Revised March 27th, 2018

CURRICULUM VITAE

JIN. O-UCHI, MD, PhD

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EDUCATION

Medical school

The Jikei University School of Medicine Tokyo, Japan	April 1995-March 2001	MD, 2001, Medicine

Graduate School

The Jikei University School of Medicine Tokyo, Japan	April 2003-August 2006	PhD, 2006, Medicine

POSTGRADUATE TRAINING

Residency		**MONTH/YEAR**
Residency, Internal Medicine	The Jikei University Hospital Tokyo, Japan	April 2001 - March 2003

Fellowship

Laboratory of Dr. Satoshi Kurihara,	The Jikei University School of Medicine Tokyo, Japan	September 2006 –August 2008
Laboratory of Drs. Arthur J Moss and Coeli MB Lopes,	University of Rochester School of Medicine and Dentistry, Rochester NY	September 2008 –June 2011

POSTGRADUATE HONORS AND AWARDS

Name of Award	*Institution Presenting Award*	*Year Received*
Best Oral Presentation Award	International Society for Heart Research (ISHR) Japanese Section	2005
Travel Grant Award	The Naito Foundation	2005
Young Investigator's Travel Grant Award	Jikei Alumni Association	2005
Graduate Student's Research Award	Jikei University School of Medicine	2005
Young Investigator Award	International Academy of Cardiovascular Sciences (IACS) Japan Section	2006
Young Investigator's Research Award	Japan Heart Foundation	2006
Fellowship Award	Japan Foundation of Cardiovascular Research	2006
Travel Grant Award	Inoue Foundation for Science	2006
Travel Grant Award	Kato Memorial Bioscience Foundation	2006
Graduate Student Best Paper Award	Jikei University	2007
Research Grant Award	Jikei University	2007
Medical Science Research Award	Kato Memorial Bioscience Foundation	2007
Grant-in-Aid for Young Scientists	Ministry of Education, Culture, Sports, Science and Technology, Japan	2008
Foreign study grants	Kanae Foundation for the Promotion of Medical Science	2008
Postdoctoral Fellowship Award	American Heart Association (AHA)	2009
Promotion Award	the Physiological Society of Japan (PSJ)	2009
1st prize, Richard J. Bing Award	International Society for Heart Research (ISHR) for Young Investigators	2010
Hiroshi and Aya Irisawa Memorial Promotion Award for Young Scientists	the Physiological Society of Japan (PSJ)	2011
Finalist, Outstanding Early Career Investigator Award	AHA, Basic Cardiovascular Sciences (BCVS)	2012
Early Career Investigator Travel Awards	International Society for Heart Research (ISHR) World Congress 2013	2013
Research Career Enhancement Award	American Physiological Society (APS)	2013
Beginning Grant-in-Aid	AHA, Great River Affiliate	2014
Finalist, New investigator Award	American Physiological Society (APS) Cell and Molecular Physiology Section	2014
Medical Research Grant	W.W. Smith Charitable Trust	2015
1st Prize, New investigator Award	American Physiological Society (APS) Cell and Molecular Physiology Section	2015
Scientist Development Grant	American Heart Association (AHA)	2016
Finalist, Gary Lopaschuk Young Faculty Award	IACS North American Section	2016
COBRE Center for Cancer Research Development, Pilot Project	NIH/ NIGMS	2016
Shih-Chun Wang Young Investigator Award	American Physiological Society (APS)	2017
Medical Research Grant Award	Rhode Island Foundation	2017
Oral Abstract Award Central	Society for Clinical and Translational Research	2017
NIH Research Project Grant Award (R01)	NIH/NHLBI	2017
COBRE Center for Perinatal Biology, Pilot Project	NIH/NIGMS	2017

MILITARY SERVICE:

None

PROFESSIONAL LICENSES AND BOARD CERTIFICATION

Licensure

Kanagawa Prefecture, Japan	64248	2001-present

Board Certification

National Medical Board in Japan	416385	2001-present

ACADEMIC APPOINTMENTS

Position Held	*Institution*	*Date*
Instructor (Research)	Thomas Jefferson University, Philadelphia PA	2011-2014
Assistant Professor (Research)	Thomas Jefferson University, Philadelphia PA	2014-2015
Assistant Professor of Medicine	Brown Medical School, Providence, RI	2016-present

HOSPITAL APPOINTMENTS

Position Held	*Institution*	*Date*
Physician (Internal Medicine)	Nakano-Ekoda Hospital, Tokyo, Japan	2002-2008
Physician (Internal Medicine)	Honda Hospital, Tokyo, Japan	2003-2008
Physician (Internal Medicine)	Akabane-dai Clinic, Tokyo, Japan	2003-2008
Research Scientist	Rhode Island Hospital, Providence, RI	2016-present

OTHER APPOINTMENTS

Role	*Journal*	*Date*
Ad hoc reviewer	*Hypertension Research*	2010-present
Editorial Board Member	*Frontiers in Physiology*	2012-present
Ad hoc reviewer	*American Journal of Physiology, Heart and Circulatory Physiology*	2013-present
Ad hoc reviewer	*Pflügers Archiv - European Journal of Physiology*	2013-present
Editorial Board Member	*World Journal of Cardiology*	2013-present
Ad hoc reviewer	*Respiratory Research*	2013-present
Ad hoc reviewer	*World Journal of Stem Cells*	2014
Ad hoc reviewer	*Clinical Medicine Insights*: Cardiology	2014
Ad hoc reviewer	*International Journal of Molecular Sciences*	2014
Ad hoc reviewer	*Journal of Psychological Abnormalities in Children*	2014
Ad hoc reviewer	*Drug Design, Development and Therapy*	2014
Editorial Board member	*Frontiers in Cell and Developmental Biology*	2014-present
Ad hoc reviewer	*World Journal of Gastroenterology*	2014
Editorial Board Member	*Journal of Biochemistry and Molecular Biology Research*	2014-present

Editorial Board Member	*Frontiers in Cardiovascular Medicine*	2015-present
Editorial Board Member	*Frontiers in Genetics*	2015-present
Ad hoc reviewer	*Cellular Physiology and Biochemistry*	2015-present
Ad hoc reviewer	*Journal of Vascular Medicine & Surgery*	2015
Ad hoc reviewer	*Antioxidants & Redox Signaling*	2015-present
Ad hoc reviewer	*Biochimica et Biophysica Acta (BBA) – Bioenergetics*	2015-present
Ad hoc reviewer	*Mini Reviews in Medicinal Chemistry*	2015
Ad hoc reviewer	*Apoptosis*	2015-present
Ad hoc reviewer	*Journal of Bioenergetics and Biomembranes*	2015-present
Ad hoc reviewer	*Frontiers in Pharmacology*	2016-present
Ad hoc reviewer	*JSM Biochemistry and Molecular Biology*	2017-present
Guest Associate Editor	*Frontiers in Cardiovascular Medicine*	2017-present
Ad hoc reviewer	*Oncology Letters*	2018-present
Editorial Board Member	*JSM Biochemistry and Molecular Biology*	2018-present
Ad hoc reviewer	*Experimental and Therapeutic Medicine*	2018-present
Guest Associate Editor	*Frontiers in Physiology*	2018-present

HOSPITAL COMMITTEES

None

UNIVERSITY COMMITTEES

Role	***Date***
Member, Search Committee for Investigator at the rank of Assistant/ Associate Professor in the Department of Medicine, Division of Cardiology, Rhode Island Hospital, Brown University	2017-2018

MEMBERSHIP IN SOCIETIES

Role	***Society***	***Date***
Member	Japanese Society of Internal Medicine	2001-present
Member	Japanese Circulation Society	2002-present
Member	Japanese Physiological Society (JPS)	2003-present
Member	International Society for Heart Research (ISHR)	2005-present
Member	Biophysical Society (BPS)	2005-present
Member	International Academy of Cardiovascular Sciences	2005-present
Member	Cardiac Muscle Society	2006-present
Trustee (elected)	Japanese Physiological Society (JPS)	2006-present
Member	Japanese Heart Failure Society	2007-present
Member	Biophysical Society of Japan	2007-present
Member	American Heart Association (AHA)	2007-present
Member	Society of General Physiologist (SGP)	2011-present
Member	American Physiological Society (APS)	2013-present
Member	Society of Cardiovascular Anesthesiologists (SCA)	2014-present

GRANTS

CURRENT SUPPORTS

1. R01HL136757 (O-Uchi,PI) 6/15/17-5/31/22

NIH/NHLBI Total direct cost: $1250,000

Title: "Regulation of mitochondrial calcium uniporter in the heart"

This project is to elucidate the role of a newly identified short transcript variant of the mitochondrial Ca2+ uniporter (MCU-S) in the regulation of cellular metabolism, mitochondrial Ca^{2+} handling, ROS production and apoptotic death in cardiomyocytes and cardiac fibroblasts. No scientific overlap with proposed project.

Role: PI

2. 16SDG27260248 (O-Uchi, PI) 01/01/16-12/31/19

American Heart Association (AHA) Total direct cost: $280,000

Title: "Role of mitochondrial RyR1 in cardiac arrhythmia and sudden cardiac death"

This project will investigate the detailed mechanism underlying the generation of cardiac arrhythmias and sudden cardiac death in malignant hyperthermia (MH) using knock-in mice carrying a RyR1 mutation Y522S (YS mice) found in the human MH family. Our central hypothesis is that chronic mitochondrial Ca^{2+} overload via leaky mutant RyR1 in cardiac mitochondria induces mitochondrial injury and cellular oxidative stress, which leads to cardiac arrhythmia.

Role: PI

3. 5P30GM1114750 (Shaw, PI) 05/01/17-4/30/18

NIH/NIGMS Total direct cost: $50,000

COBRE Center for Perinatal Biology, Pilot Project

Title: "Role of mitochondrial Ca^{2+} and ROS in the early postnatal cardiac development"

This project is to examine the molecular mechanisms underlying the proliferation of neonatal cardiac fibroblasts under angiotensin II stimulation, especially focusing on the role of mitochondrial Ca2+ uniporter (MCU) and mitochondrial ROS.

Role: Pilot Project PI

4. Medical Research Grant #20164376 (O-Uchi, PI) 4/01/17-9/30/18

Rhode Island Foundation Total direct cost: $25,000

Title: "Role of mitochondrial calcium uniporter for heart failure development"

This project will test our hypothesis whether mitochondria matrix-targeted Pyk2 inhibitory peptide can protects the heart from oxidative stress and cardiomyocyte death by inhibiting mitochondrial Ca^{2+} overload through MCU activation *in vivo*.

Role: PI

5. 2017 Shih-Chun Wang Young Investigator Award (O-Uchi, PI) 2/1/17-1/31/2017

American Physiological Society (APS) Total direct cost $10,500

The Shih-Chun Wang Young Investigator Award is given annually to an individual demonstrating outstanding promise based on their research program in the physiological sciences. The award is designated for use in the Awardee's research program.

Role: PI

PENDING SUPPORTS

1. R01HL135236 (Clements, PI) 01/01/2018–12/31/2022

NIH/NHLBI

Title: "Surgical Cardioprotection Through BKCa-Dependent Modulation of Mitochondrial Supercomplexes"

Role: Co-I

2. Innovative Project Award (O-Uchi, PI) (submitted Jan 2018) 07/01/2018- 06/30/2020

American Heart Association (AHA)

Title: "Roles of mitochondrial calcium uptake and reactive oxygen species in cardiac fibroblasts and cardiac fibrosis"

This project will test our hypothesis whether inhibition of mitochondrial calcium uniporter (MCU) in cardiac fibroblasts can protects the heart from excessive cardiac fibrosis after myocardial infarction in vivo.

Role: PI

3. Transformational Project Award (O-Uchi, PI) (submitted Jan 2018) 07/01/2018-6/30/2021

American Heart Association (AHA)

Title: "Role of proline-rich tyrosine kinase 2 in the heart failure development"

In this project we will test whether the combination of Pyk2 activation restricted at lipid rafts at cardiac plasma membrane and Pyk2 inhibition only at mitochondria provides strong anti-hypertrophic, antioxidative, and anti-apoptotic effects for protecting the heart for heart failure development.

Role: PI

4. 1R01HL144963 (Jhun, PI) (submitted Feb 2018) 09/01/2018-08/31/2023

NIH/NHLBI

Title: "Role of protein kinase D in pulmonary arterial hypertension" In this project we will test whether the hypothesis that protein kinase D (PKD)-dependent dynamine-like protein 1 (DLP1) promotes right ventricular dysfunction via cardiomyocytes death and cardiac fibroblast proliferation under pulmonary hypertension.

Role: Co-I

5. R01HL144709A (Choudhary, PI) (submitted Feb 2018) 09/01/2018-08/31/2023

NIH/NHLBI

Title: "Role of Mitochondrial Supercomplexes in PH-Induced Exercise Intolerance"

In this project we will test whether the hypothesis that dysregulation of mitochondrial supercomplexe formation in skeletal muscle has a critical role for exercise intolerance development frequently observed under pulmonary hypertension.

Role: Co-I

6. **R01HL145036** (Zhang, PI) (submitted Feb 2018) 09/01/2018-08/31/2023

NIH/NHLBI

"Role of C-terminal Src Kinase in regulation of mitochondrial function in cardiomyocytes"

This project is to delineate the role of C-terminal Src Kinase in the regulation of mitochondrial oxidative stress and the resulting cardiomyocyte injury.
Role: Co-I

7. **Odyssey Award** (Zhang PI) (submitted March 2018) 07/01/ 2018 –06/30/2020

Smith Family Foundation

"Role of C-terminal Src Kinase in regulation of mitochondrial function in cardiomyocytes"

This project is to delineate the role of C-terminal Src Kinase in the regulation of mitochondrial oxidative stress and the resulting cardiomyocyte injury.
Role: Co-I

COMPLETED SUPPORTS

1. **5P30GM110759 (**Ramratnam, PI) 12/01/16-4/30/17

NIH/NIGMS Total direct cost: $3,500

COBRE Center for Cancer Research Development, Pilot Project

Title: "Role of tyrosine Phosphorylation in the mitochondrial Ca^{2+} uniporter"

This project is to examine the molecular mechanisms underlying α_1-adrenergic modulation of mitochondrial Ca^{2+} influx especially focusing on the tyrosine phosphorylation of mitochondrial Ca^{2+} uniporter (MCU). Specifically, we will identify the Pyk2-dependent phosphorylation site(s) within MCU using Mass Spectrometry

Role: Pilot Project PI

2. **14BGIA18830032** (**O-Uchi, PI)** 01/01/14-12/31/15

American Heart Association (AHA) Total direct cost: $120,000

Title: *"Regulation of mitochondrial Ca^{2+} uniporter by adrenergic signaling in cardiomyocytes"*

This project is to examine the molecular mechanisms underlying α_1-adrenergic modulation of mitochondrial Ca^{2+} influx especially focusing on the tyrosine phosphorylation of mitochondrial Ca^{2+} uniporter.

Role: PI

3. **H1403 Medical Research Grant** (**O-Uchi, PI)** 03/01/15-12/31/15

W.W. Smith Foundation Total direct cost: $125,000

Title: "Application of anti-cancer drugs to heart failure therapy"

This project will test our hypothesis using small animal heart failure model that the novel clinical cancer drugs (FAK/Pyk2 inhibitors) can protects the heart from oxidative stress and cardiomyocyte death by inhibiting mitochondrial Ca^{2+} overload through MCU activation in vivo.

Role: PI

4. R01 HL093671 (Sheu, PI) 07/11/14-01/02/16

NIH/NHLBI Total direct cost: $1000,000

Title: *"Ca^{2+} and ROS Crosstalk Signaling in Cardiac Mitochondria"*

This project is to establish a unified theory to describe the mechanisms of crosstalk signaling between Ca^{2+} and reactive oxygen species (ROS) in cardiac muscle cells, and to translate these signaling pathways to the physiology and pathology of cardiac excitation, contraction, and energy metabolism.

Role: Co-I

5. Research Career Enhancement Award (O-Uchi, PI) 01/01/14-12/31/15

American Physiological Society (APS) Total direct cost: $4,000

Title: *"Single channel recording of mitochondrial Ca2+ uniporter in lipid bilayers system"*

This project is to establish the electrophysiological single channel recording of recombinant ion channel proteins especially newly identified mitochondrial ion channel named Mitochondrial Ca2+ uniporter (MCU) using lipid bilayers system collaborating with Prof. Hector Valdivia at University of Michigan.

Role: PI

6. 09POST231007, Postdoctoral Fellowship (O-Uchi, PI) 07/2009-06/2011

American Heart Association (AHA) Founders Affiliate Total direct cost: $85,000

Title: "Isoform-specific PKC modulation of IKs channel in Long QT syndrome"

This project is to examine the molecular mechanisms of α_1-adrenergic modulation of IKs current especially focusing on the main cardiac PKC isoforms. We will also characterize isoform specific PKC-mediated activation in mutant channels found in LQT1 families.

Role: PI

7. Hiroshi and Aya Irisawa Memorial Promotion Award (O-Uchi, PI) 7/1/2011-06/30/2012

Physiological Society of Japan (PSJ) Total direct cost: ¥1000,000 ($12,250)

Title: "Role of α_1-adrenergic signaling in cardiac excitation-contraction coupling"

The aim of this project was clarifying the intracellular mechanisms of inhibition of β-adrenergic signaling by α_1-adrenergic signaling in native cardiomyocytes. We investigated mostly the role of protein tyrosine kinases (PTKs) on adrenergic signaling.

Role: PI

8. Grant-in-Aid (O-Uchi, PI) 4/30/2008-03/31/2011

Ministry of Education, Culture, Sports, Science and Technology for Young Scientists, Japan

Total direct cost: ¥2080,000 ($25,500)

Title: "Role of PKC isoforms in cardiac excitation-contraction coupling"

In this project, we tried to identify the PKC isoforms which are activated by α_1-adrenoceptor stimulations in mammalian cardiomyocytes and to clarify the PKC isoform specific regulation of cardiac excitation-contraction coupling during α_1-adrenoceptor stimulations.

(Discontinuance from 04/2008 owing to my transfer to abroad)

Role: PI

9. Research Award (O-Uchi, PI) 10/01/2007-03/31/2008

Jikei University Research Foundation Total direct cost: ¥2000,000 ($24,500)

Title: "Regulation mechanisms of CaMKII activity at cardiac transverse-tubules"

In this project, we clarified the physiological importance of cardiac specific membrane structure called, transverse-tubules for the CaMKII activation.

Role: PI

10. Medical Science Research Award (O-Uchi, PI) 01/01/2007-08/31/2008

Kato Memorial Bioscience Foundation Total direct cost: ¥2000,000 ($24,500)

Title: "Molecular mechanism of CaMKII activation by cardiac α_1-adrenoceptor stimulation"

The aim of this project was clarifying the intracellular mechanisms of CaMKII activation by α_1-adrenoceptor signaling in native cardiomyocytes. We investigated mostly the interaction of PKC and CaMKII in this project.

Role: PI

11. Young Investigator's Research Grant (O-Uchi, PI) 01/01/2006-12/31/2007

Japan Heart Foundation Total direct cost: ¥1000,000 ($12,250)

Title: "Role of CaMKII in the excitation-contraction coupling during alpha$_1$-adrenoceptor stimulations in mammalian heart"

The aim of this project was identifying the role of CaMKII signaling in the cardiac excitation-contraction coupling during alpha$_1$-adrenoceptor stimulations.

Role: PI

12. Fellowship Award (O-Uchi, PI) 01/01/2006-12/31/2007

Japan Foundation of Cardiovascular Research Total direct cost: ¥1000,000 ($12,250)

Title: "Determination of intracellular signal transduction pathways after the subtype-specific α_1-adrenoceptor stimulations in mammalian cardiomyocytes"

The aim of this project was identifying the intracellular signal transduction pathways after the subtype-specific α_1-adrenoceptor stimulations in mammalian cardiomyocytes by biochemistry and cell biology.

Role: PI

13. Graduate Student's Research Grant (O-Uchi, PI) 04/01/2005-03/01/2006

Jikei University Research Foundation Total direct cost: ¥1000,000 ($12,250)

Title: "Regulation mechanisms of L-type Ca^{2+} channel by α_1-adrenoceptor stimulation in cardiomyocytes"

The aim of this project was clarifying the intracellular regulation mechanisms of L-type Ca^{2+} channel by α_1-adrenoceptor stimulation in native cardiomyocytes by electrophysiology.

Role: PI

UNIVERSITY/ HOSPITAL TEACHING

Teaching Instructor, course name "Basic medical science"
for Year 2 medical school students: 60hr/year
The Jikei University School of Medicine 2003-2007

Teaching Instructor, course name "Medical case studies"
for Year 3 medical school students: 30hr/year
The Jikei University School of Medicine 2006-2008

Lecturer, Integrated Medical Sciences III: Cardiovascular
for medical school students: 1.5 hr/year
Warren Alpert Medical School of Brown University 2016-present

Pre-doctoral fellows supervised
Faculty trainers in our Graduate Program in Molecular Pharmacology and Physiology (MPP)
Department of Molecular Pharmacology, Physiology and Biotechnology, Brown University
2017-present

Undergraduate students supervised

Amy K Landi (Quinnipiac University) (Current Position: M.S. student, Quinnipiac University)	Summer 2017
Jessica Cao (Brown University)	2017-present
Stephanie Adaniya (Brown University)	2017-present
Henley Ma (Brown University)	2017-present
Milla Shin (Brown University)	2017-present

Undergraduate students, Honors thesis advisor

Jessica Cao (Brown University)	2017-present

Master student supervised

Kara Ford M.S. 2017 (Brown University) (Current position: Senior Research Associate, Intellia Therapeutics, Inc., Cambridge, MA)	2016-2017

Medical School students supervised

Jun Okuzawa, M.D. 2016 (National Defense Medical College, Japan)	2015

Graduate students supervised

Satoshi Morimoto, M.D, Ph.D. 2011 (Jikei University School of Medicine) (Current Position: Assistant Professor, Department of Medicine, Jikei University School of Medicine, Tokyo Japan)	2006-2011
Takanori Hama, M.D, Ph.D. 2010 (Jikei University, School of Medicine) (Current Position: Assistant Professor, Department of Otolaryngology, Jikei University School of Medicine, Tokyo Japan)	2006-2010
Salwa Hafez, M.S. (Brown University)	2017

Ph.D. Thesis Committee Member

Salwa Hafez, M.S. (Brown University)	2017-present

Post-doctoral fellows supervised

Jyostna Mishra, Ph.D. (Thomas Jefferson University) (Current Position: Post-doctoral fellow, Department of Anesthesiology, Medical college of Wisconsin, Milwaukee, WI)	2014-2015

Junior Faculty supervised

Bong Sook Jhun, Ph.D. (Brown University) (Current Position: Assistant Professor (research), Department of Medicine, Brown University)	2017-present

Additional Supervisory Role

Sarah Monaco, M.S. (Research Assistant) (Current Position: Ph.D. student, Drexel University, Philadelphia, PA)	2014-2015
Dongqin Yang, BA (Sen. Research Assistant)	2016-present
Michelle King, BA	

(Sen. Research Assistant) 2017-present

Organization of Research Seminar Series
CVRC Seminar Series (monthly),
"Frontiers in Medical Science Research:
Advanced Methodology and Technology" 2017-presnet

Awards to trainees and junior faculties

Trainee Name	*Name of Award*	*Institution Presenting Award*	*Year Received*
Jyostna Mishra, Ph.D.	Postdoctoral Research Recognition Award	American Physiological Society (APS), Cell & Molecular Physiology Section	2016
Jessica Cao	Basic science research Award. 25th Annual Lifespan Research Symposium	Lifespan, Providence RI	2017
Jessica Cao	Undergraduate Teaching & Research Award (UTRA)	Brown University	2017
Bong Sook Jhun, Ph.D.	Advance-CTR, Pilot Project Award, U54GM115677	NIH/NIGMS	2017
Jessica Cao	Education Committee Travel Award	Biophysical Society (BPS)	2018
Bong Sook Jhun, Ph.D.	New investigator Award	American Physiological Society (APS) Cell and Molecular Physiology Section	2018
Bong Sook Jhun, Ph.D.	Medical Research Grant Award	Rhode Island Foundation	2018
Stephanie Adaniya	Undergraduate Teaching & Research Award (UTRA)	Brown University	2018
Milla Shin	Undergraduate Teaching & Research Award (UTRA)	Brown University	2018
Hanley Ma	PLME Summer Research Assistantship (SRA) in Biomedical Sciences	Brown University	2018
Hanley Ma	Summer Internship Program in Biomedical Research (SIP)	NIH	2018

INVITED PRESENTATIONS

1. September 2005. "Structural and functional relation of signal transduction in alpha1-adrenoceptor stimulation in cardiomyocyte"
   -5th International Symposium on Electron Microscopy in Medicine and Biology, Shijiazhuang, Republic of China (International)
2. November 11, 2006. "Regulation of Cardiac Ca channels by adrenergic stimulation."
   -The 1st Sophia-Jikei Biomedical Science Joint Symposium, Tokyo, Japan (Regional).
3. March 2, 2007 "Estimation of molecular mechanism underling CaMKII activation by cardiac alpha1-adrenocepor stimulation"
   -Annual meeting of Kato Memorial Bioscience Foundation, Tokyo, Japan (National).
4. December 12, 2007 "Intracellular regulatory mechanisims of L-type Ca^{2+} channel by α_1-adrenoceptor stimulation in mammalian ventricular myocytes"
   -Annual symposium of National Institute for Physiological Sciences "Ion channels and Transporters in Cardiovascular science", Okazaki, Japan (National).
5. March 26, 2008 "CaMKII: an important modurator of cardiac L-type Ca^{2+} channels in α_1-adrenoceptor stimulation." -The 85th Annual Meeting of the Physiological Society of Japan, Tokyo, Japan (National).
6. May 14, 2010 "Use of Mutant-Specific Ion Channel Characteristics for Risk Stratification of Long QT Syndrome Patients."
   -10th International Society for Heart Research (ISHR) World Congress, Kyoto, Japan (International).
7. July 3, 2010 "Novel Strategy of Risk Stratification for Long QT Syndrome Patients."
   -9th annual meeting of International Academy of Cardiovascular Sciences (IACS) Japan section, Tokyo Japan (National).
8. February 1, 2011 "Regulation of Slow delayed rectifier K^+ current by PKC isoforms."
   -4th World Congress International Academy of Cardiovascular Sciences (IACS), Vadodara, India. (International).
9. February 5, 2011 "Novel Strategy of Risk Stratification for Long QT Syndrome Patients."
   -CIMS-COM 2011, Ahmedabad, India (National).
10. March 18, 2011 "Risk Stratification and Treatment for Long QT Syndrome Type1 Patients-Combination Analysis of Clinical Information and Cellular Electrophysiology-."
    -The 75th Annual Scientific Meeting of the Japanese Circulation Society (JCS2011), Yokohama, Japan (National).
11. March 28, 2011 "Tyrosine kinase activated by α_1-adrenergic stimulation inhibits cardiac contractility by directly phosphorylating β_1-adrenoceptor."
    -The 88th Annual Meeting of the Physiological Society of Japan, Yokohama, Japan (National).
12. February 5, 2013 "Adrenergic regulation of cardiac excitation and contraction/metabolism coupling: physiology and pathophysiology"
    –CTM Seminar Series, Center for Translational Medicine, Department of Medicine, Thomas Jefferson University (National).
13. February 27, 2013 "Regulation of Cardiac Excitation and contraction /metabolism coupling by adrenergic stimulation"
    –Cardiology Unit Basic research Seminar, Department of Internal Medicine, The Jikei University School of Medicine, Tokyo, Japan (National).
14. April 15, 2013 "Regulation of Cardiac Excitation and Contraction/Metabolism Coupling by Adrenergic Signaling: Physiology and Pathophysiology."

-Departmental Seminar, Department of Molecular Biophysics & Physiology, Rush University Medical Center, Chicago IL (National).

15. September 5, 2014 "Phosphorylation of mitochondrial Ca^{2+} uniporter regulates mitochondrial Ca^{2+} uptake and apoptotic cell death in cardiomyocytes"
    -Bruce McManus Symposium: Cardiovascular Energy and Metabolism, 2nd Cardiovascular Forum for Promoting Centers of Excellence and Young Investigators, International Academy of Cardiovascular Sciences (IACS) North American Section, Winnipeg, MB, Canada (International).
16. February 20, 2015 "Molecular Mechanism of Mitochondrial Ca2+ Influx: Cardiac Physiology and Pathophysiology"
    -Departmental Seminar, Department of Anesthesiology, Medical College of Wisconsin, Milwaukee WI (National).
17. March 27, 2015 "Adrenergic Regulation of Mitochondrial Ca^{2+} Handling: Cardiac Physiology and Pathophysiology"
    -CVRC Data Club, Cardiovascular Research Center, Rhode Island Hospital, Alpart Medical School of Brown University, Providence RI (National).
18. March 29, 2015 "Pyk2-Dependent Phosphorylation of Mitochondrial Ca2+ Uniporter Modulates Mitochondrial Ca2+ Uptake"
    -Experimental Biology (EB) Annual Meeting: American Physiological Society Cell and Molecular Physiology Section, Boston MA (National).
19. September 18, 2015 "Characterization of the cardiac phenotype of malignant hyperthermia-associated mutation of RyR1"
    -Society of General Physiologists (SGP) 69th Annual Meeting and Symposium, Woods Hole, MA (National).
20. December 17, 2015 "Molecular and functional regulation of mitochondrial calcium uptake"
    -CTM Seminar Series, Center for Translational Medicine, Department of Medicine, Thomas Jefferson University (Regional).
21. May 13th , 2016, "Role of Mitochondrial Ca^{2+} and ROS in the heart".
    -MPPB Department seminar Series. Department of Molecular Pharmacology, Physiology and Biotechnology, Brown University (Regional)
22. June 16th, 2016. "Mitochondrial Ca2+ and ROS in the heart"
    -Vascular Research Lab meeting, Providence Veterans Affairs Medical Center (Regional)
23. Sep 23rd, 2016. "Post-translational modification of mitochondrial Ca^{2+} uniporter mediates mitochondrial Ca^{2+} overload and cell death in the heart"
    -4th Cardiovascular Forum for Promoting Centers of Excellence and Young Investigators, International Academy of Cardiovascular Sciences (IACS) North American Section, Sherbrooke QC, Canada (International).
24. Nov 9th, 2016."Physiological and pathophysiological role of mitochondrial calcium influx mechanism" - Department seminar Series. Department of Regenerative Medicine and Cell Biology, Medical University of South Carolina (National).
25. Jan 11th, 2017."Physiological role of mitochondrial calcium influx mechanism" - CVRC Data Club. Cardiovascular Research Center, Department of Medicine, Rhode Island Hospital, Brown University (Regional).
26. April 7th, 2017."Role of mitochondrial calcium and ROS in the heart development and remodeling" – Pediatric Research Colloquium, Women & Infant Hospital, Providence (Regional).
27. April 7th, 2017."Mitochondrial calcium homeostasis as potential target for cardiovascular medicine" – CardioPlumonary Vascular Biology COBRE seminar, Ocean State Research Institute, Providence VA Medical Center, Providence (Regional).

28. April 19th 2017. "Mitochondrial Ca2+ homeostasis as potential target for the treatment of cardiovascular diseases"–Cardiac and Vascular surgery Division seminar, Cardiovascular Research Institute, Loyola University Chicago (National).
29. April 21st, 2017 "Malignant hyperthermia-associated mutation of leaky RyR1 induces mitochondrial damage in the heart".-2017 Combined Annual Meeting of Central Society for Clinical and Translational Research (CSCTR) and Midwest Section of the American federation for Medical Research (MWAFMR), Chicago (National).
30. June 2nd, 2017. "Physiological role of mitochondrial calcium homeostasis in the heart" – Basic Medical Science Seminar. Department of Cell Physiology, The Jikei University School of Medicine, Tokyo, Japan (National).
31. June 3rd, 2017. "Pathophysiological role of mitochondrial calcium homeostasis in the cardiovascular diseases"
    -Cardiology Unit Basic research Seminar, Department of Internal Medicine, The Jikei University School of Medicine, Tokyo, Japan (National).
32. June 20th, 2017. "Mitochondrial Ca2+ homeostasis as potential target for the treatment of cardiovascular diseases" -Department Seminar, Department of Anesthesiology, University of Maryland School of Medicine (National).
33. July 7, 2017 ""'Mitochondrial Ca2+ Uniporter as a Potential Target for the Treatment of Cardiovascular Diseases" – Special Lecture, Lillehei Heart Institute, University of Minnesota, Minneapolis, MN (National)
34. October 5th, 2017. "Physiological and pathophysiological role of mitochondrial calcium in the heart"
    -Department Seminar, Department of Biochemistry and Molecular Biology, Michigan State University (National).
35. Octorber 30th, 2017. "Role of mitochondrial calcium and ROS in the early postnatal cardiac development".
    -Center of Biomedical Research Excellence for Perinatal Biology, Research Symposium, Women & Infants Hospital, Providence RI (Regional).
36. Jan 24th, 2018." Malignant hyperthermia-associated mutation of leaky RyR1 and mitochondrial damage in the heart".
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SCHOLARLY WORK PUBLISHED IN OTHER MEDIA

None