January 3, 2023

CURRICULUM VITAE

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

Department of Anatomy, Cell Biology & Physiology
Wells Center for Pediatric Research
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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 *E. coli* (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 β-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 & Physiology Wells Center for Pediatric Research Krannert Institute of Cardiology 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
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
2014-2018	Member of the Early Career Committee, American Heart Association (AHA), Basic Cardiovascular Sciences (BCVS)
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
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	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
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, TPA Basic Science 3, TPA Cardiac Biology, IPA Basic Science 1, and IPA Cardiac Basic Science
2014-present	Reviewer, Tumor Biology
2014-present	Reviewer, BioMed Research International
2014-present	Reviewer, Journal of Translational Medicine
2014-present	Reviewer, Circulation Research
2014-present	Reviewer, AJP-Heart and Circulatory Physiology
2014-present	Reviewer, International Journal of Molecular Sciences
2014-present	Reviewer, Genes, Chromosomes and Cancer
2014-present	Reviewer, Pathology-Research and Practice
2015-present	Reviewer, Heart and Vessels
2015-present	Reviewer, Translational Research (formerly Journal of Laboratory and Clinical Medicine)
2015-present	Reviewer, Experimental and Therapeutic Medicine
2015-present	Reviewer, Reproductive Sciences
2015-present	Reviewer, European Journal of Clinical Investigation
2015-present	Reviewer, PLoS ONE
2015-present	Reviewer, BMC Genomics
2015-present	Reviewer, Journal of Clinical Investigation
2015-present	Reviewer, Journal of American Heart Association
2016-present	Reviewer, Experimental Biology and Medicine
2016-present	Reviewer, BMC Systems Biology
2016-present	Reviewer, AJP-Cell Physiology
2016-present	Reviewer, BMC Cardiovascular Disorders
2016-present	Reviewer, Cellular Physiology and Biochemistry
2016-present	Reviewer, Biomolecules & Therapeutics

2016-present	Reviewer, JCI Insight
2016-present	Reviewer, Journal of Cardiovascular Pharmacology
2017-present	Reviewer, Molecular Medicine Reports
2017-present	Reviewer, Scientific Reports
2017-present	Reviewer, Human Genetics
2017-present	Reviewer, EBioMedicine
2017-present	Reviewer, Oncotarget
2017-present	Reviewer, Gene Therapy
2017-present	Reviewer, Bioscience Reports
2017-present	Grant Review Committee Co-Chair, American Heart Association (AHA), Cardiac Biology Regulation-BSci 3 or Fellowship Cardiac Biology Regulation-BSci 2
2018-present	Reviewer, Endocrine
2018-present	Reviewer, Expert Opinion on Drug Discovery
2018-present	Reviewer, Food and Function
2018-present	Reviewer, Molecular Diagnosis & Therapy
2018-present	Reviewer, Non-Coding RNA
2018-present	Reviewer, Cellular and Molecular Life Sciences
2018-present	Scholarship Review Committee Member, The Scientific Councils of the American Heart Association/American Stoke Association (AHA/ASA), Student Scholarships in Cardiovascular Disease and Stoke
2018-present	Grant Review Committee Chair, American Heart Association (AHA), Transformational Project Award (TPA) Basic Science 3 or Career Development Award (CDA) Cardiac Basic Science
2018-present	Leader, American Heart Association (AHA), TPA Peer Reviewer Training Orientation
2018-present	Leader, American Heart Association (AHA), CDA Peer Reviewer Training Orientation
2019-present	Reviewer, Life Sciences
2019-present	Reviewer, Circulation Journal
2019-present	Reviewer, Cardiovascular Research
2019-present	Grant Review Committee, Indiana Clinical and Translational Sciences Institute, Core Pilot Grant Program
2020-present	Reviewer, The Annals of Translational Medicine
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	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, Antioxidants (Basel)
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

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 3rd 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 3rd Asian Cardiovascular Symposium: A pre-meeting symposium at AHA BCVS-2021 (Role: Panelist). August, 2021.

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 *Drosophila*
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 β-arrestin-biased agonism of β_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 β-arrestin-biased agonism of β_1-adrenergic receptor

2014-2020 National Institutes of Health, R01 HL124251
(Role : PI and Term : 08/11/2014-07/31/2020)
Title : β-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 : β-adrenergic receptor/β-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

2019-2024 National Institutes of Health, R01 HL146481
(Role : PI and Term: 07/15/2019-06/30/2024)
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 β-arrestin-mediated β_1-adrenergic receptor signaling
(This fellowship was declined because the student left the lab for another PhD training)

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

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 β-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 β-arrestin-biased agonism of β_1-adrenergic receptor and β-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) and 7/28 (neither agree nor disagree) 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

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 “Critical Role of Neddylation in Cardiac Development” Advisor: Huabo Su, Vascular Biology Center, Augusta University
2018-2019	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 & Toxicology, Augusta University
2017-2020	MD/PhD Thesis Committee Najeah Okashah “G protein Bias in G protein coupled receptors” Advisor: Nevin Lambert, Department of Pharmacology & Toxicology, Augusta University
2020-2021	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)
2019-present	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
2021-present	PhD Thesis Committee Areli Jannes Javier

"Cardiomyocyte Remodeling in Duchenne Muscular Dystrophy"
Advisor: Steven S Welc, Musculoskeletal Health Sciences, Indiana University School of Medicine

2022-present 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

Trainees

2012 Joseph Vinson: 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)

2012 Corey Neal: Postdoctoral Fellow, Vascular Biology Center, Augusta University
(The number of publications in Mentor/Sponsor lab: One)
(The next position: Teacher, Community College, Atlanta)

2012-2013 Siva Krothapalli: Chief MD Resident, Internal Medicine, Medical College of Georgia, Augusta University
(The number of publications in Mentor/Sponsor lab: One)
(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: 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: 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: 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: 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: 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: 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: 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: 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: Six)
(The next position: Non-science career)

2013-2017 Jian-peng Teoh: PhD Student, Vascular Biology PhD Program, Augusta University
(American Heart Association Predoctoral Fellowship Awardee in Mentor/Sponsor lab)
(The number of publications in Mentor/Sponsor lab: Fifteen)
(The next position: Postdoctoral Fellow, UC-Davis)

2017-2018 Yanyan Xu: PhD Student, Lab Rotation, Augusta University
(The number of publications in Mentor/Sponsor lab: 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: 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: Eight)
(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: 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: Four) (The next position: Senior Scientist, Pfizer)
2020-present	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: Four)
2023	Angela Haskell: Master Student, Medical Sciences, Indiana University School of Medicine
2023	Jessica Mah: Master Student, Medical Sciences, Indiana University School of Medicine
2020-present	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: Four)
2022-present	Taiki Hayasaka: Postdoctoral Fellow, Department of Anatomy, Cell Biology & Physiology, Indiana University School of Medicine (The number of publications in Mentor/Sponsor lab: One)

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): funded in the top 1.39% as an exceptional project
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: 18POST34030034)
2018-2021	Transformational Project Award, American Heart Association (AHA Reference Number: 18TPA34170104)
2019-2024	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): funded in the top 0.11% as an exceptional project
2021	2020 Acta Pharmacologica Sinica Outstanding Paper Award for "Circular noncoding RNAs as potential therapies and circulating biomarkers for cardiovascular diseases": http://www.chinaphar.com/announcement/view/151
2022-2023	Postdoctoral Fellowship (Role: Sponsor/Mentor), American Heart Association (AHA Reference Number: 931621)
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: 900453): funded in the top 2.43% as an exceptional project

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 β_1-Adrenergic Receptor/β-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-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, Ranganthan 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 32th 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 32th 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**. β-arrestin-biased agonism of β-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 33th 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 34th 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 β-arrestin-mediated β_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.*

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, Taejon, 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^{th}), 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^{th} 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. β-blockers alprenolol and carvedilol stimulate β-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^{th} 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 β-arrestin-Biased Agonism of β_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**. β-arrestin1 Stimulates the Processing of a Subset of MicroRNAs. American Heart Association Scientific Sessions. Los Angles, CA, November, 2012. **Selected in late-breaking basic science poster sessions.**

15. Wang Y, Neal CL, Park K, and **Kim IM**. β-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. β-arrestin1-Biased β1-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 β1-Adrenergic Receptor/β-arrestin1-Regulatable MicroRNA, MiR-150 Acts as a Gatekeeper of Cardiac Function. The 10th 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 30th 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 10th Biennial Ovarian Cancer Research Symposium, Seattle, WA, September, 2014.

21. Tang Y, Wang Y, Park KM, Hu Q and **Kim IM**. A β_1-Adrenergic Receptor/β-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**. β-Arrestin-Biased β-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**. β-Arrestin-Biased Agonism of β-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**. β-Arrestin-Biased Agonism of β-Adrenergic Receptor Regulates Dicer-Mediated MicroRNA Maturation. The 32th 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 β-Arrestin-Biased Agonism of β-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**. β-adrenergic receptor/β-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**. β-Arrestin-Biased Agonism of β-Adrenergic Receptor Regulates Dicer-Mediated MicroRNA Maturation to Promote Cardioprotective Signaling. The 33th 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**. β-Arrestin-Biased Agonism of β-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**. β-Arrestin-Biased Agonism of β-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 34th 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.

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. β-arrestin1-Biased β1-Adrenergic Receptor Signaling-mediated MicroRNA Regulatory Network: A New Player in Cardiac Protection. Biological Information Research Center (BRIC) Webinar. South Korea, February, 2014.

9. β-arrestin1-Biased β1-Adrenergic Receptor Signaling-mediated MicroRNA Regulatory Network: A New Player in Cardiac Protection. The 4th International Conference on Clinical & Experimental Cardiology. San Antonio, April, 2014.

10. β-arrestin signaling and non-coding RNAs in cardioprotection. Vascular Biology Center, Augusta University, Augusta, GA, September, 2014.

11. β-arrestin-mediated adrenergic receptor signaling and non-coding RNAs in heart failure. Cardiovascular Biology, Emory University, Atlanta, GA, January, 2016.

12. β-arrestin-mediated adrenergic receptor signaling and non-coding RNAs in heart failure. Molecular Cardiology, Cleveland Clinic, Cleveland, OH, April, 2016.

13. β-arrestin-mediated β-adrenergic receptor signaling and microRNA biogenesis in heart failure. Session of "Non-coding and Extracellular RNAs as Modulators of Cardiovascular Disease" at the American Heart Association Basic Cardiovascular Science Scientific Sessions. July, 2016.

14. β-arrestin-biased β-adrenergic receptor signaling and microRNA biogenesis in heart failure. Session of "Cardiac Biology" on the Bio, Medical, Pharmacology Symposium at the US-Korea Conference on Science, Technology, and Entrepreneurship. August, 2016.

15. β-arrestin-mediated adrenergic receptor signaling and non-coding RNAs in heart failure. The Heart and Cardiovascular Health Grand Rounds, Cardiology Division, Augusta University, September, 2016.

16. β-arrestin-mediated adrenergic receptor signaling and non-coding RNAs in heart failure. Krannert Institute of Cardiology, Indiana University School of Medicine, December, 2016.

17. β-arrestin-mediated adrenergic receptor signaling and non-coding RNAs in heart failure.

Department of Cell Biology and Molecular Medicine, New Jersey Medical School, Rutgers-The State University of New Jersey, January, 2017.

18. β-arrestin-mediated adrenergic receptor signaling and non-coding RNAs in heart failure. Department of Pharmacology and Experimental Therapeutics, Louisiana State University Health Sciences Center, January, 2017.

19. β-arrestin-mediated adrenergic receptor signaling and non-coding RNAs in heart failure. Department of Physiology and Biophysics, Case Western University, March, 2017.

20. β-arrestin-mediated adrenergic receptor signaling and non-coding RNAs in heart failure. Department of Cell Biology and Anatomy. Augusta University, March, 2017.

21. β-arrestin-mediated adrenergic receptor signaling and non-coding RNAs in heart failure. Department of Physiology and Biophysics, University of Illinois at Chicago, March, 2017.

22. β-arrestin-mediated adrenergic receptor signaling and non-coding RNAs in heart failure. Division of Cardiovascular Medicine, University of Louisville, October, 2017.

23. β-arrestin-mediated adrenergic receptor signaling and non-coding RNAs in heart failure. Department of Neuroscience, Cell Biology, and Physiology. Wright State University, May, 2018.

24. β-arrestin-mediated adrenergic receptor signaling and non-coding RNAs in heart failure. Department of Cellular and Integrative Physiology. Indiana University School of Medicine, July, 2018.

25. β-arrestin-mediated β-adrenergic receptor signaling and microRNA biogenesis in heart failure. The 1st Asian Cardiovascular Symposium: A pre-meeting symposium at AHA BCVS-2019. July, 2019.

26. β-arrestin-mediated β-adrenergic receptor signaling and microRNA biogenesis in heart failure. Anatomy, Cell Biology & Physiology Fall Research Forum. Indiana University School of Medicine, October, 2019.

27. β-arrestin-mediated β-adrenergic receptor signaling and microRNA biogenesis in heart failure. The Session 4 entitled “Scriptors: RNA localization, efflux and metabolism in heart development and disease”, The 3rd International Symposium on Innovations in Cardiovascular Sciences and Therapeutics, Global Talents in Science, October, 2021.

28. β-arrestin-mediated adrenergic receptor signaling and noncoding RNAs in heart failure. Department of Pharmacology, Addiction Science and Toxicology. The University of Tennessee Health Science Center, November, 2021.

PEER-REVIEWED PUBLICATIONS:

1. **Kim IM,** Lee YC, Won JS, and Choe MH (2003). Identification of Genes for Growth with Oxygen in *Escherichia coli* by Operon Fusion and Southern Blot Techniques. **J Microbiol Biotechnol.** 13(6), 976-983.

2. Kalinichenko VV, Gusarova GA, **Kim IM**, Shin B, Yoder HM, Clark J, Sapozhnikov AM, Whitsett JA,

and Costa RH (2004). *Foxf1* Haploinsufficiency Reduces Notch-2 Signaling during Mouse Lung Development. **Am J Physiol Lung Cell Mol Physiol.** 286**:** L521-530.

3. **Kim IM**, Ramakrishna S, Gusarova GA, Yoder HM, Costa RH and Kalinichenko VV (2005). The Forkhead Box m1 Transcription Factor is Essential for Embryonic Development of Pulmonary Vasculature. **J Biol Chem.** 280, 22278-22286.

4. **Kim IM**, Zhou Y, Ramakrishna S, Hughes DE, Solway J, Costa RH and Kalinichenko VV (2005). Functional Characterization of Evolutionary Conserved DNA Regions in Forkhead Box f1 Gene Locus. **J Biol Chem.** 280**,** 37908-37916.

5. Yoshida Y, Rausa FM, Hughed DE, **Kim IM,** Tan Y, Darlington GJ and Costa RH (2006). C/EBPα and HNF6 Protein Complex Formation Stimulates HNF6-Dependent Transcription by CBP Coactivator Recruitment. **Hepatology.** 43**,** 276-286.

6. **Kim IM**, Ackerson T, Ramakrishna S, Tretiakova M, Wang IC, Kalin TV, Michael LM, Gusarova GA, Yoder HM, Costa RH and Kalinichenko VV (2006). The Forkhead Box m1 Transcription Factor is Essential for Proliferation of Tumor Cells During Development of Lung Cancer. **Cancer Res.** 66, 2153-2161.
Featured as "Cancer Research Highlights: Selected Articles from the Issue".

7. Malin D, **Kim IM**, Boetticher E, Kalin TV, Ramakrishna S, Meliton L, Ustiyan V, Zhu X, Kalinichenko VV (2007). Forkhead box F1 is essential for migration of mesenchymal cells and directly induces integrin-beta3 expression. **Mol Cell Biol.** 27(7):2486-98.

8. **Ramakrishna S*, Kim IM***, Petrovic V, Malin D, Wang IC, Kalin TV, Meliton L, Zhao YY, Ackerson T, Qin Y, Malik AB, Costa RH and Kalinichenko VV (2007). Myocardium defects and ventricular hypoplasia in mice homozygous null for the Forkhead Box M1 transcription factor. **Dev Dyn.** 236(4):1000-13.
***Ramakrishna S and Kim IM contributed equally to this work.**

9. **Kim IM**, Tilley DG, Chen J, Salazar NC, Whalen EJ, Violin JD, Rockman HA. (2008). Beta-blockers alprenolol and carvedilol stimulate beta-arrestin-mediated EGFR transactivation. **Proc Natl Acad Sci U S A**. 105(38):14555-60.
Selected as "EDITORS' CHOICE in *Science Signaling.* 1, ec336 (2008)."
Featured in the selected news:
TechJournal South (http://www.techjournalsouth.com/news/article.html?item id=6094&printable=).
HDCN News Archive: Hypertension, CV Disease Channel, S15 (http://www.hdcn.com/ch/highbp/narchbp.htm).
EurekAlert (http://www.eurekalert.org/pub_releases/2008-09/dumc-tbb091508.php).

10. Tilley DG, **Kim IM**, Patel PA, Violin JD, Rockman HA. (2009) Beta-arrestin mediates beta1-adrenergic receptor-epidermal growth factor receptor interaction and downstream signaling. **J Biol Chem**. 284(30):20375-86.

11. **Kim IM**, Wolf MJ. (2009) Serial examination of an inducible and reversible dilated cardiomyopathy in individual adult *Drosophila.* **PLoS ONE.** 4(9):e7132.
Featured in the selected news:
OCT news (http://www.octnews.org/articles/1530286/serial-examination-of-an-inducible-and-reversible-/)

12. **Kim IM**, Wolf MJ, Rockman HA. (2010) Gene deletion screen for cardiomyopathy in adult

Drosophila Identifies a new Notch ligand. **Circ Res.** 106:1233-1243.
Selected as "Editors' Picks" and "Featured Articles" from the Issue.
Commented in the Issue: Morrisey EE. (2010) *Weary* of the Stress: Time to Put Another Notch In Cardiomyopathy. Circ Res.106:1187-1189.
Featured in the Selected News:
BRIC news letter (http://bric.postech.kr/myboard/print.php?Board=hbs_treatise&id=16647&idauthorid=9306&ttype=0)
Highlighted by the Circ Res Editors: (2012) Circulation Research Thematic Synopsis: Cardiovascular Genetics. Circ Res. 111: e32-e47.

13. Rakesh K, Yoo B, **Kim IM**, Salazar NC, Kim KS, Rockman HA. (2010) β-Arrestin-Biased Agonism of the Angiotensin Receptor Induced by Mechanical Stress. **Sci Signal.** 3(125): ra46.
Featured as Online Cover of the issue.
Highlighted as Science Signaling Podcast. 8 June 2010: pc12.
Selected as "EDITORS' CHOICE in *Science.* 25 June 2010: 1613."
Featured in the Selected News:
Faculty of 1000 Biology Evaluation
(http://f1000biology.com/article/id/4390986/evaluation)

14. Casad ME, Abraham D, **Kim IM**, Frangakis S, Dong B, Lin N, Wolf MJ, Rockman HA. (2011) Cardiomyopathy is associated with ribosomal protein gene haploinsufficiency in *Drosophila melanogaster.* **Genetics.** 189(3): 861-70.

15. Neal CL, Teoh JP, Tang Y, Wang Y, Park KM, **Kim IM*** (2013) MicroRNAs as diagnostic, prognostic and predictive biomarkers of ovarian cancer. **Recent Pat Biomark.** 3(2): 120-136.
*** Corresponding author.**
Selected as "Most Accessed Articles" from the Journal.

16. Wang Y, Teoh JP, Park KM, Tang Y, Krothapalli S, Su H, **Kim IM*** (2013) MicroRNAs as diagnostic, prognostic and predictive biomarkers of cardiac disease. **Recent Pat Biomark.** 3(2): 81-97.
*** Corresponding author.**
Selected as "Most Accessed Articles" and "Most Cited Articles" from the Journal.

17. Tang Y, Poteh A, Chiang A, **Kim IM*** (2013) MicroRNA therapeutics in cardiac disease. **Cardiol Pharmacol.** 2(3): e113. *** Corresponding author.**
Selected as "Most Viewed Articles" from the Journal.

18. Ranganathan P, Jayakumar C, Navankasattusas S, Li DY, **Kim IM**, Ramesh G (2014). UNC5B receptor activation determines cell survival and tissue injury in response to ischemic and drug induced organ injury. **J Am Soc Nephrol.** 25 (2): 239-49.

19. **Kim IM***, Wang Y, Park KM, Tang Y, Teoh JP, Vinson J, Traynham C, Mao L, Su H, Johnson JA, Koch WJ, Rockman HA (2014) β-arrestin1-biased β1-adrenergic receptor signaling regulates microRNA processing. **Circ Res.** 114 (5): 833-844. ***Corresponding author.**
Selected as "Editors' Picks" and "Featured Articles" from the Issue:
Williams R. (2014) In this Issue. Circ Res.114 (5): 739.
Commented in the Issue: Kamal FA, Travers JG, Blaxall BC. (2014) Embracing bias: β1-adrenergic receptor-biased ligands and nuclear miRNA processing. Circ Res.114 (5): 742-745.
Selected as "Most Read Articles" from the Journal.
Featured in the Selected News:
BRIC news letter (http://bric.postech.ac.kr/myboard/read.php?id=38259&Page=1&Board=hbs_treatise&skin=hbs_treatis

e&idauthorid=9306&ttype=0)

20. Wang Y, Kim S, **Kim IM*** (2014). Regulation of metastasis by microRNAs in ovarian caner. **Front Oncol.** 4: 143. ***Corresponding author.**

21. Teoh JP, Park KM, Wang Y, Hu Q, Kim S, Wu G, Huang S, Maihle N, **Kim IM*** (2014). Endothelin-1/Endothelin A receptor-mediated biased signaling is a new player in modulating human ovarian cancer cell tumorigenesis. **Cell Signal.** 26(12): 2885-2895. ***Corresponding author.**

22. Chen L, Phillips MI, Miao HL, Zeng R, Qin G, **Kim IM**, Weintraub NL, Tang Y (2014). Infrared fluorescent protein 1.4 genetic labeling tracks engrafted cardiac progenitor cells in mouse ischemic heart. **PLoS One.** 9(10): e107841.

23. Kandala S, **Kim IM**, Su H (2014). Neddylation and deneddylation in cardiac biology. **Am J Cardiovasc Dis.** 4(4): 140-158.

24. Tang Y, Wang Y, Park KM, Hu Q, Teoh JP, Broskova Z, Ranganthan P, Li J, Jayakumar C, Su H, Tang Y, Ramesh G, **Kim IM*** (2015). MicroRNA-150 Protects the Mouse Heart from Ischemic Injury by Regulating Cell Death. **Cardiovasc Res.** 106(3): 387-397. ***Corresponding author.**
Selected as "Most Read Articles" from the Journal.
Highlighted in AHA Science News Video for BCVS2014.

25. Wang Y, Zhang L, Li Y, Chen L, Wang X, Guo W, Zhang X, Qin G, He SH, Zimmerman A, Liu Y, **Kim IM**, Weintraub N, Tang Y (2015). Exosomes/microvesicles from induced pluripotent stem cells deliver cardioprotective miRNAs and prevent cardiomyocyte apoptosis in the ischemic myocardium. **Int J Cardiol.** 192: 61-69.

26. Ranganathan P, Jayakumar C, Tang Y, Park KM, Teoh JP, Su H, Li J, **Kim IM**, Ramesh G (2015). MicroRNA-150 deletion in mice protects kidney from myocardial infarction-induced acute kidney injury. **Am J Physiol-Renal Physiol.** 309(6): F551-8.

27. Teoh JP, Park KM, Broskova Z, Jimenez FR, Bayoumi A, Archer K, Su H, Johnson J, Weintraub N, Tang Y, **Kim IM*** (2015). Identification of Gene Signature Regulated by Carvedilol in Mouse Hearts. **Physiol Genomics.** 47(9): 376-85. ***Corresponding author.**

28. Li J, Ma X, Li H, Hou N, Wang X, **Kim IM**, Li F, Su H (2015). NEDD8 ultimate buster-1 long (NUB1L) protein suppresses atypical neddylation and promotes proteasomal degradation of misfolded proteins. **J. Biol Chem.** 290(39): 23850-62.

29. Archer K, Broskova Z, Bayoumi AS, Teoh JP, Davila A, Tang Y, Su H, **Kim IM*** (2015). Long noncoding RNAs as master regulators of cardiac disease. **Int J Mol Sci.** 16(10): 23651-23667.
*** Corresponding author.**

30. Bayoumi AS, Sayer A, Broskova Z, Teoh JP, Wilson J, Su H, Tang Y, **Kim IM*** (2016). Crosstalk between long noncoding RNAs and microRNAs in health and disease. **Int J Mol Sci.** 17(3): E356.
*** Corresponding author.**

31. Park KM, Teoh JP, Wang Y, Broskova Z, Bayoumi AS, Tang Y, Su H, Weintraub, NL **Kim IM*** (2016). Carvedilol-responsive microRNAs, miR-199a-3p and -214 protect cardiomyocytes from simulated ischemia-reperfusion injury. **Am J Physiol Heart Circ Physiol.** 311(2): H371-83.
***Corresponding author.**

32. Li J, Ma W, Yue G, Tang Y, **Kim IM**, Weintraub NL, Wang XY, Su H (2016). Cardiac proteasome functional insufficiency plays a pathogenic role in diabetic cardiomyopathy. **J Mol Cell Cardiol**. 102: 53-60.

33. Bologna Z, Teoh JP, Bayoumi A, Tang Y, **Kim IM*** (2017). Biased GPCR signaling: New player in modulating physiology and pathology. **Biomol Ther (Seoul).** 25(1): 12-25. ***Corresponding author.**

34. Omar A, Zhou M, Berman A, Sorrentino RA, Yar N, Weintraub NL, **Kim IM**, Lei W, Tang Y (2016). Genomic-based Diagnosis of Arrhythmia Disease in a Personalized Medicine Era. **Expert Rev Precis Med Drug Dev**. 1(6): 497-504.

35. Chen Z, Li Y, Yu H, Shen Y, Ju C, Ma G, Liu Y, **Kim IM**, Weintraub NL, Tang Y (2017). Isolation of Extracellular Vesicles from Stem Cells. **Methods Mol Biol.** 1660: 389-394.

36. Bayoumi AS, Teoh JP, Aonuma T, Yuan Z, Ruan X, Tang Y, Su H, Weintraub NL, **Kim IM*** (2017). MicroRNA-532 protects the heart in acute myocardial infarction, and represses prss23, a positive regulator of endothelial-to-mesenchymal transition. **Cardiovasc Res**. 113(13): 1603-1614. ***Corresponding author.**

37. Hagan M, Zhou M, Ashraf M, **Kim IM**, Su H, Weintraub NL, Tang Y (2017). Long noncoding RNAs and their roles in skeletal muscle fate determination. **Non-coding RNA Investig**. Dec; 1. 24.

38. Bayoumi AS, Park KM, Wang Y, Teoh JP, Aonuma T, Tang Y, Su H, Weintraub NL, **Kim IM*** (2018). A carvedilol-responsive microRNA, miR-125b-5p protects the heart from acute myocardial infarction by repressing pro-apoptotic bak1 and klf13 in cardiomyocytes. **J Mol Cell Cardiol**. 114: 72-82. ***Corresponding author.**
Commented in the Editorial: Varga ZV, Agg B, Ferdinandy P (2018). MiR-125b is a protectomiR: A rising star for acute cardioprotection. **J Mol Cell Cardiol.** 115: 51-53.

39. Hagen M, Ashraf M, **Kim IM**, Weintraub NL, Tang Y (2018). Effective regeneration of dystrophic muscle using autologous iPSC-derived progenitors with CRISPR-Cas9 mediated precise correction. **Med Hypotheses**. 110: 97-100.

40. Ruan X, Ju CW, Shen Y, Liu YT, **Kim IM**, Yu H, Weintraub NL, Wang XL, Tang Y (2018). Suxiao jiuxin Pill promotes exosome secretion from mouse cardiac mesenchymal stem cells *in vitro*. **Acta Pharmacol Sin**. 39(4): 569-578.

41. Ruan X, Li YU, Ju CW, Shen Y, Lei W, Chen C, Li Y, Yu H, Liu YT, **Kim IM**, Wang XL, Weintraub NL, Tang Y (2018). Exosomes from Suxiao jiuxin Pill-treated cardiac mesenchymal stem cells decrease H3k27 demethylase UTX expression in mouse cardiomyocytes *in vitro*. **Acta Pharmacol Sin**. 39(4): 579-586.

42. Zou J, Ma W, Li J, Littlejohn R, Zhou H, **Kim IM**, Fulton DJ, Chen W, Weintraub NL, Zhou J, Su H (2018). Neddylation mediates ventricular chamber maturation through repression of Hippo signaling. **Proc Natl Acad Sci U S A.** 115(17): E4101-E4110.

43. Teoh JP, Bayoumi AS, Aonuma T, Xu Y, Johnson JA, Su H, Weintraub NL, Tang Y, **Kim IM*** (2018). β-arrestin-biased agonism of β-adrenergic receptor regulates Dicer-mediated microRNA maturation to promote cardioprotective signaling. **J Mol Cell Cardiol**. 118: 225-236. ***Corresponding Author.**

44. Bayoumi AS, Aonuma T, Teoh JP, Tang Y, **Kim IM*** (2018). Circular noncoding RNAs as potential

therapies and circulating biomarkers for cardiovascular diseases. **Acta Pharmacol Sin**. 39(7): 1100-1109. ***Corresponding Author.**
Selected as "2020 Outstanding Paper Award" from the Journal: http://www.chinaphar.com/announcement/view/151

45. Aonuma T, Bayoumi AS, Tang Y, **Kim IM*** (2018). A circular RNA regulator quaking: A novel gold mine to be unfolded in doxorubicin-mediated cardiotoxicity. **Non-coding RNA Investig**. Apr;2. pii: 19. ***Corresponding Author.**

46. Wang Z, Su X, Ashraf M, **Kim IM**, Weintraub NL, Jiang M, Tang Y (2018). Regenerative therapy for cardiomyopathies. **J Cardiovasc Transl Res**. 11(5): 357-365.

47. Su X, Jin Y, Shen Y, Ju C, Cai J, Liu Y, **Kim IM**, Wang Y, Yu H, Weintraub NL, Jiang M, Tang Y (2018). Exosome-derived dystrophin from allograft myogenic progenitors improves cardiac function in Duchenne muscular dystrophic mice. **J Cardiovasc Transl Res**. 11(5): 412-419.

48. Ju C, Shen Y, Ma G, Liu Y, Cai J, **Kim IM**, Weintraub NL, Liu N, Tang Y (2018). Transplantation of cardiac mesenchymal stem cell-derived exosomes promotes repair in ischemic myocardium. **J Cardiovasc Transl Res.** 11(5): 420-428.

49. Zou J, Ma W, Littlejohn R, Li J, Stansfield BK, **Kim IM**, Liu J, Zhou J, Weintraub NL, Su H (2019). Transient inhibition of neddylation at neonatal stage evokes reversible cardiomyopathy and predisposes the heart to isoproterenol-induced heart failure. **Am J Physiol Heart Circ Physiol.** 316(6): H1406-H1416.

50. Chen Z, Su X, Shen Y, Jin Y, Luo T, **Kim IM**, Weintraub NL, Tang Y (2019). MiR322 mediates cardioprotection against ischemia/reperfusion injury via FBXW7/Notch pathway. **J Mol Cell Cardiol**. 133: 67-74.

51. Su X, Jin Y, Shen Y, **Kim IM**, Weintraub NL, Tang Y (2019). RNAase III-type enzyme dicer regulates mitochondrial fatty acid oxidative metabolism in cardiac mesenchymal stem cells. **Int J Mol Sci.** 20(22): E5554.

52. Zhang H, Shen Y, **Kim IM**, Weintraub NL, Tang Y (2021). The impaired bioenergetics of diabetic cardiac microvascular endothelial cells. **Front Endocrinol (Lausanne).** 12: 642857.

53. Liu J, Liu S, Han L, Sheng Y, Zhang Y, **Kim IM**, Wan J, Yang L (2021). LncRNA HBL1 is required for genome-wide PRC2 occupancy and function in cardiogenesis from human pluripotent stem cells. **Development.** 148(13): dev199628.

54. Moukette B, Barupala N, Aonuma T, Sepulveda M, Kawaguchi S, **Kim IM*** (2021). Interactions between noncoding RNAs as epigenetic regulatory mechanisms in cardiovascular diseases. **Methods Cell Biol.** 166: 309-348. ***Corresponding Author.**

55. Su X, Shen Y, Jin Y, **Kim IM**, Weintraub NL, Tang Y (2021). Aging-associated differences in epitranscriptomic m6A regulation in response to acute cardiac ischemia/reperfusion injury in female mice. **Front Pharmacol.** 12: 654316.

56. Aonuma T, Moukette B, Kawaguchi S, Barupala NP, Sepulveda MN, Corr C, Tang Y, Liangpunsakul S, Payne RM, Willis MS, **Kim IM*** (2021). Cardiomyocyte microRNA-150 confers cardiac protection and directly represses proapoptotic small proline-rich protein 1A. **JCI Insight.** 6(18): 150405. ***Corresponding Author.**

Selected as an "Editor's Pick" and Highlighted in the October issue of JCI This Month.

57. Aonuma T, Moukette B, Kawaguchi S, Barupala N, Sepulveda M, Frick K, Tang Y, Guglin M, Raman S, Cai C, Liangpunsakul S, Nakagawa S, **Kim IM*** (2022). MiR-150 attenuates maladaptive cardiac remodeling mediated by long noncoding RNA MIAT and directly represses pro-fibrotic Hoxa4. **Circ Heart Fail**. 15(4): e008686. ***Corresponding Author.**

58. Moukette B, Kawaguchi S, Sepulveda MN, Hayasaka T, Aonuma T, Liangpunsakul S, Yang L, Dharmakumar R, Conway SJ, **Kim IM*** (2022). MiR-150 blunts cardiac dysfunction in mice with cardiomyocyte loss of β_1-adrenergic receptor/β-arrestin signaling and controls a unique transcriptome. **Cell Death Discov.** 8(1): 504. ***Corresponding Author.**

59. Jin Y, Shen Y, **Kim IM**, Weintraub NL, Hamrick M, Tang Y (2023). Restoration of dystrophin expression in Mdx-derived muscle progenitor cells using CRISPR/Cas9 system and homology-directed repair technology. **Methods Mol Biol**. 2587: 455-464.

Complete List of Published Work in My Bibliography (45 papers with 21 papers as corresponding author since 2013)**:**
http://www.ncbi.nlm.nih.gov/sites/myncbi/il-man.kim.1/bibliography/43848679/public/?sort=date&direction= ascending.

Publications, Citations and h-Index from Scopus and ResearchGate
https://www.scopus.com/authid/detail.uri?authorId=55477681100
https://www.researchgate.net/profile/Il-Man-Kim/research