member, CorMobi, LLC (for development of wearable technology for management of congestive heart failure)

**Board Certification:**

American Board of Internal Medicine, Internal Medicine, 2005-2015  
American Board of Internal Medicine, Cardiovascular Disease, 2008-present (recertified 2018)

**Professional Honors & Recognition**

A) International/National/Regional/Local

2020: Elected to the Interurban Clinical Club

2019: First place, Yale New Haven Health System Center for Health Care Innovation HealthTech Forum for CorMobi, LLC (novel wearable technology for heart failure)

2017: Sir William Osler Young Investigator Award of the Interurban Clinical Club

2017: Elected as Fellow of the Davenport College, Yale University

2017: Appointed as Visiting Scholar, University of Cambridge, Cambridge, UK

2016: Elected to the American Society for Clinical Investigation

2015: Elected to Fellow of the American Heart Association

2014: American Heart Association Established Investigator Awardee

2014: Northwestern Cardiovascular Young Investigators Forum—Jeremiah Stamler Distinguished Award in Basic Science (Best Faculty Award)

2013: NAVBO Springer Junior Investigator Award  
2011: First place, Irvine H. Page Young Investigator Research Award, ATVB 2011 Scientific Sessions  
2010: First place, Pulmonary Hypertension Association 9<sup>th</sup> International Conference Basic Science Competition  
2009 & 2007: Gerald Reaven Basic Science Research Award, Stanford University School of Medicine  
2008: Howard Hughes Medical Institute Physician Scientist Early Career Award  
2008: ACC/Merck Fellow  
2008: Clinical Excellence Award, Division of Cardiovascular Medicine, Stanford University School of Medicine  
2007: Northwestern Cardiovascular Young Investigators' Forum-First Place  
2006: ACCF/Bristol-Myers Squibb Award  
2003: First place, "Fly amaxa" Publication Award  
2002: Ivor and Colette Royston Predoctoral Award, Young Investigators' Day, Johns Hopkins University School of Medicine  
2002: Harold Lamport Biomedical Research Prize, Johns Hopkins University School of Medicine  
2001: Howard Hughes Medical Institute Continued Fellowship for Medical Students  
2001: W. Barry Wood Student Research Fellowship, Johns Hopkins University School of Medicine  
1995: Thomas Temple Hoopes Prize for Excellence in Undergraduate Research (Hon. Mention), Harvard College  
1995: Harvard College Dean's List  
1995: Harvard College Scholarship  
1994: Ford Foundation Research Award, Harvard College  
1992: Valedictorian, El Camino Fundamental High School, Sacramento, CA

**Grant History:**

**A) Active Grants**

Agency: NIH/NHLBI  
I.D.#: R01 HL142818  
Title: Role of Endothelial Regulation of Fatty Acid Uptake in Metabolic Dysfunction  
P.I.: Hyung J. Chun, M.D.  
Direct costs per year: \$315,558  
Total cost for project period: \$2,114,240  
Project Period: 9/2018-8/2022

Agency: Pfizer, Inc  
I.D.#: N/A  
Title: Investigation of tofacitinib to mitigate the impact of COVID-19 (ITOMIC)  
P.I.: Hyung J. Chun, MD  
Direct costs per year: \$  
Total cost for project period: \$  
Project Period:

Agency: Pfizer, Inc  
I.D.#: N/A  
Title: Investigation of IRAK4 Inhibition to Mitigate the Impact of COVID-19 in Severe SARS-CoV-2  
P.I.: Hyung J. Chun, MD  
Direct costs per year: \$  
Total cost for project period: \$  
Project Period:

Agency: NIH/NHLBI  
I.D.#: T32 HL007950  
Title: Vascular Research Training  
P.I.: Jeffrey Bender, M.D., and Hyung J. Chun, M.D. (Co-directors)  
Direct costs per year: \$473,998  
Total cost for project period: \$1,863,365  
Project Period: 9/30/2000-6/30/2021

Agency: American Heart Association  
I.D.#: Transformational Project Award 18TPA34230072  
Title: Translating MicroRNA Pathways for Cardiometabolic Health  
P.I.: Hyung J. Chun, M.D.  
Direct costs per year: \$90,909  
Total cost for project period: \$300,000  
Project period: 7/1/2018-6/30/2021

Agency: Department of Defense  
I.D.#: PR170428  
Title: Role of Endothelial Dysfunction as Key Pathogenic Driver of Cardiac Hypertrophy  
P.I.: Hyung J. Chun, M.D.  
Direct costs per year: \$131,068  
Total cost for project period: \$200,000  
Project Period: 9/1/2018-3/31/2020

## B) Past Grants

Agency: NIH/NHLBI  
I.D.#: R56 HL136715  
Title: Molecular Mechanisms of Neonatal Pulmonary Hemorrhage  
P.I.: Hyung J. Chun, M.D.  
Direct costs per year: \$351,127

Total cost for project period: \$549,370  
Project Period: 9/25/2017 – 8/31/2019 (NCE)

Agency: NHLBI/NIH  
I.D.#: R43 HL145812  
P.I.: Paul DaSilva Jardine, Ph.D. (Vascumab, LLC)  
Role: Consultant  
Direct costs per year: \$310,197  
Project Period: 2/15/2019—1/31/2020

Agency: Pulmonary Vascular Research Institute/Dinosaur Trust  
I.D.#: BMPR2 Research Grant  
Title: VEGFR3-BMP2 Crosstalk in Pulmonary Arterial Hypertension  
P.I.: Hyung J. Chun, MD  
Project Period: 7/1/2018-6/30/2019

Agency: American Heart Association  
I.D.#: Established Investigator Award 14EIA17890000  
Title: Endothelium in Health and Disease: Pursuit of Novel Mechanisms to Promote Vascular Homeostasis  
P.I.: Hyung J. Chun, M.D.  
Project period: 01/01/2014-12/31/2018

Agency: NIH/NHLBI  
I.D.#: VITA Program Contract  
Title: Novel therapy for pulmonary arterial hypertension  
P.I.: Paul DaSilva-Jardine, Ph.D. and Hyung J. Chun, M.D.  
Project Period: 1/1/2017-6/30/2018

Agency: NIH/NHLBI  
I.D.#: R01 HL113005  
Title: Role of MicroRNAs 424 and 503 in Pulmonary Arterial Hypertension  
P.I.: Hyung J. Chun, M.D.  
Project Period: 8/16/2012-6/30/2018

Agency: Howard Hughes Medical Institute  
I.D. #: HHMI Physician Scientist Early Career Award  
Title: Role of the Apelin-APJ Pathway in Vascular Wall Disease  
P.I.: Hyung Chun, M.D.  
Project Period: 08/1/2008-07/31/2013

Agency: NIH/NHLBI  
I.D.#: K08 HL095654  
Title: Role of apelin in the systemic and pulmonary vasculature  
P.I.: Hyung J. Chun, M.D.  
Project period: 09/1/2009-08/31/2014

Agency: American Diabetes Association

I.D.#: Basic Science Award 1-14-BS-035  
Title: Role of GPCR Mediated FoxO1 Regulation in Diabetic Endothelial Dysfunction  
P.I.: Hyung J. Chun, M.D.  
Project period: 01/01/2014-12/31/2016

Agency: Gilead Sciences  
I.D.#: Research Scholars Program in Pulmonary Arterial Hypertension  
Title: Defining the apelin-APJ/eNOS axis in pulmonary hypertension  
P.I.: Hyung Chun, M.D.  
Project Period: 1/1/2011-12/31/2012

Agency: American Heart Association  
I.D.#: Grant-in-Aid 12GRNT9410029  
Title: Apelin Targeted MicroRNAs in Pathogenesis of Pulmonary Arterial Hypertension  
P.I.: Hyung Chun, M.D.  
Project Period: 1/1/2012-8/15/2012 (relinquished due to overlap with R01 HL113005)

Agency: Pfizer  
I.D.#: ASPIRE Young Investigator Research Award  
Title: Targeting of p53 by MicroRNAs in the Pulmonary Endothelium: Implications in Pulmonary Arterial Hypertension  
P.I.: Hyung Chun, M.D.  
Project Period: 1/1/2012-12/31/2012

Agency: NIH/NHLBI  
I.D.#: P30 HL101284  
Title: Yale Cardiovascular Center Faculty Recruitment  
P.I.: Michael Simons, M.D.  
Role on Project: Recruited Faculty  
Project Period: 09/1/2009-08/31/2011 (NCE through 8/31/2012)

Agency: Yale University, Center for Small Molecule Discovery  
I.D.#: Yale Center for Small Molecule Discovery Pilot Program  
Title: Discovery of small molecule agonists and antagonists of the APJ receptor  
P.I.: Hyung Chun, M.D.  
Project Period: 10/1/2010-9/30/2011

Agency: GSK Research & Education Foundation for Cardiovascular Disease  
I.D.#: International Competitive Grants Award Program for Young Investigators  
Title: Role of the Apelin-APJ Pathway in Vascular Wall Disease  
P.I.: Hyung Chun, M.D.  
Project Period: 7/1/2008-6/30/2010

Agency: American Lung Association  
I.D.#: Biomedical Research Grant  
Title: Characterization of Apelin Signaling in Pulmonary Hypertension  
P.I.: Hyung Chun, M.D.  
Project Period: 6/1/2009-5/30/2010 (relinquished due to loss of eligibility from being awarded K08 Award)

Agency: Actelion Pharmaceuticals

I.D.#: Entelligence Young Investigators Award  
Title: Role of the Apelin-APJ Pathway in Endothelin-1 Signaling and Pulmonary Arterial Hypertension  
P.I.: Hyung Chun, M.D.  
Project Period: 7/1/2008-6/30/2009

Agency: ACC/Merck  
I.D.#: ACC/Merck Fellowship in Cardiovascular Disease and the Metabolic Syndrome  
Title: Mechanisms of Diabetic Heart Disease  
P.I.: Hyung Chun, M.D.  
Project Period: 3/1/2008-2/28/2009 (relinquished due to overlapping salary support during fellowship period)

Agency: Society of Nuclear Medicine  
I.D.#: Pilot Research Grant  
Title: Integration of Imaging and Genomics for Characterization of Cardiac Stem Cell Therapy  
P.I.: Hyung Chun, M.D.  
Project Period: 7/1/2007-6/30/2008

Agency: Stanford University School of Medicine  
I.D.#: Dean's Postdoctoral Fellowship  
Title: Role of Apelin-APJ Signaling Pathway in the Cardiovascular System  
P.I.: Hyung Chun, M.D.  
Project Period: 1/1/2005-12/31/2005

Agency: National Research Foundation of Korea  
I.D.#: Global Research Network Program  
Title: Integration of shear stress, GPCR signaling, and microRNA in vascular development  
P.I.: Jongmin Kim, Ph.D. and Hyung J. Chun, M.D.  
Project period: 07/01/2014-06/30/2017

### C) Trainee Grants

Trainee: Jongmin Kim, PhD  
Agency: American Heart Association  
Award: Postdoctoral Award  
Role: Mentor

Trainee: Irinna Papangeli, PhD  
Agency: American Heart Association  
Award: Scientist Development Grant  
Role: Mentor

Trainee: Won-Kyung Cho, MD  
Agency: NIH/NHLBI  
Award: K08 Award  
Role: Mentor

Trainee: Alan Morrison, MD, PhD  
Agency: Actelion  
Award: Entelligence Award

Role: Mentor

Trainee: Stephanie Thorn, PhD  
Agency: Actelion  
Award: Entelligence Award  
Role: Mentor

Trainee: Takaomi Adachi, MD, PhD  
Agency: American Diabetes Association  
Award: Postdoctoral Award  
Role: Mentor

Trainee: Katharine Clapham, MD  
Agency: Pulmonary Vascular Research Institute  
Award: Postdoctoral Award  
Role: Mentor

Trainee: Katharine Clapham, MD  
Agency: NIH/NCATS/YCCI  
Award: KL2 Award  
Role: Mentor

Trainee: Omar El-Hely  
Agency: American Heart Association  
Award: Undergraduate Summer Research Award  
Role: Mentor

Trainee: Devi Mehrotra  
Agency: Yale University  
Award: Summer Research Fellowship  
Role: Mentor

Trainee: Vanessa Wu  
Agency: American Heart Association  
Award: Undergraduate Summer Research Award  
Role: Mentor

**Invited Speaking Engagements, Presentations, Symposia & Workshops Not Affiliated with Yale:**

**International/National**

- 2020: International Vascular Biology Meeting, Seoul, Korea: "Endotheliopathy in COVID19: Yale Experience"
- 2020: NAVBO Vascular Biology Annual Meeting Seminar: "COVID-19: The Vasculature Unleashed"
- 2020: Research Seminar, APIE Therapeutics, Cary, NC: "Overview of the apelin-APJ signaling"
- 2020: Brown University/Lifespan Special Research Seminar: "Transforming the Future of Cardiovascular Research"
- 2020: Research Seminar, Regeneron, Tarrytown, NY: "Emerging Disease Mechanisms in Pulmonary Arterial Hypertension"
- 2019: Annual Meeting of the Korean Society for Vascular Biology and Medicine, Daegu, Korea; "Endothelial Beta-Arrestins in Vascular Development"



- 2019: NAVBO Webinar, “Endothelial Regulation of Metabolic Homeostasis”
- 2019: Research Seminar, AMGEN, South San Francisco, CA; “Emerging Disease Mechanisms in Pulmonary Arterial Hypertension”
- 2019: Cambridge-Yale-MedImmune Symposium, New Haven, CT: “Endothelial regulation of cardiac homeostasis”
- 2019: ASPET Experimental Biology 2019, Orlando, FL: “Cardiometabolic Effects of Apelin” (session Chair)
- 2019: Oligonucleotide and Precision Therapeutics Congress, Cambridge, MA: “Novel miRNA-targeting Therapeutic for Non-Alcoholic Fatty Liver Disease”
- 2019: Oligonucleotide and Precision Therapeutics Congress, Cambridge, MA: “Apelinergic Therapy in Pulmonary Arterial Hypertension”
- 2018: NAVBO Vascular Biology, Newport, RI: “Endothelial microRNA in vascular and metabolic derangement”
- 2018: American Heart Association Scientific Session, Chicago, IL: “Novel Preclinical Therapeutic targets for right ventricular failure” (session moderator)
- 2018: Brown University Cardiology Grand Round, Providence, RI, “Novel Mechanisms Towards New Therapies in Pulmonary Arterial Hypertension”
- 2018: Brown University CPVB COBRE Seminar, Providence, RI: “Endothelial Function in Health and Disease”
- 2018: Regulatory Peptides Annual Meeting, Acapulco, Mexico: “Engaging the apelinergic pathway for cardiometabolic health”
- 2018: Cambridge-Yale-MedImmune Symposium, Cambridge, UK: “Endothelial microRNA in vascular and metabolic derangement”
- 2018: Yale-Munster-Uppsala Research Retreat, Visby, Sweden: “Erk5 in cardiac hypertrophy”
- 2018: NHLBI/NIH Intramural Program Special Seminar, Bethesda, MD, “Translational Pursuits in Academic Cardiovascular Medicine”
- 2018: Oligonucleotide & Peptide Therapeutics Boston, Drug Discovery for Rare Diseases, Cambridge, MA, “Targeting the Pulmonary Vasculature with Oligonucleotide Therapy: Fact or Fiction?”
- 2018: Cornell Cardiovascular Research Institute Special Seminar, New York, NY, “Endothelial Contribution to Health and Disease”
- 2018: Sookmyung University, Seoul, Korea, “Endothelial Dysfunction in Health and Disease”
- 2018: A-STAR Institute, Singapore, “Endothelial Signaling in Vascular Health and Disease”
- 2017: American Heart Association Scientific Session, Los Angeles, CA, “Endothelial HDAC-MEF2 Crosstalk: Implications in Pulmonary Vascular Remodeling”
- 2017: 216<sup>th</sup> Meeting of the Interurban Clinical Club, Yale University, New Haven, CT, “Endothelial Function in Health and Disease”
- 2017: NAVBO Annual Meeting, “Endothelial APLNR regulates tissue fatty acid uptake and is essential for apelin’s glucose-lowering effects”
- 2017: Discovery on Target, Boston, MA, “Selective HDAC Inhibition in Pulmonary Arterial Hypertension”
- 2017: NHLBI Vascular Interventions/Innovations and Therapeutic Advances (VITA 2) Program First Annual Investigators Meeting: “HDAC Inhibitors for Treatment of Pulmonary Arterial Hypertension”
- 2017: University of Cambridge Cardiovascular Seminar Series, Cambridge, U.K., “Novel Mechanisms of Dysregulated Endothelium in Pulmonary Arterial Hypertension”
- 2017: University of Sheffield Department of Infection, Immunity & Cardiovascular Disease Research Seminar, Sheffield, U.K., “Dysregulated Endothelial Signals in Pulmonary Arterial Hypertension”
- 2017: American Thoracic Society International Conference, Washington, DC, “The Endothelium is Key to Pulmonary Hypertension”
- 2016: Duke University School of Medicine Cardiovascular Research Center/Mandel Seminar, Durham, NC, “Endothelial Dysfunction in Pulmonary Hypertension”

- 2016: University of Alabama Birmingham Cardiology Research Seminar, Birmingham, AL, "Translational Targets in Pulmonary Arterial Hypertension"
- 2016: Cambridge-Yale-MedImmune Annual Meeting, Cambridge, UK, "Endothelial Dysfunction in Pulmonary Hypertension"
- 2016: FASEB Meeting, Smooth Muscle, Lisbon, Portugal, "Endothelial Smooth Muscle Communication During Pulmonary Vascular Remodeling"
- 2016: NHLBI-CMREF Workshop: Enhancing Treatments for Pulmonary Vascular Diseases Through Precision Medicine, Chicago, IL, "Precision Targeting of the Pulmonary Vasculature in Pulmonary Arterial Hypertension: Promises and Challenges"
- 2015: American Heart Association Scientific Session, Orlando, FL, "From atherosclerosis to pulmonary arterial hypertension; an endothelial perspective"
- 2015: Research Seminar, Zhongshan Ophthalmic Center, Sun Yat-sen University Guangzhou, China, "Endothelial Signaling in Vascular Health and Disease"
- 2015: Gordon Research Conference (Vascular Cell Biology), Ventura, CA, "Novel VEGFR3 Mediated Regulation of BMPR2 Signaling in Pulmonary Arterial Hypertension"
- 2015: Pulmonary Vascular Research Institute Annual Meeting, Guangzhou, China, "Targeting microRNAs to treat PAH: Will we ever get there?"
- 2014: Feinberg Cardiovascular Research Institute Special Seminar, Northwestern University, Chicago, IL, "Endothelial Function in Vascular Health and Disease"
- 2014: Cleveland Clinic Lerner Research Institute Special Seminar, Cleveland, OH, "Endothelial Function in Health and Disease"
- 2014: Vascular Medicine Institute Research Seminar, UPMC, Pittsburgh, PA, "Pulmonary Arterial Hypertension: From an Endothelial Perspective"
- 2014: Division of Cardiology Research Seminar, University of Washington, Seattle, WA, "GPCR Signaling Targets in Vascular Disease and Development"
- 2014: Special Research Seminar, National Jewish Health, Denver, CO, "Endothelial Signaling Paradigms in Pulmonary Arterial Hypertension"
- 2014: Cardiovascular Research Institute Research Seminar, UCSF, San Francisco, CA, "Pulmonary Arterial Hypertension: Lessons from Cardiovascular Development"
- 2014: NAVBO/Yale Cardiovascular Research Center Symposium, New Haven, CT, "MicroRNA based therapies for pulmonary arterial hypertension" (session chair)
- 2014: International Vascular Biology Meeting 2014, Kyoto, Japan, "MicroRNAs as Key Rheostats of Pulmonary Vascular Homeostasis"
- 2014: Cardiology Research Seminar, Samsung Medical Center, Seoul, Korea, "Emerging therapeutic targets in pulmonary arterial hypertension"
- 2014: Research Seminar, Department of Life Systems, Sookmyung University, Seoul, Korea, "MicroRNAs as Key Targets of GPCR Signaling"
- 2014: Research Seminar, Kyung Hee University School of Pharmacy, Seoul, Korea, "GPCR signaling in vascular homeostasis"
- 2014: Research Conference, Seoul National University School of Medicine, "GPCR mediated regulation of microRNAs in vascular homeostasis"
- 2014: New York Korean Biologists Annual Conference, Keynote Speaker, "GPCR signaling in vascular homeostasis"
- 2014: Research Triangle Institute Research Seminar, Chapel Hill, NC, "Therapeutic Potential of the Apelin-APJ Signaling Paradigm in Cardiovascular Disorders"
- 2014: Pulmonary Research Seminar, Brown University, Providence, RI, "Emerging signaling paradigms for guidance of future therapies in pulmonary arterial hypertension"
- 2013: Springer Award Lecture, North American Vascular Biology Organization Annual Meeting, Hyannis, MA, "Transcriptional regulation of microRNAs 424 and 503 by MEF2 and PPAR-gamma in the endothelium: Role in pathogenesis of pulmonary arterial hypertension"

- 2013: Center for Cardiovascular Research Joint Lab Seminar, John A. Burns School of Medicine, Honolulu, Hawaii, “Emerging Signaling Paradigms in Pulmonary Arterial Hypertension”
- 2013: Pulmonary Hypertension Association Online University Webinar, “Role of Endothelial Apelin-FGF Link Mediated by miR-424 and miR-503 in Pulmonary Arterial Hypertension”
- 2012: Gilead Sciences, Foster City, California, “MicroRNAs as Novel Therapeutics in Pulmonary Arterial Hypertension”
- 2011: Genomic Medicine Institute Seminar, Cleveland Clinic, Cleveland, Ohio, “Novel Endothelial Signaling Pathways Disrupted in Pulmonary Arterial Hypertension”
- 2011: NHLBI Division of Cardiovascular Sciences K Awardee’s and K12 Scholars Meeting, Bethesda, Maryland, “Disruption of the Apelin-APJ System Worsens Hypoxia-Induced Pulmonary Hypertension”
- 2009: HHMI Meeting of Medical Fellows and Scholars, Chevy Chase, Maryland, “Role of Apelin-APJ Signaling in the Vasculature”
- 2008: Cardiovascular Medicine Seminar, Weill Medical College of Cornell University, “Apelin-APJ Signaling Pathway in Cardiovascular Diseases”
- 2007: American Society of Nuclear Cardiology Annual Meeting, San Diego, California, “Imaging of stem cell therapy: from bench to bedside”
- 2003: Plenary session at the XXIX Congreso de la Sociedad Espanola de Inmunologia, Cadiz, Spain, “Programmed cell death as a mechanism that enforces immune tolerance and prevents autoimmunity”
- 2002: Lymphocytes and Antibodies Conference, FASEB Summer Research Conference, Snowmass, Colorado, “Pleiotropic lymphocyte activation defects due to caspase-8 mutation causes human immunodeficiency”
- 2001: Programmed Cell Death Meeting, Cold Spring Harbor Laboratory; Cold Spring Harbor, New York, November 2001, “Human caspase-8 disease reveals primary neonatal immunoregulatory role”
- 2001: Research Seminar at the University of Eastern Piedmont, Novarra, Italy, “Role of Fas-signaling and caspases in immune activation”
- 2000: Howard Hughes Medical Institute-National Institutes of Health Research Scholars Program Scientific Meeting; Bethesda, Maryland, “Identification of a novel inherited mutation in caspase-8 in Autoimmune Lymphoproliferative Syndrome”
- 1999: Annual Meeting of the International Society for Minimally Invasive Cardiac Surgery; Paris, France, “Non-invasive graft flow and patency assessment following minimally invasive direct coronary artery bypass (MIDCAB) grafting”

**Peer Review Groups/Grant Study Sections**

- 2019: Vice Chair and Reviewer, NIH Center for Scientific Review ZRG1 CVRS-H 02
- 2019: Reviewer, AHA Established Investigator Award
- 2018: Reviewer, NIH Center for Scientific Review Respiratory Integrative Biology and Translational Research
- 2016-present: Reviewer, AHA Innovative Research Grant
- 2016-present: Reviewer, Geneen Foundation Research Grant
- 2016: Reviewer, NIH Center for Scientific Review HLBP1 Workgroup 007
- 2015-2016: Reviewer, NIH Center for Scientific Review Special Emphasis Panel ZHL1 PPG-S (F1) (Translational Programs in Lung Diseases)
- 2014-2016: Reviewer & Co-Chair (2016), NIH Center for Scientific Review Special Emphasis Panel ZRG1 CVRS G (02) M
- 2010-present: Member, American Heart Association, Molecular Signaling III Study Section

2009-present: Reviewer for Austrian Science Fund, James and Esther King Biomedical Research Program (Florida Department of Health), Fight for Sight, U.K. Medical Research Council

**Journal Service**

Editorial Board, *Pulmonary Circulation*, *Frontiers in Cardiovascular Medicine*

Topic Editor, Right Ventricular Failure in Pulmonary Hypertension, *Frontiers in Cardiovascular Medicine*

Ad hoc reviewer for *Nature*, *Science*, *Nature Medicine*, *Science Translational Medicine*, *Lancet*, *Journal of Clinical Investigations*, *Nature Communications*, *Cell Reports*, *Circulation*, *Circulation Research*, *European Respiratory Journal*, *Circulation Heart Failure*, *Scientific Reports*, *ATVB*, *Trends in Molecular Medicine*, *Journal of Cardiac Failure*, *Sleep Medicine*, *International Journal of Cardiology*, *European Journal of Pharmacology*, *Journal of Nuclear Medicine*, *Cellular and Molecular Biology*, *American Journal of Respiratory and Critical Care Medicine*, *American Journal of Respiratory Cell and Molecular Biology*, *Cellular and Molecular Life Sciences*, *Annals of Medicine*, *Hypertension*, *BBA-Molecular and Cell Biology of Lipids*

**Professional Service for Professional Organizations**

2018-present: Member, Leadership Committee, 3CPR Council, American Heart Association

2014-2018: Member, 3CPR Early Career Committee, American Heart Association

2010-2012: Member, ATVB Early Career Committee, American Heart Association

**American Heart Association:**

2006-present Professional Member

**American College of Cardiology:**

2005-2009 Fellow in Training Member

**NAVBO:**

2010-present Member

**Other Professional Service**

- Clinical Advisor, Foresite Capital
- Co-founder and Chief of the Scientific Advisory Board, Verso Therapeutics (funded by Atlas Ventures) (novel therapeutics for pulmonary hypertension)
- Co-founder, CorMobi, LLC (novel wearable technology for heart failure)
- Consultant, Pfizer, Inc
- Consultant, AstraZeneca, Inc
- Consultant, TranslateBio
- Consultant, ShouTi, Inc

**Patents**

- U.S. Patent 9340787B2, issued 5/17/16, "Compositions and Methods of Using MicroRNAs"
- U.S. Patent US10213422B2, issued 2/26/2019, "Compositions and Methods of Inhibiting Histone Deacetylases"

- U.S. Patent Application (Provisional), “Compositions and Methods for Treating or Preventing NASH, NAFLD, Diabetes, Atherosclerosis, and/or Obesity,” filed 12/7/2018

**Yale University Service**

2015-present            ACGME Faculty, Cardiovascular Medicine  
 2011-2012              Medical student cardiology curriculum teaching module

<b>Name of Presentation</b>	<b>Date or Frequency of Presentation</b>	<b>Subject of Presentation</b>
Bridgeport Hospital Noon Conference	November 2020	COVID-19 Endotheliopathy: Yale Experience
St. Mary’s Hospital Medical Grand Round	September 2020	COVID-19 Endotheliopathy and Disease Severity
Section of Cardiovascular Medicine Grand Round	August 2020	COVID-19 Endotheliopathy
13 <sup>th</sup> Annual Yale Pulmonary Hypertension Symposium	June 2019	Emerging Mechanisms of Right Ventricular Failure in Pulmonary Hypertension
Eighteenth Annual Retreat of the Vascular Biology and Therapeutics Program	October 2018	EndoMT in Pulmonary Vascular Remodeling
Department of Pathology Research in Progress Seminar	March 2018	Endothelial Regulation of Cardiac Hypertrophy
Department of Pathology Special Seminar	May 2017	The Dysregulated Endothelium
Pulmonary Research Conference	May 2016	Modulating Endothelial Signaling in Pulmonary Arterial Hypertension
Section of Pulmonary, Critical Care and Sleep Medicine State Chest Lecture	May 2016	Pursuit of disease modifiers in pulmonary arterial hypertension
Yale Innovator Pitchoff, Biotech Entrepreneur Bootcamp	November 2015	Novel therapies for Pulmonary Arterial Hypertension
Section of Cardiovascular Medicine Grand Round	November 2015	From Rodents to Humans: Bridging the Translational Gap in Cardiovascular Medicine
Thirteenth Annual Retreat of the Vascular Biology and Therapeutics Program	October 2013	GPCR crosstalk in vascular maturation
Drug Discovery & Translational Medicine Symposium	October 2013	Novel Targets in Treatment of Pulmonary Arterial Hypertension
Department of Medicine Grand Round	July 2012	Pulmonary Arterial Hypertension: Novel Insights into Its Pathogenesis
Cardiology Grand Round	May 2010	Statin Pleiotropy

Pulmonary-Critical Care Medicine Research Seminar	May 2010	Apelin Signaling in Pulmonary Arterial Hypertension
Vascular Biology & Therapeutics Seminar	March 2010	Endothelial Homeostasis: Role of Apelin and Its Downstream Targets
Vascular Biology & Therapeutics Ninth Annual Retreat	October 2009	Apelin Signaling in Animal Models of Vascular Pathology
Yale Affiliated Hospital Lecture Program	6 lectures/year	Teaching rounds at Bridgeport Hospital

**Primary Mentoring Roles:**

**Postdoctoral:**

Name of trainee: Jongmin Kim, Ph.D.

Position and period of mentorship: Postdoctoral Fellowship, 2010-2013

Current Position: Associate Dean, Research & Business Development Foundation-Research Affairs and Associate Professor, Department of Life Systems, Sookmyung University, Seoul, Korea

Name of trainee: Yoko Kojima, M.D., Ph.D.

Position and period of mentorship: Postdoctoral Fellowship, 2010-2012

Current Position: Associate Research Scientist, Stanford University School of Medicine

Name of trainee: Danielle McLean, Ph.D.

Position and period of mentorship: Postdoctoral Fellowship, 2010-2013

Current Position: Principal Medical Writer, NuCana plc, Edinburgh, U.K.

Name of trainee: Yujung Kang, Ph.D.

Position and period of mentorship: Postdoctoral Fellowship, 2010-2013

Current Position: Chief of Bio Team, R&D Center, Vieworks, Inc., Seoul, Korea

Name of trainee: Jingxia Wu, Ph.D.

Position and period of mentorship: Postdoctoral Fellowship, 2012-2014

Current Position: Postdoctoral associate, Deutsches Krebsforschungszentrum

Name of trainee: Cheol Hwangbo, Ph.D.

Position and period of mentorship: Postdoctoral Fellowship, 2013-2016

Current Position: Assistant Professor, Gyeongsang National University

Name of trainee: Avraham Sofer, M.D.

Position and period of mentorship: Pulmonary Fellow, 2015-2017

Current Position: Clinical Practice, St. Paul, MN

Name of trainee: Seyoung Lee, PhD

Position and period of mentorship: Postdoctoral Associate, 2016-2017

Current Position: Postdoctoral Associate, Yale University

Name of trainee: Irinna Papangeli, Ph.D.

Position and period of mentorship: Postdoctoral Associate, 2013-2016, Associate Research Scientist 2016-2019

Current Position: Staff Scientist, Bayer-Broad Institute for Precision Cardiology Laboratory

Name of trainee: Takaomi Adachi, M.D.

Position and period of mentorship: Visiting Scholar, 2015-2017, Postdoctoral Fellow, 2017-present

Name of trainee: Katharine Clapham, MD

Position and period of mentorship: Cardiology Fellow/Postdoctoral Associate, 2018-present

Name of trainee: C-Hong Chang, PhD

Position and period of mentorship: Postdoctoral Associate, 2018-present

Name of trainee: Hanming Zhang, PhD

Position and period of mentorship: Postdoctoral Associate, 2019-present

**Predoctoral:**

Name of trainee: Devi Mehrotra

Position and period of mentorship: Undergraduate Researcher, 2013-2015

Current Position: Medical Student, Albert Einstein School of Medicine

Name of trainee: Emily Nadelmann

Position and period of mentorship: Undergraduate Researcher, 2013-2015

Current Position: Medical Student, Albert Einstein School of Medicine

Name of trainee: Omar El-Hely

Position and period of mentorship: Undergraduate Researcher, 2014-2016

Current Position: Medical Student, Wake Forest School of Medicine

Name of trainee: Joaquiang Hu

Position and period of mentorship: Visiting Graduate Student, 2016-2018

Current Position: Medical Student, The fourth Military Medical University (Xi'an, China)

Name of trainee: Jessica Furtado

Position and period of mentorship: Rotating Graduate Student, 2019

Name of trainee: Vanessa Wu

Position and period of mentorship: Undergraduate Researcher, 2019-present

Name of trainee: Abigail Miller

Position and period of mentorship: Undergraduate Researcher, 2019-present

Name of trainee: Marcus Shallow

Position and period of mentorship: Undergraduate Researcher, 2019-present

Name of trainee: Jonathan Hwa

Position and period of mentorship: High School Research Associate, 2019-present

Name of trainee: Bella Capuano

Position and period of mentorship: High School Research Associate, 2018-present

**Other Mentoring Activities:**

Mentor for the K08 award for Won-kyung Cho, M.D., Instructor in the Section of Pulmonary, Critical Care and Sleep Medicine (until her departure to Brown University); she had worked in the lab of Dr. Jack Elias

Mentor for Actelion Entelligence Award for Alan Morrison, M.D. Ph.D., Assistant Professor, Section of Cardiovascular Medicine (until his departure to Brown University); he had worked in the lab of Dr. Jeff Bender

Mentor for Actelion Entelligence Award for Stephanie Thorn, Ph.D., Research Scientist, Section of Cardiovascular Medicine; she works in the lab of Dr. Albert Sinusas

Medical Thesis Committee for Deepak Atri, Yale University School of Medicine (Primary Mentor: Michael Simons)

Medical Thesis Committee for Zainab Jaji, Yale University School of Medicine (Primary Mentor: John Hwa)

Medical Thesis Committee for Nicholas Wilcox, Yale University School of Medicine (Primary Mentor: Jeff Bender)

Thesis defense committee for Min Ding, Ph.D. candidate at Dartmouth College (Primary Mentor: Kathleen Martin)

Thesis External Reader for Philip Kong, Ph.D. candidate at Yale University (Primary Mentor: Tarek Fahmy)

**Public Service**

1. This Morning TBS eFM , Seoul (Korean-English Radio News Show), 11/14/13, featured expert for program, "Vascular Diseases"
2. *Nature Medicine* Biomedical Briefing, 12/5/2013, featured expert for article, "New statin standards"
3. *Huffington Post*, 4/29/2020, featured expert for article, "Everything You Need To Know About Coronavirus Causing Blood Clots"
4. *Practical Cardiology*, 7/9/2020, Causes of Blood Clots in COVID-19
5. *Healthline*, 10/19/2020, featured expert for article, "What we know about COVID-19 and long term heart damage"
6. *NHLBI Press Release*, 10/22/2020, featured expert for article, "Arterial wall cells offer insight into coronavirus' rampage from head to toe"
7. *NPR*, 11/5/2020, featured expert for article, "Clots, strokes and rashes. Is COVID-19 a disease of the blood vessels?"



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5. **Chun HJ**,\* Zheng L,\* Ahmad M,\* (\*co-primary authors) Wang J, Speirs CK, Siegel RM, Dale JK, Puck J, Davis J, Hall CG, Skoda-Smith S, Atkinson TP, Straus SE, Lenardo MJ. Pleiotropic defects in lymphocyte activation caused by caspase-8 mutations lead to human immunodeficiency. **Nature**. 2002 Sep 26;419(6905):395-9. PubMed PMID: 12353035. (featured in editorial in *Nature Immunology*, Vol 3, p 896)
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#### Case Reports, Technical Notes, Letters

1. **Chun HJ**, Cook K, Wang PJ, Al-Ahmad A. Pacemaker alternans terminated by telemetry wand: what is the mechanism? *Heart Rhythm*. 2008 Jul;5(7):1080-2. doi: 10.1016/j.hrthm.2008.03.007. Epub 2008 Mar 8. PubMed PMID: 18598969.
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