

# CURRICULUM VITAE

## Il-man Kim, Ph.D. Associate Professor with Tenure

Department of Anatomy, Cell Biology, and Physiology  
Krannert Cardiovascular Research Center  
Wells Center for Pediatric Research  
Indiana University School of Medicine  
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### **PERSONAL:**

Home Address	1332 Thornbird Lane, Carmel, IN 46032
Cell Phone	706-755-7688
Date of Birth	October 12, 1975
Place of Birth	Taebak, South Korea
Citizenship	US Citizen
Sex	Male
Race	Asian

### **EDUCATION:**

1991-1994	Pohang High School, Pohang, South Korea
1994-1997	B. Eng. (earned in August, 1997) Food Science & Technology Dongguk University, Seoul, South Korea
1997-1999	M.S. (earned in August, 1999) Molecular Biology, Graduate School of Biotechnology Korea University, Seoul, South Korea Thesis: Identification of genes for the growth with oxygen in <i>E. coli</i> (Advisor: Muhyeon Choe, Ph.D.)
2001-2006	Ph.D. (earned in May, 2006) Biochemistry & Molecular Genetics University of Illinois at Chicago Dissertation: Foxf1 and Foxm1 transcription factors in development and cancer (Advisor: Robert H. Costa, Ph.D. [now deceased])
2006-2011	Postdoctoral Training (until August, 2011) Division of Cardiology, Department of Medicine Duke University Medical Center Research area: Identification of novel genes causing dilated cardiomyopathy and investigation of seven transmembrane receptor-mediated $\beta$ -arrestin signaling pathways (Mentor: Howard A. Rockman, M.D.)

## **PROFESSIONAL:**

### **Academic Appointments**

- 09/2011-06/2016 Assistant Professor  
Vascular Biology Center and Department of Biochemistry & Molecular Biology  
Medical College of Georgia  
College of Graduate Studies  
Augusta University  
(Previously known as Georgia Regents University & Georgia Health Sciences University)
- 07/2016-03/2019 Associate Professor with Tenure  
Vascular Biology Center and Department of Biochemistry & Molecular Biology  
Medical College of Georgia  
College of Graduate Studies  
Augusta University  
(Previously known as Georgia Regents University & Georgia Health Sciences University)
- From 04/2019 Associate Professor with Tenure  
Department of Anatomy, Cell Biology, and Physiology  
Krannert Cardiovascular Research Center  
Wells Center for Pediatric Research  
Indiana University School of Medicine

### **Administrative Responsibilities/Appointments**

- 2013 Editor, Onco Reviews
- 2013-2014 Editor, VRI Cell Signaling
- 2013-2017 Academic Editor, Cardiology and Angiology
- 2022-present Associate Editor, Frontiers in Cardiovascular Medicine

### **Committee/Editorial Board Assignments**

- 2012, 2014, & 2020 Ad Hoc Grant Review Committee, Medical Research Council (MRC), Population & Systems Medicine Board and Developmental Pathway Funding Scheme, UK
- 2014 Ad Hoc Grant Review Committee, National Institutes of Health (NIH), Molecular and Integrative Signal Transduction (MIST) Study Section in February
- 2014 Ad Hoc Grant Review Committee, National Institutes of Health (NIH), Myocardial Ischemia and Metabolism (MIM) Study Section in June
- 2013-2014 Bi-Annual Undergraduate & Graduate Scholarship Committee, Augusta Korean Methodist Church, Georgia
- 2015 Ad Hoc Grant Review Committee, National Institutes of Health (NIH), Cardiac Contractility, Hypertrophy and Failure (CCHF) Study Section in February
- 2015 Ad Hoc Grant Review Committee, Innovative Medical Research, University of Münster, Germany
- 2012-2015 Postdoctoral Review Committee, Vascular Biology Center, Augusta University
- 2013-2017 Editorial Board Member, Heart Health

2014-2017	Review Editor, Frontiers in Oncology
2015-2017	PhD Comprehensive Qualifying Exam Committee, Vascular Biology Center, Augusta University
2017	Ad Hoc Grant Review Committee, the Pakistan - U.S. Science and Technology (S&T) Cooperation Program, the U.S. National Academy of Sciences and the Higher Education Commission (HEC) of Pakistan
2017	Ad Hoc Grant Review Committee, Biotechnology & Biological Sciences Research Council (BBSRC), UK
2017	Ad Hoc Grant Review Committee, Proof-of-Concept Research Program, Department of Internal Medicine, Virginia Commonwealth University
2017	Ad Hoc Grant Review Committee, Intramural Grant Program, US Food and Drug Administration Office of Women's Health
2018	Ad Hoc Grant Review Committee, NIH/NHLBI lncRNAs in HLBS Diseases Special Emphasis Panel [2018/10 ZHL1 CSR-K (O1) 1] for "RFA-HL-19-011: Long Non-coding RNA in Cardiovascular, Lung, Blood, and Sleep Research" in August
2018	Ad Hoc Grant Review Committee, The Austrian Science Fund FWF commissioned by the Interregional Project Networks (IPN) of the European Region Tyrol-South Tyrol-Trentino (EGTC)
2013-2018	Annual Graduate Research Day Poster Judge, College of Graduate Studies, Augusta University
2014-2018	Ad Hoc MD/PhD Admission Committee, University System of Georgia MD/PhD Program
2014-2018	IACUC Subcommittee Member, Augusta University
2014-2018	Member of the Early Career Committee, American Heart Association (AHA), Basic Cardiovascular Sciences (BCVS)
2016-2018	Graduate Education Committee, Vascular Biology Center, Augusta University
2015-2019	Abstract Grader, American Heart Association (AHA), Basic Cardiovascular Sciences (BCVS) Conference
2016-2019	Award Selection Committee, Augusta University Research Institute
2017-2019	Ad Hoc Grant Review Committee, Pilot Study Research Program, Augusta University
2018-2019	Ad Hoc Grant Review Committee, Extramural Success Award Program, Augusta University
2014-2019	Reviewer, Tumor Biology
2014-2019	Reviewer, BioMed Research International
2014-2019	Reviewer, Journal of Translational Medicine
2014-2020	Reviewer, International Journal of Molecular Sciences
2014-2020	Reviewer, Genes, Chromosomes and Cancer
2014-2020	Reviewer, Pathology-Research and Practice
2015-2020	Reviewer, Heart and Vessels

2015-2020	Reviewer, Experimental and Therapeutic Medicine
2015-2020	Reviewer, Reproductive Sciences
2015-2020	Reviewer, European Journal of Clinical Investigation
2015-2020	Reviewer, PLoS ONE
2015-2020	Reviewer, BMC Genomics
2016-2020	Reviewer, Experimental Biology and Medicine
2016-2020	Reviewer, BMC Systems Biology
2016-2020	Reviewer, BMC Cardiovascular Disorders
2016-2020	Reviewer, Cellular Physiology and Biochemistry
2016-2020	Reviewer, Biomolecules & Therapeutics
2016-2020	Reviewer, Journal of Cardiovascular Pharmacology
2017-2020	Reviewer, Molecular Medicine Reports
2017-2020	Reviewer, Scientific Reports
2017-2020	Reviewer, Human Genetics
2017-2020	Reviewer, EBioMedicine
2017-2020	Reviewer, Oncotarget
2017-2020	Reviewer, Gene Therapy
2017-2020	Reviewer, Bioscience Reports
2017-2020	Grant Review Committee Co-Chair, American Heart Association (AHA), Cardiac Biology Regulation-BSci 3 or Fellowship Cardiac Biology Regulation-BSci 2
2018-2020	Grant Review Committee Chair, American Heart Association (AHA), Transformational Project Award (TPA) Basic Science 3 or Career Development Award (CDA) Cardiac Basic Science
2018-2020	Leader, American Heart Association (AHA), TPA Peer Reviewer Training Orientation
2018-2020	Leader, American Heart Association (AHA), CDA Peer Reviewer Training Orientation
2018-2020	Scholarship Review Committee Member, The Scientific Councils of the American Heart Association/American Stroke Association (AHA/ASA), Student Scholarships in Cardiovascular Disease and Stroke
2020	Reviewer, The Annals of Translational Medicine
2020	Ad Hoc Grant Review Committee, National Institutes of Health (NIH), Myocardial Ischemia and Metabolism (MIM) Study Section in February
2020	Grant Review Committee Member, American Heart Association (AHA), Rapid Response Grant: COVID-19 and Its Cardiovascular Impact
2018-2021	Reviewer, Endocrine
2018-2021	Reviewer, Expert Opinion on Drug Discovery

2018-2021	Reviewer, Food and Function
2018-2021	Reviewer, Molecular Diagnosis & Therapy
2018-2021	Reviewer, Non-Coding RNA
2018-2021	Reviewer, Cellular and Molecular Life Sciences
2019-2021	Reviewer, Life Sciences
2019-2021	Reviewer, Circulation Journal
2021	Ad Hoc Grant Review Committee, National Institutes of Health (NIH), Integrative Myocardial Physiology/Pathophysiology B (MPPB) Study Section in February
2021	Ad Hoc Grant Review Committee, National Institutes of Health (NIH), Integrative Myocardial Physiology/Pathophysiology B (MPPB) Study Section in June
2020-2022	Editorial Board Member, Frontiers in Cardiovascular Medicine
2022	Reviewer, Antioxidants (Basel)
2022	Ad Hoc Grant Review Committee, NIH/NHLBI Fellowship Special Emphasis Panel [2022/10 ZRG1 F10C-C (20)] in July
2022	Ad Hoc Grant Review Committee, NIH R03 Special Emphasis Panel [2023/01 ZRG1 MBBC-K (55)] in November
2023	Ad Hoc Grant Review Committee, NIH R03 Special Emphasis Panel [2023/05 ZTR1 RD-7 (01) 1] in March
2023	Ad Hoc Grant Review Committee, NIH R03 Special Emphasis Panel [2023/10 ZTR1 RD-1 (01) 1] in July
2023	Physiology Faculty Search Committee, Department of Anatomy, Cell Biology, and Physiology, Indiana University School of Medicine
2023	Task Force Committee on Faculty Research Dissemination, Department of Anatomy, Cell Biology, and Physiology, Indiana University School of Medicine
2023	Reviewer for Seed Funding, Herman B Wells Center for Pediatric Research, Indiana University School of Medicine
2023	Ad Hoc Grant Review Committee, Advanced Grant Call, European Research Council
2024	Ad Hoc Grant Review Committee, NHLBI, PPG Special Emphasis Panel [2025/01 HLBP (15) 1]
2025	Ad Hoc Grant Review Committee, NHLBI, PPG Special Emphasis Panel [2025/05 HLBP (8) 1]
2025	Ad Hoc Grant Review Committee, National Institutes of Health (NIH), Therapeutic Development and Preclinical Studies (TDPS) Study Section in June
2025	Review Committee, AHA Scientific Sessions Abstracts
2012-present	Editorial Board Member, Cardiovascular Pharmacology
2013-present	Grant Review Committee Member, American Heart Association (AHA), Cardiac Biology Regulation-BSci 3, Fellowship Cardiac Biology Regulation-BSci 2, Fellowship Signaling 1, Fellowship Signaling 2, Fellowship Basic Science 8, Fellowship Cardiomyopathy, Fellowship Cardiology 5, Fellowship Cardiology 8,

	TPA Basic Science 3, TPA Cardiac Biology, IPA Basic Science 1, IPA Cardiac Basic Science, Second Century Early Faculty Independence Award (SCEFIA), and Collaborative Sciences Award
2014-present	Reviewer, Circulation Research
2014-present	Reviewer, AJP-Heart and Circulatory Physiology
2015-present	Reviewer, Translational Research (formerly Journal of Laboratory and Clinical Medicine)
2015-present	Reviewer, Journal of Clinical Investigation
2015-present	Reviewer, Journal of American Heart Association
2016-present	Reviewer, AJP-Cell Physiology
2016-present	Reviewer, JCI Insight
2019-present	Reviewer, Cardiovascular Research
2019-present	Grant Review Committee, Indiana Clinical and Translational Sciences Institute, Core Pilot Grant Program
2020-present	Reviewer, The FEBS Journal
2020-present	Reviewer, Cellular Signalling
2020-present	Reviewer, Aging
2020-present	Reviewer, The FASEB Journal
2020-present	Reviewer, Molecular Therapy - Nucleic Acids
2020-present	Transgenic & Knock-Out Mouse Core Advisory Committee, Indiana University Simon Cancer Center
2020-present	The Indiana University Medical Student Program for Research and Scholarship (IMPRS) Poster Judge, Indiana University School of Medicine
2020-present	Research Advisory Group, Indiana University Cardiovascular Institute
2021-present	Reviewer, Journal of Molecular and Cellular Cardiology
2021-present	Reviewer, Science Bulletin
2021-present	Reviewer, Clinical and Translational Medicine
2021-present	Editorial Board Member, Non-coding RNA Investigation
2021-present	Topic Board Member/Topical Advisory Panel, International Journal of Molecular Sciences
2022-present	Reviewer, Theranostics
2022-present	Reviewer, Science Advances
2022-present	Reviewer, Circulation
2022-present	Reviewer, Nature Communications
2022-present	Interviewer for IBMG PhD Program Admission, Indiana University School of Medicine
2023-present	IBC Member, Indiana University

2024-present	Reviewer, Signal Transduction and Targeted Therapy
2025-present	Reviewer, Redox Biology
2025-present	Reviewer, Clinical Science

### **Organizing Roles at Scientific Meetings:**

The Annual BCVS Early Career Committee Symposium, American Heart Association Basic Cardiovascular Science Scientific Sessions (Role : Moderator), July, 2015

The Concurrent Session 8B: RNAs and the Heart, AHA BCVS 2017 Scientific Sessions (Role: Moderator), July, 2017

The Abstract Poster Session of SI.APS.02: Ligand-Receptor Signaling and Impact on Cardiovascular Function, AHA Scientific Sessions (Role: Poster Professor), November, 2018

The Korean Cardiovascular Society (KCS) Session 2: Invited Lecture 2, The 3<sup>rd</sup> Asian Cardiovascular Symposium: A pre-meeting symposium at AHA BCVS-2021 (Role: Moderator). August, 2021.

The Korean Cardiovascular Society (KCS) Session 3: Abstract Competition 1, The 3<sup>rd</sup> Asian Cardiovascular Symposium: A pre-meeting symposium at AHA BCVS-2021 (Role: Panelist). August, 2021.

The Korean Cardiovascular Society (KCS) Session 1: Invited Lecture, The 5th Asian Cardiovascular Symposium: A pre-meeting symposium at AHA BCVS-2023 (Role: Moderator). July, 2023.

One-to-one Speed Mentoring Session, American Heart Association Basic Cardiovascular Science Scientific Sessions (Role : Mentor), July, 2025

Three Poster Sessions, American Heart Association Basic Cardiovascular Science Scientific Sessions (Role : Poster Award Judge), July, 2025

### **Research and Training Grants Awarded**

2008-2010	American Heart Association Postdoctoral Fellowship, 0825499E (Role : PI and Term : 07/01/2008-06/31/2010) Title : Identifying novel genes causing dilated cardiomyopathy in adult <i>Drosophila</i>
2012-2014	American Heart Association Grant-in-Aid, 12GRNT12100048 (Role : PI and Term : 07/01/2012-06/30/2014) Title : Biogenesis and regulation of cardiac microRNAs by $\beta$ -arrestin-biased agonism of $\beta_1$ -adrenergic receptor
2014-2017	American Heart Association Scientist Development Grant, 14SDG18970040 (funded in the top 1.39% as an exceptional project) (Role : PI and Term : 01/01/2014-12/31/2017) Title : Biogenesis and regulation of cardiac microRNAs by $\beta$ -arrestin-biased agonism of $\beta_1$ -adrenergic receptor
2014-2020	National Institutes of Health, R01 HL124251 (Role : PI and Term : 08/11/2014-07/31/2020) Title : $\beta$ -arrestin signaling and microRNA biogenesis in cardioprotection
2016-2017	American Heart Association Postdoctoral Fellowship, 16POST26990020 (Role : Sponsor/Mentor and Term : 01/01/2016-12/31/2017) Title : The role of microRNA-150 in regulating cardiomyocyte survival during ischemic cardiac injury (This fellowship was relinquished in 02/01/2017 because the postdoc left the lab for

- a pharmacist career)
- 2016-2020 National Institutes of Health, R01 HL086555  
(Role : Co-I and Term : 05/01/2016-03/31/2020)  
Title : Hypoxia and cardiac stem cell homing
- 2016-2018 American Heart Association Predoctoral Fellowship, 16PRE30210016  
(Role : Sponsor/Mentor and Term : 07/01/2016-06/30/2018)  
Title :  $\beta$ -adrenergic receptor/ $\beta$ -arrestin-mediated microRNA regulatory network: A new player in cardioprotective signaling  
(This fellowship was relinquished in 12/16/2017 because the student left the lab for a postdoc position)
- 2016-2020 National Institutes of Health, R01 HL134354 (funded in the top 1% as an outstanding project)  
(Role : Co-I and Term : 08/15/2016-04/30/2021)  
Title : Notch1/miR-322 Axis in Stem Cell Mediated Vascular Repair
- 2017-2020 National Institutes of Health Postdoctoral F32 Fellowship, F32 HL136191  
(Role : Co-Sponsor/Co-Mentor and Term : 09/01/2017-08/31/2020)  
Title : Endothelial Mineralocorticoid Receptors: Novel Mechanism for Sex-Discrepancies in Vascular Disorders Associated with Obesity
- 2018-2020 American Heart Association Postdoctoral Fellowship, 18POST34030054  
(Role : Sponsor/Mentor and Term : 07/01/2018-06/30/2020)  
Title : The axis of long noncoding RNA MIAT and microRNA-150 in acute myocardial infarction
- 2018-2021 American Heart Association Transformational Project Award, 18TPA34170104  
(Role : PI and Term : 07/01/2018-6/30/2021)  
Title : The novel role of microRNA-532-5p/prss23 axis in regulating cardiac vascularization during acute myocardial infarction
- 2019-2025 National Institutes of Health, R01 HL146481  
(Role : PI and Term : 07/15/2019-06/30/2025)  
Title : Identifying novel pathways targeting endothelial-to-mesenchymal transition during heart failure
- 2020-2021 American Heart Association Postdoctoral Fellowship, 20POST34990024  
(funded in the top 0.11% [#1 among 917 applications])  
(Role : Sponsor/Mentor and Term : 01/01/2020-12/31/2021)  
Title : The novel role of microRNA-125a-5p/bak1 axis in regulating cardiomyocyte survival during acute myocardial infarction
- 2022-2023 American Heart Association Postdoctoral Fellowship, 900453  
(Role : Sponsor/Mentor and Term : 01/01/2022-12/31/2023)  
Title : The roles of GCHFR and its cardiomyocyte post-transcriptional inhibitor in ischemic cardiac injury
- 2022-2024 American Heart Association Predoctoral Fellowship, 901208  
(Role : Sponsor/Mentor and Term : 07/01/2022-06/30/2024)  
Title : Regulation of cardiac long noncoding RNA MIAT by  $\beta$ -arrestin-mediated  $\beta_1$ -adrenergic receptor signaling
- 2022-2025 American Heart Association Career Development Award, 931621 (funded in the top 2.43% as an exceptional project)  
(Role : Sponsor/Mentor and Term : 04/01/2022-03/31/2025)  
Title : The role of endothelial serine protease 23 and its post-transcriptional inhibitor in ischemic cardiac injury

2023-2024      American Physiological Society Postdoctoral Fellowship  
(Role : Sponsor/Mentor and Term : 07/01/2023-06/30/2024)  
Title : The novel role of microRNA-150/periostin axis in regulating cardiac fibroblast activation during myocardial infarction

## Research Experience

1997-1999      Graduate Research Assistant  
Graduate School of Biotechnology, Korea University, Seoul, South Korea  
Research area: Genes for the growth with oxygen and construction of immunotoxins for cancer treatment  
Mentor: Muhyeon Choe, Ph.D.

2000              Research Assistant  
Laboratory of Experimental Therapeutics, Korea Cancer Center Hospital, Seoul, South Korea  
Research area: Oxidative stress in tumor progression and drug resistance  
Mentor: Youngdo Yoo, Ph.D.

2001-2006      Graduate Research Assistant  
Department of Biochemistry and Molecular Genetics  
University of Illinois at Chicago  
Research area: Forkhead box transcription factors in development and cancer  
Mentor: Robert H. Costa, Ph.D.

2006-2010      Postdoctoral Research Associate  
Division of Cardiology, Department of Medicine, Duke University Medical Center  
Research area: Identification of novel genes causing dilated cardiomyopathy and investigation of seven transmembrane receptor-mediated  $\beta$ -arrestin signaling pathways  
Mentor: Howard A. Rockman, M.D.

2011              Postdoctoral Research Associate Senior  
Division of Cardiology, Department of Medicine, Duke University Medical Center  
Research area: Control of microRNA biogenesis by  $\beta$ -arrestin-biased agonism of  $\beta_1$ -adrenergic receptor and  $\beta$ -arrestin-mediated endothelin A receptor activation of angiogenic genes  
Mentor: Howard A. Rockman, M.D.

## Teaching Experience

1998              Teaching Assistant  
Teaching undergraduate course "Laboratory of Biochemistry"  
Korea University, Seoul, Korea

2008-2011      Laboratory mentorship  
Directly supervised and mentored technicians, graduate, nursing, and medical students for their laboratory projects  
Duke University Medical Center

2012, Spring      Lecturer  
VBI 8020 "Frontiers in Vascular Biology" course  
Vascular Biology Center, Augusta University

	Students' evaluation: 5/5 (excellent)
2012, Fall	Speed Dating with Poster Presentation COGS 8040 "Introduction to Faculty Research" course Biomedical Sciences PhD Program, Augusta University
2013, Spring	Lecturer COGS 8033 "Integrated Systems Biology" course Biomedical Sciences PhD Program, Augusta University Students' evaluation: 4/5 (very good)
2013, Fall	Speed Dating with Poster Presentation COGS 8040 "Introduction to Faculty Research" course Biomedical Sciences PhD Program, Augusta University
2014, Spring	Lecturer VBI 8020 "Frontiers in Vascular Biology" course Vascular Biology Center, Augusta University Students' evaluation: 4/5 (very good)
2014, Spring	Lecturer COGS 8033 "Integrated Systems Biology" course Biomedical Sciences PhD Program, Augusta University Students' evaluation: 4.3/5 (very good)
2015, Spring	Lecturer COGS 8033 "Integrated Systems Biology" course Biomedical Sciences PhD Program, Augusta University Students' evaluation: 4/5 (very good)
2015, Fall	Speed Dating with Oral and Poster Presentation COGS 8040 "Introduction to Faculty Research" course Biomedical Sciences PhD Program, Augusta University
2016, Spring	Lecturer COGS 8033 "Integrated Systems Biology" course Biomedical Sciences PhD Program, Augusta University Students' evaluation: 4.3/5 (very good)
2016, Fall	Speed Dating with Oral and Poster Presentation COGS 8040 "Introduction to Faculty Research" course Biomedical Sciences PhD Program, Augusta University
2017, Spring	Lecturer COGS 8033 "Integrated Systems Biology" course Biomedical Sciences PhD Program, Augusta University Students' evaluation: 4.4/5 (very good)
2017, Spring	Lecturer VBI 8020 "Frontiers in Vascular Biology" course Vascular Biology Center, Augusta University
2017, Fall	Lecturer COGS 8120 "Cardiovascular Physiology & Pharmacology" course Biomedical Sciences PhD Program, Augusta University
2018, Spring	Lecturer

	COGS 8033 "Integrated Systems Biology" course Biomedical Sciences PhD Program, Augusta University Students' evaluation: 3.62/4 (very good)
2018, Fall	Speed Dating with Oral and Poster Presentation COGS 8040 "Introduction to Faculty Research" course Biomedical Sciences PhD Program, Augusta University
2019, Spring	Lecturer COGS 8033 "Integrated Systems Biology" course Biomedical Sciences PhD Program, Augusta University Students' evaluation: 4.04/5 (very good)
2019, Spring	Lecturer VBI 8020 "Frontiers in Vascular Biology" course Vascular Biology Center, Augusta University
2021, Spring	Lecturer G740 "Translational Systems Physiology and Pharmacology" course The Indiana BioMedical Gateway (IBMG) PhD Program, Indiana University School of Medicine
2022, Spring	Lecturer PHSL-F603 "Integrated Medical Physiology" course Graduate Program, Indiana University School of Medicine Students' evaluation (Rate of the degree to which students agree with 7 favorable statements): 21/28 (somewhat agree & strongly agree) based on reports submitted by 4 students
2022, Spring	Lecturer G740 "Translational Systems Physiology and Pharmacology" course The Indiana BioMedical Gateway (IBMG) PhD Program, Indiana University School of Medicine
2023, Spring	Lecturer PHSL-F603 "Integrated Medical Physiology" course Graduate Program, Indiana University School of Medicine Students' evaluation (Rate of the degree to which students agree with 7 favorable statements): 106/119 (somewhat agree & strongly agree) based on reports submitted by 17 students Students' overall evaluation: 4.53/5 (very good)
2023, Spring	Lecturer G740 "Translational Systems Physiology and Pharmacology" course The Indiana BioMedical Gateway (IBMG) PhD Program, Indiana University School of Medicine
2024, Spring	Lecturer PHSL-F603 "Integrated Medical Physiology" course Graduate Program, Indiana University School of Medicine Students' evaluation (Rate of the degree to which students agree with 7 favorable statements): 21/28 (strongly agree & somewhat agree) based on reports submitted by 4 students Students' overall evaluation: 4.43/5 (very good)
2024, Spring	Lecturer G740 "Translational Systems Physiology and Pharmacology" course

	The Indiana BioMedical Gateway (IBMG) PhD Program, Indiana University School of Medicine
2024, Summer II	Instructor for Mengyao Sun, the 3 <sup>rd</sup> PhD student in Dr. Lei's Yang's Lab F780 "Special Topics in Physiology" course The Indiana BioMedical Gateway (IBMG) PhD Program, Indiana University School of Medicine
2024, Fall to 2025, Spring	Facilitator & Grader 2425-IUSM-XM780-248723 "Health Systems Science 2" course Year 2 Medical Student, MD Program, Indiana University School of Medicine
2025, Spring	Lecturer PHSL-F603 "Integrated Medical Physiology" course Graduate Program, Indiana University School of Medicine Students' evaluation (Rate of the degree to which students agree with 7 favorable statements): 21/28 (strongly agree & somewhat agree) based on reports submitted by 4 students
2025, Spring	Lecturer G740 "Translational Systems Physiology and Pharmacology" course The Indiana BioMedical Gateway (IBMG) PhD Program, Indiana University School of Medicine
2025, Fall to 2026, Spring	Facilitator & Grader 2526-IUSM-XM780-258534 "Health Systems Science 2" course Year 2 Medical Student, MD Program, Indiana University School of Medicine

### **Student Thesis Committee**

2014	PhD Thesis Reader Tien-Hung Lan "TRANSIENT SELF-ASSOCIATION OF BETA2-ADRENERGIC RECEPTORS" Advisor: Nevin Lambert, Department of Pharmacology & Toxicology, Augusta University
2016	PhD Thesis Reader Jason Davis "A Novel Function of ARF1 in Prostate Cancer Cell Proliferation through Activating the Mitrogen-Activated Protein Kinase Pathway" Advisor: Guangyu Wu, Department of Pharmacology & Toxicology, Augusta University
2013-2017	PhD Thesis Mentor Jian-peng Teoh "Beta-arrestin Signaling and Noncoding RNAs in Cardioprotection" Vascular Biology Center, Augusta University
2015-2019	PhD Thesis Committee Shirley Li "Epigenetic Mechanisms of Galentin-3 Regulation in Pulmonary Arterial Hypertension" Advisor: David Fulton, Vascular Biology Center, Augusta University
2016-2019	MD/PhD Thesis Committee Rodney Littlejohn

	<p>“Critical Role of Neddylation in Cardiac Development” Advisor: Huabo Su, Vascular Biology Center, Augusta University</p>
2018-2019	<p>PhD Thesis Committee Mostafa Khater “The ARF1 Signaling Pathway and the Effects of Different PI3K Inhibitors in Prostate Cancer” Advisor: Guangyu Wu, Department of Pharmacology &amp; Toxicology, Augusta University</p>
2017-2020	<p>MD/PhD Thesis Committee Najeah Okashah “G protein Bias in G protein coupled receptors” Advisor: Nevin Lambert, Department of Pharmacology &amp; Toxicology, Augusta University</p>
2020-2021	<p>PhD Thesis Mentor Nipuni Punsara Barupala “Beta-arrestin-Mediated Adrenergic Signaling and Noncoding RNAs in Heart Failure” Department of Anatomy, Cell Biology and Physiology, Indiana University School of Medicine (This student left the lab before PhD candidacy for another PhD training)</p>
2019-2024	<p>MD/PhD Thesis Committee John Wells “A G protein Coupled Receptor, GPR101 as a Novel Candidate for X-linked Heterotaxy” Advisor: Stephanie Ware, Department of Medical and Molecular Genetics, Indiana University School of Medicine</p>
2021-present	<p>PhD Thesis Committee Areli Jannes Javier “Cardiomyocyte Remodeling in Duchenne Muscular Dystrophy” Advisor: Steven S Welc, Musculoskeletal Health Sciences, Indiana University School of Medicine</p>
2022-present	<p>PhD Thesis Committee Mengyao Sun “The Roles of Noncoding RNAs in hiPSC-Derived Cardiovascular Cell Differentiation” Advisor: Lei Yang, Department of Pediatrics, Indiana University School of Medicine</p>

## Trainees

2012	<p>Joseph Vinson: Medical Student, DODI Summer Scholar, Augusta University (The number of publications in Mentor/Sponsor lab Upon Departure: One) (The next position: Medical Student, Medical College of Georgia)</p>
2012	<p>Corey Neal: Postdoctoral Fellow, Vascular Biology Center, Augusta University (The number of publications in Mentor/Sponsor lab Upon Departure: One) (The next position: Teacher, Community College, Atlanta)</p>
2012-2013	<p>Siva Krothapalli: Chief MD Resident, Internal Medicine, Medical College of Georgia, Augusta University (The number of publications in Mentor/Sponsor lab Upon Departure: One)</p>

(The next position: Resident, Cardiology, University of Iowa)

2013 Angela Chiang: Medical Student, DODI Summer Scholar, Augusta University  
(The number of publications in Mentor/Sponsor lab Upon Departure: One)  
(The next position: Medical Student, Medical College of Georgia)

2013 Akwesi Poteh: Medical Student, DODI Summer Scholar, Augusta University  
(The number of publications in Mentor/Sponsor lab: One)  
(The next position: Medical Student, Medical College of Georgia)

2013-2014 Yaoping Tang: Postdoctoral Fellow, Vascular Biology Center, Augusta University  
(The number of publications in Mentor/Sponsor lab Upon Departure: Six)  
(The next position: Vice President/Faculty, Science Experimental Center, Guangxi University of Chinese Medicine, Nanning, Guangxi, China)

2014 Aaron Fan: MD/PhD Student, Lab Rotation, Augusta University  
(The next position: MD/PhD Student, Augusta University)

2014 Brian Philips: PhD Student, Lab Rotation, Augusta University  
(The next position: MS Student, Augusta University)

2012-2014 Yongchao Wang: Research Associate, Vascular Biology Center, Augusta University  
(The number of publications in Mentor/Sponsor lab Upon Departure: Nine)  
(The next position: PhD Student, University of Kentucky)

2014-2015 Devi Prasad Boggupalli: PhD Student, Lab Rotation, Augusta University  
(The next position: PhD Student, Augusta University)

2014-2015 Qiuping Hu: Research Associate, Vascular Biology Center, Augusta University  
(The number of publications in Mentor/Sponsor lab Upon Departure: Two)  
(The next position: Research Associate, Columbia University, New York)

2012-2015 Kyoung-mi Park: Research Assistant, Vascular Biology Center, Augusta University  
(The number of publications in Mentor/Sponsor lab Upon Departure: Ten)  
(The next position: Research Assistant, Washington University, Saint Louis)

2015 Krystal Archer: Medical Student, DODI Summer Scholar, Medical College of Georgia, Augusta University  
(The number of publications in Mentor/Sponsor lab Upon Departure: Two)  
(The next position: MD Student, Augusta University)

2015 Alec Davila: MD/PhD Student, Lab Rotation, Augusta University  
(The number of publications in Mentor/Sponsor lab Upon Departure: One)  
(The next position: MD/PhD Student, Augusta University)

2015 Rodney Littlejohn: MD/PhD Student, Lab Rotation, Augusta University  
(The next position: MD/PhD Student, Augusta University)

2015 Felix Jimenez: Postdoctoral Fellow, Vascular Biology Center, Augusta University  
(The number of publications in Mentor/Sponsor lab Upon Departure: One)  
(The next position: Postdoctoral Fellow, Baylor College of Medicine, TX)

2015 Brinda Bhatt: PhD Student, Lab Rotation, Augusta University  
(The next position: PhD Student, Augusta University)

2016 Khadijah Alexander: PhD Student, Lab Rotation, Augusta University  
(The next position: PhD Student, Augusta University)

2015-2017 Zuzana Broskova: Postdoctoral Fellow, Vascular Biology Center, Augusta University

	(American Heart Association Postdoctoral Fellowship Awardee in Mentor/Sponsor lab) (The number of publications in Mentor/Sponsor lab Upon Departure: Six) (The next position: Non-science career)
2017-2018	Yanyan Xu: PhD Student, Lab Rotation, Augusta University (The number of publications in Mentor/Sponsor lab Upon Departure: One) (The next position: PhD Student, Augusta University)
2018	Shinjini Chowdhury: PhD Student, Lab Rotation, Augusta University (The next position: PhD Student, Augusta University)
2015-2018	Ahmed Bayoumi: Postdoctoral Fellow, Vascular Biology Center, Augusta University (The number of publications in Mentor/Sponsor lab Upon Departure: Ten) (The next position: Non-science career)
2017-2021	Tatsuya Aonuma: Postdoctoral Fellow, Vascular Biology Center at Augusta University and Department of Anatomy, Cell Biology & Physiology at Indiana University School of Medicine (American Heart Association Postdoctoral Fellowship Awardee in Mentor/Sponsor lab) (The number of publications in Mentor/Sponsor lab Upon Departure: Ten) (The next position: Assistant Professor, Asahikawa Medical University, Japan)
2020-2021	Nipuni Punsara Barupala: PhD Student, Department of Anatomy, Cell Biology & Physiology, Indiana University School of Medicine (American Heart Association Predoctoral Fellowship Awardee in Mentor/Sponsor lab: This fellowship was declined because the student left the lab before PhD candidacy for another PhD training) (The number of publications in Mentor/Sponsor lab Upon Departure: Three) (The next position: PhD Student)
2022	Jennifer Ann Mobley: PhD Student, Lab Rotation, IBMG PhD Program, Indiana University School of Medicine (The next position: PhD Student, Indiana University School of Medicine)
2019-2022	Bruno Moukette: Postdoctoral Fellow, Department of Anatomy, Cell Biology & Physiology, Indiana University School of Medicine (American Heart Association Postdoctoral Fellowship Awardee in Mentor/Sponsor lab) (The number of publications in Mentor/Sponsor lab Upon Departure: Six) (The next position: Senior Scientist, Pfizer)
2020-2023	Satoshi Kawaguchi: Postdoctoral Fellow, Department of Anatomy, Cell Biology & Physiology, Indiana University School of Medicine (American Heart Association Postdoctoral Fellowship Awardee in Mentor/Sponsor lab) (The number of publications in Mentor/Sponsor lab Upon Departure: Six) (The next position: Assistant Professor, Asahikawa Medical University, Japan)
2023	Angela Haskell: Master Student, Medical Sciences, Indiana University School of Medicine (The number of publications in Mentor/Sponsor lab Upon Departure: Two) (The next position: Research Associate, Indiana Biosciences Research Institute)
2023	Jessica Mah: Master Student, Medical Sciences, Indiana University School of Medicine

	(The number of publications in Mentor/Sponsor lab Upon Departure: Two) (The next position: Medical Student, Indiana University)
2022-2024	Taiki Hayasaka: Postdoctoral Fellow, Department of Anatomy, Cell Biology & Physiology, Indiana University School of Medicine (American Physiological Society Postdoctoral Fellowship Awardee in Mentor/Sponsor lab) (The number of publications in Mentor/Sponsor lab Upon Departure: Three) (The next position: Assistant Professor, Asahikawa Medical University, Japan)
2013-2017 (PhD Student) & 2023-2024 (Assistant Scientist)	Jian-peng Teoh: PhD Student & Assistant Scientist, Vascular Biology PhD Program, Augusta University & Department of Anatomy, Cell Biology & Physiology, Indiana University School of Medicine (American Heart Association Predoctoral Fellowship Awardee in Mentor/Sponsor lab) (The number of publications in Mentor/Sponsor lab Upon Departure: Fifteen) (The next Position: Non-science career)
2020-2025	Marisa Noemi Sepulveda: Assistant Scientist, Department of Anatomy, Cell Biology & Physiology, Indiana University School of Medicine (American Heart Association Career Development Award Awardee in Mentor/Sponsor lab) (The number of publications in Mentor/Sponsor lab Upon Departure: Nine) (The next position: Research Assistant Professor, University of Illinois at Chicago)
2025-present	Edward Gabriel Barba: Undergraduate Student, CTSI-Ivy Tech Summer Scholar, Indiana University School of Medicine
2024-present	Hamedane Moustapha: Master Student, Indiana University School of Medicine

### **AWARDS/HONORS:**

1995	Two Top-Honor Student Awards, Dongguk University, Seoul, South Korea
1995-1997	Allowance of Scholarships, Dongguk University, Seoul, South Korea
1997	Graduation in 3.5 years with Top-Honor Award Dongguk University, Seoul, South Korea
1997-1999	Two-Year Fellowship from the Korea Ministry of Education Korea University, Seoul, South Korea
2001-2006	Graduate Fellowship, University of Illinois at Chicago
2008-2010	Postdoctoral Fellowship, American Heart Association (AHA Reference Number: 0825499E)
2009	A finalist for Louis N. and Arnold M. Katz Basic Science Research Prize for Young Investigators, American Heart Association Scientific Sessions. Orlando, FL, November
2012-2014	Grant-in-Aid, American Heart Association (AHA Reference Number: 12GRNT12100048)
2014	A finalist for the Outstanding Early Career Investigator Award, American Heart Association Basic Cardiovascular Science Scientific Sessions. Las Vegas, NV, July
2014	The Young Investigator Award, Southern Translational Education and Research (STAR) Conference. Augusta, GA, September

2014-2017	Scientist Development Grant, American Heart Association (AHA Reference Number: 14SDG18970040): <u>funded in the top 1.39% as an exceptional project</u>
2014-2020	R01 grant, National Institutes of Health (NIH Reference Number: R01 HL124251)
2015	The Emerging Scientist Award from Georgia Regents Research Institute, Augusta University, May
2016-2017	Postdoctoral Fellowship (Role: Sponsor/Mentor), American Heart Association (AHA Reference Number: 16POST26990020)
2016-2018	Predoctoral Fellowship (Role: Sponsor/Mentor), American Heart Association (AHA Reference Number: 16PRE30210016)
2016	Shih-Chun Wang Young Investigator Award, American Physiological Society
2018-2020	Postdoctoral Fellowship (Role: Sponsor/Mentor), American Heart Association (AHA Reference Number: 18POST34030054)
2018-2021	Transformational Project Award, American Heart Association (AHA Reference Number: 18TPA34170104)
2019-2025	R01 grant, National Institutes of Health (NIH Reference Number: R01 HL146481)
2020-2021	Postdoctoral Fellowship (Role: Sponsor/Mentor), American Heart Association (AHA Reference Number: 20POST34990024): <u>funded in the top 0.11% as an exceptional project</u>
2021	2020 Acta Pharmacologica Sinica Outstanding Paper Award for “Circular noncoding RNAs as potential therapies and circulating biomarkers for cardiovascular diseases”: <a href="http://www.chinaphar.com/announcement/view/151">http://www.chinaphar.com/announcement/view/151</a>
2022-2023	Postdoctoral Fellowship (Role: Sponsor/Mentor), American Heart Association (AHA Reference Number: 900453)
2022-2024	Predoctoral Fellowship (Role: Sponsor/Mentor), American Heart Association (AHA Reference Number: 901208)
2022-2025	Career Development Award (Role: Sponsor/Mentor), American Heart Association (AHA Reference Number: 931621): <u>funded in the top 2.43% as an exceptional project</u>
2023-2024	Postdoctoral Fellowship (Role: Sponsor/Mentor), American Physiological Society
2024	2024 Acta Pharmacologica Sinica Most Cited Paper Award for “Circular noncoding RNAs as potential therapies and circulating biomarkers for cardiovascular diseases”: <a href="http://www.chinaphar.com/announcement/view/156">http://www.chinaphar.com/announcement/view/156</a>
2025-2029	R01 grant, National Institutes of Health (NIH Reference Number: R01 HL180692)

#### **SCIENTIFIC AND PROFESSIONAL SOCIETIES:**

1997-1999	Student Member, Korean Society for Molecular Biology
1997-1999	Student Member, Biochemical Society of the Republic of Korea
2012-2014	Member, American Association for Cancer Research
2007-present	Member, American Heart Association

2012-present	Member, Heart Failure Society of America
2012-present	Member, International Society of Heart Research
2012-present	Member, American Society for Biochemistry & Molecular Biology
2014-present	Member, American Physiological Society

## **PRESENTATIONS AT INTERNATIONAL, NATIONAL, REGIONAL AND STATE MEETINGS:**

### **Oral Presentations**

1. **Kim IM**, Wolf MJ, and Rockman HA. Gene Deletion Screen for Cardiomyopathy in Adult *Drosophila* Identifies Weary (Wry); a New Notch Ligand. American Heart Association Scientific Sessions. November, 2009. **Selected as a finalist for the Louis N. and Arnold M. Katz Basic Research Prize for Young Investigators. Published in *Circulation*. 2009; 120: A26 or S743.**
2. **Kim IM**, Tang Y, Wang Y, Park KM and Hu Q. A  $\beta_1$ -Adrenergic Receptor/ $\beta$ -Arrestin1-Regulatable MicroRNA, MiR-150 Protects the Mouse Heart from Ischemic Injury by Repressing Pro-apoptotic Egr2 and P2x7r. American Heart Association Basic Cardiovascular Science Scientific Sessions. July, 2014. **Selected as a finalist for the Outstanding Early Career Investigator Award. Highlighted in AHA Science News Video for BCVS 2014:**  
[http://my.americanheart.org/professional/Sessions/ATVB/ScienceNews/Science-News-BCVS-2014-Thursday\\_UCM\\_465709\\_Article.jsp?utm\\_campaign=bcvs14&utm\\_source=dailysn&utm\\_medium=email](http://my.americanheart.org/professional/Sessions/ATVB/ScienceNews/Science-News-BCVS-2014-Thursday_UCM_465709_Article.jsp?utm_campaign=bcvs14&utm_source=dailysn&utm_medium=email)  
[http://my.americanheart.org/professional/Sessions/ATVB/ScienceNews/Science-News-BCVS-2014-Wednesday\\_UCM\\_465708\\_Article.jsp?utm\\_campaign=bcvs14&utm\\_source=dailysn&utm\\_medium=email](http://my.americanheart.org/professional/Sessions/ATVB/ScienceNews/Science-News-BCVS-2014-Wednesday_UCM_465708_Article.jsp?utm_campaign=bcvs14&utm_source=dailysn&utm_medium=email)
3. Tang Y, Wang Y, Park KM, Hu Q, Teoh JP, Ranganathan P, Li J, Jayakumar C, Su H, Tang Y, Ramesh G, and **Kim IM**. MicroRNA-150 Protects the Mouse Heart from Ischemic Injury by Repressing Pro-apoptotic Egr2 and P2x7r. Southern Translational Education and Research (STAR) conference. Augusta, GA, September, 2014. **Won the Young Investigator Award.**
4. Broskova Z\*, Park KM, Wang Y and **Kim IM**. MicroRNA-125a/b-5p Protect the Mouse Heart from Ischemic Injury by Regulating Cardiomyocyte Apoptosis. The 32<sup>th</sup> Annual Graduate Research Day, College of Graduate Studies, Augusta University. March, 2016. *\*Won the Best Postdoctoral Oral Presentation Award: Excellence in Postdoctoral Research Award from Research Administration.*
5. Bayoumi AS\*, Teoh JP and **Kim IM**. MicroRNA-532-5p Protects the Mouse Heart against Myocardial Infarction by Regulating Cardiac Endothelial Cell Function. The 32<sup>th</sup> Annual Graduate Research Day, College of Graduate Studies, Augusta University. March, 2016. *\*Won the Best Postdoctoral Oral Presentation Award: Excellence in Postdoctoral Research Award from Research Administration.*
6. Broskova Z\*, Park KM, Wang Y and **Kim IM**. MicroRNA-125b-5p Protects the Mouse Heart from Ischemic Injury by Regulating Pro-apoptotic Bak1 and Klf13 in Cardiomyocytes. American Heart Association Basic Cardiovascular Science Scientific Sessions. July, 2016. *\*Ranked as top 10 abstracts and presented in the section of non-coding and extracellular RNAs as modulators of cardiovascular disease.*
7. Teoh JP\* and **Kim IM**.  $\beta$ -arrestin-biased agonism of  $\beta$ -adrenergic receptor regulates microRNA

maturation to promote protective signaling in cardiac cells. American Heart Association Scientific Sessions. November, 2016. **\*Won the BCVS Abstract Travel Award (among the top 20 percent of the accepted abstracts presented at the conference) and Presented in the section of late-breaking basic science II.**

8. Bayoumi AS and **Kim IM**. MicroRNA-532-5p Protects the Heart in Acute Myocardial Infarction by Repressing a Positive Regulator of Endothelial-to-Mesenchymal Transition, Prss23. The 33<sup>th</sup> Annual Graduate Research Day, College of Graduate Studies, Augusta University. March, 2017.

9. Bayoumi AS and **Kim IM**. Overexpression of microRNA-150 rescues cardiac function in cardiac-specific mice with deficiency of beta-arrestin-mediated beta1-adrenergic receptor signaling. The 34<sup>th</sup> Annual Graduate Research Day, College of Graduate Studies, Augusta University. March, 2018.

10. Aonuma T and **Kim IM**. The role of microRNA-150 in myocardial infarction. JapanXR Science Forum 2020 in Midwest. July, 2020.

11. Aonuma T, Moukette B, Barupala N and **Kim IM**. Cardiac MicroRNA-150 Confers Cardioprotection by Directly Repressing Pro-apoptotic Small Proline-rich Protein 1a, Sprr1a in Cardiomyocytes. American Heart Association Scientific Sessions. November, 2020. Presented in the virtual oral section of New Horizons in Cardioprotection.

12. Kawaguchi S, Moukette B, Sepulveda MN and **Kim IM**. MicroRNA-125a-5p Protects the Heart from Ischemic Injury by Directly Repressing Pro-apoptotic GTP Cyclohydrolase 1 Feedback Regulator (GCHFR) in Cardiomyocytes. Annual Meeting of the Indiana Physiological Society. April, 2022.

13. Kawaguchi S\*, Moukette B, Sepulveda MN and **Kim IM**. Small Proline-rich Repeat Protein 1a Is A Significant Functional Target Of Microrna-150 In Mouse Hearts And Human Cardiac Fibroblasts. American Heart Association Scientific Sessions. November, 2022. **\*Won the BCVS Abstract Travel Award (among the top 20 percent of the accepted abstracts presented at the conference) and Presented in the section of rapid fire oral entitled with wound healing in the infarcted myocardium.**

14. Moukette B\*, Kawaguchi S, Sepulveda MN and **Kim IM**. MicroRNA-150 Overexpression Blunts Maladaptive Cardiac Remodeling In Mice With Cardiomyocyte-specific Loss Of  $\beta$ -arrestin-mediated  $\beta_1$ -adrenergic Receptor Signaling. American Heart Association Scientific Sessions. November, 2022. **\*Won the BCVS Abstract Travel Award (among the top 20 percent of the accepted abstracts presented at the conference) and Presented in the section of rapid fire oral entitled with novel signaling pathways in cardiovascular disease.**

15. Hayasaka T, Sepulveda MN and **Kim IM**. Cardiomyocyte MicroRNA-125a-5p Plays A Vital Protective Role In Myocardial Infarction And Directly Represses Proapoptotic GTP-Cyclohydrolase I Feedback Regulator. The 5th Asian Cardiovascular Conference: A pre-meeting symposium at AHA BCVS-2023. August, 2023.

## Poster Presentations

1. Choi SH, **Kim IM** and Choe MH. The Aerobic Expression and Regulatory Analysis of Gene Expression of *nrdAB* in *Escherichia Coli*. The Fall Meeting of the Korean Society for Molecular Biology, Seoul National University, Seoul, Korea, Oct., 1998

2. Choi SH, **Kim IM** and Choe MH. The Aerobic Expression and Regulatory Analysis of Gene Expression of *nrdAB* in *Escherichia Coli*. The Fall Meeting of the Biochemical Society of the Republic of Korea, Korea Advanced Institute of Science and Technology, Taejeon, Korea, Oct., 1998
3. **Kim IM** and Choe MH. Genes of Heme Related Reduction-Oxidation Reaction for the Growth with Oxygen in *Escherichia Coli*. The Spring Meeting of the Korean Society for Molecular Biology, Seoul Education Hall, Seoul, Korea, May, 1999
4. Choi SH, **Kim IM**, Jung YJ and Choe MH. The Aerobic Expression and Regulatory Analysis of Gene Expression of *nrdAB* in *Escherichia Coli*. The Seoul Meeting of IUBMB(6<sup>th</sup>), Seoul, Korea, Oct., 1999
5. **Kim IM**, Zhou Y, Ramakrishna S, Hughes DE, Solway J, Costa RH and Kalinichenko VV. A Conserved 3' *Foxf1* DNA Regulatory Element Is Essential for the -5.3 Kb *Foxf1* Promoter to Drive Reporter Transgene Expression in the Foregut Mesoderm. The 45<sup>th</sup> Annual Meeting of the Midwest Regional Society for Developmental Biology, University of Chicago, June, 2005
6. **Kim IM**, Ramakrishna S, Malin D and Kalinichenko VV. Disruption of Forkhead Box m1 Gene Causes Severe Myocardial Hypertrophy and Increased Levels of the Cell Cycle Inhibitor p21 during Heart Development. The Fourth Biennial Conference on the Developmental Basis of Evolutionary Change. University of Chicago, October, 2005
7. **Kim IM**, Tilley DG, Chen J, Salazar NC, Whalen EJ, Violin JD, and Rockman HA.  $\beta$ -blockers alprenolol and carvedilol stimulate  $\beta$ -arrestin mediated epidermal growth factor receptor transactivation. American Heart Association Scientific Sessions. Orlando, FL, November, 2007. **Published in *Circulation*. 2007;116:II\_273**
8. **Kim IM**, Casad ME, Wolf MJ, and Rockman HA. Gene Deletion Screen in Adult *Drosophila* Identifies Possible Candidate Gene for Dilated Cardiomyopathy. American Heart Association Scientific Sessions. Orlando, FL, November, 2007. **Selected in late-breaking basic science poster sessions. Published in *Circulation Research*. 2007;101(11):1207-1208.**
9. Casad ME, **Kim IM**, Wolf MJ, and Rockman HA. Deletion Screen in Adult *Drosophila* Identifies Candidate Genes for Dilated Cardiomyopathy. The 49<sup>th</sup> Annual *Drosophila* Research Conference. San Diego, CA, April, 2008
10. Frangakis S, **Kim IM**, and Rockman HA. Identification of Genes Causing Dilated Cardiomyopathy in Adult *Drosophila*. The MSTP Symposium in Duke Medical Scientist Training Program. Durham, NC, April, 2010.
11. Frangakis S, **Kim IM**, Wolf MJ, and Rockman HA. Identification of a Possible Two-Pore Potassium Channel Gene that Causes Dilated Cardiomyopathy in Adult *Drosophila*. Duke Department of Cell Biology Retreat. Asheville, NC, September, 2010.
12. **Kim IM** and Rockman HA. Control of MicroRNA Biogenesis by  $\beta$ -arrestin-Biased Agonism of  $\beta_1$ -Adrenergic Receptor. Keystone Symposia's Meeting on MicroRNAs and Human Disease. Fairmont Banff Spring, Banff, Alberta, Canada, February, 2011.
13. Neal CL, Wang Y, Vinson J, and **Kim IM**. Regulation of Ovarian Tumorigenesis by G protein-Biased Agonism of Endothelin Type A Receptor. 2012 Georgia Life Sciences Summit, Atlanta, GA, October, 2012.

14. Wang Y, Neal CL, Zou W, Mao L, Williams B, and **Kim IM**.  $\beta$ -arrestin1 Stimulates the Processing of a Subset of MicroRNAs. American Heart Association Scientific Sessions. Los Angeles, CA, November, 2012. **Selected in late-breaking basic science poster sessions.**
15. Wang Y, Neal CL, Park K, and **Kim IM**.  $\beta$ -arrestin1-Mediated MicroRNA Regulatory Network: A New Player in Cardiac Protection. Keystone Symposia's Meeting on Noncoding RNAs in Development and Cancer. Fairmont Hotel Vancouver, Vancouver, British Columbia, Canada, January, 2013.
16. **Kim IM**, Wang Y, Park KM, Traynham CJ, Mao L, Koch WJ and Rockman HA.  $\beta$ -arrestin1-Biased  $\beta$ 1-adrenergic Receptor Signaling Regulates MicroRNA Processing. American Heart Association Basic Cardiovascular Sciences Scientific Sessions. Las Vegas, NA, July, 2013.
17. Teoh JP, Wang Y, Tang Y, Park KM and **Kim IM**. Endothelin A Receptor-Mediated Biased Signaling is a New Player in Modulating Ovarian Cancer Progression. American Association for Cancer Research Meeting on "Advance in Ovarian Cancer Research: From Concept to Clinic", Miami, FL, September, 2013.
18. **Kim IM**, Tang Y, Wang Y, Park KM and Teoh JP. Novel Biomarker of Heart failure and  $\beta$ 1-Adrenergic Receptor/ $\beta$ -arrestin1-Regulatable MicroRNA, MiR-150 Acts as a Gatekeeper of Cardiac Function. The 10<sup>th</sup> Annual Cambridge Healthtech Institute's Conference: MicroRNA As Biomarkers and Diagnostics. Boston, MA, March, 2014.
19. Teoh JP, Park KM, Wang Y, and **Kim IM**. Endothelin-1/Endothelin A Receptor-Mediated Biased Signaling is a New Player in Modulating Human Ovarian Cancer Cell Tumorigenesis. The 30<sup>th</sup> Annual Graduate Research Day, College of Graduate Studies, Augusta University, March, 2014.
20. Teoh JP, Park KM, Wang Y, Hu Q, Kim S, Wu G, Huang S, Mahile N and **Kim IM**. Endothelin-1/Endothelin A Receptor-Mediated Biased Signaling is a New Player in Modulating Human Ovarian Cancer Cell Tumorigenesis. The AACR 10<sup>th</sup> Biennial Ovarian Cancer Research Symposium, Seattle, WA, September, 2014.
21. Tang Y, Wang Y, Park KM, Hu Q and **Kim IM**. A  $\beta$ 1-Adrenergic Receptor/ $\beta$ -Arrestin1-Regulatable MicroRNA, MiR-150 Protects the Mouse Heart from Ischemic Injury by Repressing Pro-apoptotic Egr2 and P2x7r. American Heart Association Scientific Sessions. November, 2014.  
**Selected to represent at the Best of AHA Specialty Conference (BCVS 2014) Poster Sessions.**
22. Teoh JP, Hu Q, Park KM and **Kim IM**.  $\beta$ -Arrestin-Biased  $\beta$ -Adrenergic Receptor Signaling by Carvedilol Regulates Long Non-Coding RNA Expression. Keystone Symposia Conference: Long Noncoding RNAs-From Evolution to Function. Keystone, CO, March, 2015.
23. Teoh JP and **Kim IM**.  $\beta$ -Arrestin-Biased Agonism of  $\beta$ -Adrenergic Receptor Regulates Dicer-Mediated MicroRNA Maturation. Keystone Symposia Conference: Noncoding RNAs in Health and Disease. February, 2016.
24. Broskova Z, Park KM, Wang Y and **Kim IM**. MicroRNA-125a-5p and MicroRNA-125b-5p Protect the Mouse Heart from Ischemic Injury by Regulating Cardiomyocyte Apoptosis. Keystone Symposia Conference: Noncoding RNAs in Health and Disease. February, 2016.
25. Bayoumi AS, Teoh JP and **Kim IM**. MicroRNA-532-5p Protects the Mouse Heart against Myocardial Infarction by Regulating Cardiac Endothelial Cell Apoptosis. Keystone Symposia

Conference: Noncoding RNAs in Health and Disease. February, 2016.

26. Teoh JP\* and **Kim IM**.  $\beta$ -Arrestin-Biased Agonism of  $\beta$ -Adrenergic Receptor Regulates Dicer-Mediated MicroRNA Maturation. The 32<sup>th</sup> Annual Graduate Research Day, College of Graduate Studies, Augusta University. March, 2016. *\*Won a Graduate Faculty Assembly Award for Excellence in Research from Graduate School.*

27. **Kim IM**, Teoh JP, Ahmed BS and Broskova Z. Regulation of Dicer-Mediated MicroRNA Maturation by  $\beta$ -Arrestin-Biased Agonism of  $\beta$ -Adrenergic Receptor: A New Cardioprotective Mechanism. Experimental Biology 2016 Conference. April, 2016. **Won the Shih-Chun Wang Young Investigator Award, American Physiological Society.**

28. Broskova Z\*, Park KM, Wang Y and **Kim IM**. MicroRNA-125b-5p Protects the Mouse Heart from Ischemic Injury by Regulating Pro-apoptotic Bak1 and Klf13 in Cardiomyocytes. American Heart Association Basic Cardiovascular Science Scientific Sessions. July, 2016. *\*Won the New Investigator Travel Award (among the top 10 percent of the accepted abstracts presented at the conference).*

29. Bayoumi AS\*, Teoh JP and **Kim IM**. MicroRNA-532-5p protects the mouse heart against myocardial infarction by repressing a positive regulator of endothelial-to-mesenchymal transition, Prss23. American Heart Association Basic Cardiovascular Science Scientific Sessions. July, 2016. *\*Won the New Investigator Travel Award (among the top 10 percent of the accepted abstracts presented at the conference).*

30. Teoh JP and **Kim IM**.  $\beta$ -adrenergic receptor/ $\beta$ -arrestin-mediated microRNA maturation confers cardiac cell survival. American Heart Association Basic Cardiovascular Science Scientific Sessions. July, 2016.

31. Bayoumi AS, Teoh JP and **Kim IM**. MicroRNA-532-5p protects the mouse heart against myocardial infarction by repressing a positive regulator of endothelial-to-mesenchymal transition, Prss23. American Heart Association Scientific Sessions. November, 2016. **Selected to represent at the Best of AHA Specialty Conference (BCVS 2016) Poster Sessions.**

32. Teoh JP and **Kim IM**.  $\beta$ -Arrestin-Biased Agonism of  $\beta$ -Adrenergic Receptor Regulates Dicer-Mediated MicroRNA Maturation to Promote Cardioprotective Signaling. The 33<sup>th</sup> Annual Graduate Research Day, College of Graduate Studies, Augusta University. March, 2017.

33. Bayoumi AS, Teoh JP and **Kim IM**. MicroRNA-532-5p Protects the Heart in Acute Myocardial Infarction by Repressing a Positive Regulator of Endothelial-to-Mesenchymal Transition, Prss23. American Heart Association Basic Cardiovascular Science Scientific Sessions. July, 2017. **Among the top 10 percent of the accepted abstracts presented at the conference.**

34. Teoh JP\* and **Kim IM**.  $\beta$ -Arrestin-Biased Agonism of  $\beta$ -Adrenergic Receptor Regulates Dicer-Mediated MicroRNA Maturation to Promote Cardioprotective Signaling. American Heart Association Basic Cardiovascular Science Scientific Sessions. July, 2017. *\*Won the New Investigator Travel Award (among the top 10 percent of the accepted abstracts presented at the conference).*

35. Bayoumi AS, Teoh JP and **Kim IM**. MicroRNA-532-5p Protects the Heart in Acute Myocardial Infarction by Repressing a Positive Regulator of Endothelial-to-Mesenchymal Transition, Prss23. American Heart Association Scientific Sessions. November, 2017. **Selected to represent at the Best of AHA Specialty Conference (BCVS 2017) Poster Sessions.**

36. Teoh JP and **Kim IM**.  $\beta$ -Arrestin-Biased Agonism of  $\beta$ -Adrenergic Receptor Regulates Dicer-Mediated MicroRNA Maturation to Promote Cardioprotective Signaling. American Heart Association Scientific Sessions. November, 2017. **Selected to represent at the Best of AHA Specialty Conference (BCVS 2017) Poster Sessions.**
37. Aonuma T, Bayoumi AS and **Kim IM**. MicroRNA-125b-5p Protects the Heart from Acute Myocardial Infarction by Repressing Pro-apoptotic Bak1 and Klf13 in Cardiomyocytes. American Heart Association Scientific Sessions. November, 2017. **Selected in Late-Breaking Basic Science Poster Sessions.**
38. Aonuma T and **Kim IM**. Long noncoding RNA MIAT exacerbates maladaptive cardiac remodeling by functioning as a competing endogenous RNA of microRNA-150 during myocardial infarction. The 34<sup>th</sup> Annual Graduate Research Day, College of Graduate Studies, Augusta University. March, 2018.
39. Moukette B, Aonuma T and **Kim IM**. MicroRNA-125a-5p Protects the Mouse Heart from Ischemic Injury by Repressing Pro-apoptotic Bak1 and Klf13 in Cardiomyocytes. Anatomy, Cell Biology & Physiology Fall Research Forum. Indiana University School of Medicine, October, 2019.
40. Aonuma T, Moukette B and **Kim IM**. Long noncoding RNA MIAT exacerbates maladaptive cardiac remodeling by functioning as a competing endogenous RNA of microRNA-150 during myocardial infarction. Anatomy, Cell Biology & Physiology Fall Research Forum. Indiana University School of Medicine, October, 2019.
41. Moukette B, Aonuma T and **Kim IM**. MicroRNA-125a-5p Protects the Mouse Heart from Ischemic Injury by Repressing Pro-apoptotic Bak1 and Klf13 in Cardiomyocytes. American Heart Association Basic Cardiovascular Science Scientific Sessions. July, 2020.
42. Aonuma T, Moukette B and **Kim IM**. Long noncoding RNA myocardial infarction associated transcript, MIAT exacerbates maladaptive cardiac remodeling by functioning as a competing endogenous RNA of microRNA-150 during myocardial infarction. American Heart Association Basic Cardiovascular Science Scientific Sessions. July, 2020.
43. Aonuma T, Moukette B and **Kim IM**. MiR-150 prevents maladaptive cardiac remodeling mediated by long noncoding RNA, MIAT and directly represses pro-fibrotic Hoxa4. NHLBI Long Non-coding RNAs Symposium: From Basic Mechanism to Human Disease, March, 2021.
44. Moukette B, Kawaguchi S, Barupala NP, Sepulveda MN, Aonuma T and **Kim IM**. MicroRNA-125a-5p Protects the Mouse Heart from Ischemic Injury by Repressing Pro-apoptotic Bak1 and Klf13 in Cardiomyocytes. Annual Meeting of the Indiana Physiological Society. April, 2021.
45. Moukette B, Kawaguchi S, Aonuma T, Barupala NP, Sepulveda MN and **Kim IM**. MicroRNA-125a-5p Protects the Mouse Heart from Ischemic Injury by Repressing Pro-apoptotic Bak1 and Klf13 in Cardiomyocytes. Annual Meeting of Indiana University School of Medicine Postdoc Symposium. October, 2021.
46. Devadoss D, Manevski M, Moukette B, Kawaguchi S, Sepulveda MN, Barupala NP, Borchert GM, Rahman I, Unwalla HJ, **Kim IM** and Chand HS. MiR-150-5p Modulates Pulmonary Inflammation and Secretory Mucin Expression Associated with Cigarette Smoke-Induced Chronic Obstructive Pulmonary Disease. Annual Meeting of American Thoracic Society. May, 2022.
47. Hayasaka T, Sepulveda MN and **Kim IM**. Cardiomyocyte MicroRNA-125a-5p Plays A Vital Protective Role In Myocardial Infarction And Directly Represses Proapoptotic GTP-Cyclohydrolase I

Feedback Regulator. American Heart Association Basic Cardiovascular Science Scientific Sessions. August, 2023.

48. Sepulveda MN\*, Hayasaka T and **Kim IM**. Small Proline-rich Protein 1a Is A Key Downstream Effector Of Microrna-150 During Both Maladaptive Cardiac Remodeling In Mice And Human Cardiac Fibroblast Activation. American Heart Association Basic Cardiovascular Science Scientific Sessions. August, 2023.

49. Ma J, Yang Z, Huda N, Jiang Y, Gao H, **Kim IM** and Liangpunsakul S. MiR-150 Deficiency in Macrophages Improves Alcohol Induced Hepatic Steatosis via Transferring Thyroid Hormone Receptor B Enriched EVS Targeting Adipose Tissue-Liver Axis: Thyroid Hormone Receptor B, a Promising Therapeutic Target in ALD. AASLD The Liver Meeting. November, 2023.

### **INVITED SPEAKER:**

1. Molecular Mechanisms of Heart Failure. Vascular Biology Center, Medical College of Georgia, Augusta, GA, December, 2010.

2. Molecular Mechanisms of Heart Failure. Department of Molecular & Cellular Pharmacology, University of Miami, Miami, FL, January, 2011.

3. Molecular Mechanisms of Heart Failure. Department of Pharmacology, University of Minnesota, Minneapolis, MN, February, 2011.

4. Molecular Mechanisms of Heart Failure. Cardiovascular Research Institute, Wayne State University, Detroit, MI, April, 2011.

5. Molecular Mechanisms of Heart Failure. Wonju College of Medicine, Yonsei University, Wonju, Korea, June, 2011.

6. Biased 7TMR signaling from plasma membrane to nucleus: From cardiac disease to cancer. Section of Experimental Medicine, Augusta University, Augusta, GA, May, 2012.

7. Biased GPCR signaling from plasma membrane to nucleus: From cardiac disease to cancer. Department of Cell Biology and Anatomy, Augusta University, Augusta, GA, April, 2013.

8.  $\beta$ -arrestin1-Biased  $\beta$ 1-Adrenergic Receptor Signaling-mediated MicroRNA Regulatory Network: A New Player in Cardiac Protection. Biological Information Research Center (BRIC) Webinar. South Korea, February, 2014.

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