CURRICULUM VITAE

**JIN. O-UCHI, MD, PhD, FAHA, FCVS**

**PROFESSIONAL ADDRESS:**

Heart Institute

Hypertension and Kidney Research Center

Department of Molecular Pharmacology & Physiology

University of South Florida Morsani College of Medicine

560 Channelside Drive, MDD 803A

Tampa, FL, 33602

E-Mail: jouchi@usf.edu

**IDENTIFYING INFORMATION**

**Education**

|  |  |  |
| --- | --- | --- |
| **Degree** | **Institution** | **Date Degree Granted** |
| M.D. | The Jikei UniversitySchool of MedicineTokyo, Japan | 2001 |
| Ph.D.Advisor: Dr. Satoshi Kurihara | The Jikei UniversitySchool of MedicineTokyo, JapanMedicine/Department of Cell Physiology | 2006 |
| Postdoctoral Research AssociateAdvisor: Dr. Satoshi Kurihara | The Jikei UniversitySchool of Medicine | 2006 - 2008 |
| Postdoctoral Research AssociateAdvisor: Drs. Author Moss and Coeli MB Lopes | University of Rochester | 2008 - 2011 |
| **Graduate appointments** | **Institution** |  |
| Residency | Jikei University HospitalTokyo, Japan | 2001 - 2003 |

**Certifications, License**

|  |  |
| --- | --- |
| National Medical Board, Japan | 2001-present |
| Medical License, Kanagawa Prefecture, Japan | 2001-present |
| Control Substances Registration, Rhode Island | 2018 |

**Academic Appointment**

|  |  |
| --- | --- |
| University of South Florida College of Medicine, Tampa, FLAssociate Professor, Tenure Track Hypertension and Kidney Research CenterDepartment of Molecular Pharmacology & Physiology | 2024-present |
| University of Minnesota, Twin Cities, Minneapolis, MN Graduate Program Faculty Department of Integrative Biology and Physiology | 2019-2024 |
| Intergovernmental Personnel Agreements (IPAs)Providence VA Medical Center | 2019-2024 |
| Faculty memberMasonic Cancer Center | 2019-2024 |
| Assistant Professor, Tenure Track  Department of Medicine, Cardiovascular Division Lillehei Heart Institute | 2018-2024 |
| Faculty member  Institute for Engineering in Medicine (IEM)  | 2018-2024 |
| Brown University, Providence, RI Graduate Program Faculty Department of Molecular Pharmacology, Physiology, and Biotechnology | 2017 - 2018 |
| Assistant ProfessorDepartment of Medicine, Cardiology DivisionCardiovascular Research Institute | 2016-2018 |
| Thomas Jefferson University, Philadelphia, PAAssistant Professor, ResearchDepartment of Medicine, Cardiology Division Center for Translational Medicine Instructor, Research  Department of Medicine, Cardiology Division Center for Translational Medicine  | 20152011-2014 |

 **Clinical/Hospital Appointments**

|  |  |
| --- | --- |
| Rhode Island Hospital, Providence, RI Research Scientist | 2016-2018 |
| Honda Hospital, Tokyo, Japan Staff Physician (Internal Medicine) | 2003-2008 |
| Akabane-dai Clinic, Tokyo, Japan Staff Physician (Internal Medicine) | 2003-2008 |
| Nakano-Ekoda Hospital, Tokyo, JapanStaff Physician Internal Medicine | 2002-2008 |

**Current Membership and Offices in Professional Organizations**

|  |  |  |
| --- | --- | --- |
| **Role** | **Professional Organizations** | **Date** |
| Member | Japanese Cardiovascular Research Association (JCRA) | 2024-present |
| Member | International Society for the Development of Magnesium Research  | 2021-present |
| Member | Heart Rhythm Society | 2019-present |
| Member | Central Society for Clinical and Translational Research | 2019-present |
| Member | Society of Cardiovascular Anesthesiologists  | 2014-present |
| Member | American Physiological Society  | 2013-present |
| Member | Society of General Physiologist  | 2011-present |
| Member | Japanese Heart Failure Society | 2007-present |
| Member | Biophysical Society of Japan | 2007-present |
| Member | American Heart Association  | 2007-present |
| Member | Cardiac Muscle Society | 2006-present |
| Trustee, Elected | Japanese Physiological Society  | 2006-present |
| Member | International Society for Heart Research  | 2005-present |
| Member | Biophysical Society  | 2005-present |
| Member | International Academy of Cardiovascular Sciences | 2005-present |
| Member | Japanese Physiological Society | 2003-present |
| Member | Japanese Circulation Society | 2002-present |
| Member | Japanese Society of Internal Medicine | 2001-present |

**HONORS AND AWARDS FOR RESEARCH WORK, TEACHING, PUBLIC ENGAGEMENT, AND SERVICE**

**External Sources**

|  |  |  |
| --- | --- | --- |
| **Name of Award** | **Institution Presenting Award** | **Year Received** |
| Dale J. Benos Professional Service Award | American Physiological Society (APS) | 2024 |
| Finalist, Translational Research Grant Award | AnaBios Corporation | 2021 |
| Speaker for “Featured Topic Session” at Experimental Biology Meeting | APS, Cell and Molecular Physiology Section (CaMPS) | 2019 |
| Fellow of American Heart Association (FAHA) | American Heart Association (AHA) Basic Cardiovascular Sciences (BCVS) | 2018 |
| Finalist, Neonatal Cardiopulmonary Biology, Young Investigator Award | 5th Neonatal Cardiopulmonary Biology Young Investigators Forum | 2018 |
| Fellow of APS Cardiovascular Section of (FCVS) | APS, Cardiovascular Section | 2018 |
| Shih-Chun Wang Young Investigator Award | APS | 2017 |
| Oral Abstract Award | Central Society for Clinical and Translational Research (CSCTR) | 2017 |
| National Scientist Development Award | AHA | 2016 |
| Finalist, Gary Lopaschuk Young Faculty Award | International Academy of Cardiovascular Sciences, North American Section (IACS) | 2016 |
| 1st Prize, New investigator Award | APS, CaMPS | 2015 |
| Research Career Enhancement Award | APS | 2014 |
| Finalist, New investigator Award | APS, CaMPS | 2014 |
| Early Career Investigator Travel Awards | International Society for Heart Research (ISHR) | 2012 |
| Finalist, Outstanding Early Career Investigator Award | AHA BCVS | 2012 |
| Hiroshi and Aya Irisawa Memorial Promotion Award for Young Scientists | Physiological Society of Japan (PSJ) | 2011 |
| 1st prize, Richard J. Bing Award | ISHR | 2010 |
| Postdoctoral Fellowship Award  | AHA | 2009 |
| Promotion Award | PSJ | 2009 |
| Foreign study Award | Kanae Foundation, Tokyo Japan | 2008 |
| Graduate Student Best Paper Award | Jikei University School of Medicine | 2007 |
| Trustee, Physiological Society of Japan | PSJ | 2006 |
| Young Investigator Award | International Academy of Cardiovascular Sciences 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 |
| Best Oral Presentation Award | International Society for Heart Research Japanese Section  | 2005 |
| Travel Grant Award | The Naito Foundation  | 2005 |

**Internal Sources**

|  |  |  |
| --- | --- | --- |
| Graduate Student Best Paper Award | Jikei University School of Medicine | 2007 |
| Research Grant Award | Jikei University School of Medicine | 2007 |
| Young Investigator's Travel Grant Award | Jikei Alumni Association | 2005 |
| Graduate Student's Research Award | Jikei University School of Medicine | 2005 |

**RESEARCH AND SCHOLARSHIP**

 **Grants and Contracts**

**External Sources**

**Current**

* + 1. Role: Co-Principal Investigator (Contact PI)

Grant Number: R01HL171710

External Granting Agency: NIH/NHLBI

Grant Title: Role of ER-mitochondria contact sites in right ventricular fibrosis

Project Dates: 07/01/2024-04/30/2028

Direct Costs Per Year: $387,000

30% Effort

* + 1. Role: Co-Investigator

Name of PI: Jhun (Single PI)

Grant Number: R01HL160699

External Granting Agency: NIH/NHLBI

Grant Title: Mitochondrial Fission, Calcium, and ROS in Right Ventricular Fibrosis

Project Dates: 7/01/2023-6/30/2027

Direct Costs Per Year: $250, 000

10% Effort

* + 1. Role: Sponsor

Name of PI: Rhee (Single PI)

Grant Number: 2024 Summer Undergraduate Research Fellowship (SURF)

External Granting Agency: American Physiological Society

Grant Title: Role of c-Src kinase in the calcium transport between endoplasmic reticulum and mitochondria

Project Dates: 06/03/2024 –4/31/2025

Direct Costs Per Year: $5,300

1% Effort

**Past**

1. Role: Subaward Principal Investigator (Co-I)

Name of PI: Choudhary (Single PI)

Grant Number: R01HL148727

External Granting Agency: NIH/NHLBI

Title: Role of Endothelial Anoctamin-1 in Pulmonary Arterial Hypertension

Project Dates: 07/01/2019 to 06/30/2024 (NCE)

Direct Costs Per Year $32,061

5% Effort

1. Role: Co-Investigator

Name of PI: Dudley (Single PI)

Grant Number: R56HL162208

External Granting Agency: NIH/NHLBI

Grant Title: Magnesium, mitochondria, and diastolic dysfunction

Project Dates: 09/22/2022-08/31/2023

 Direct Costs Per Year: $ 351,215

10% Effort

1. Role: Subaward Principal Investigator (Co-I)

Name of PI: Choudhary (Single PI)

Grant Number: CX001892

External Granting Agency: VA BLR&D

Grant Title: Role of Skeletal Muscle Mitochondrial Supercomplexes in Exercise Intolerance

Project Dates: 07/01/2019 -06/30/2023

Direct Costs Per Year: $15,259

10% Effort

1. Role: Subaward Principal Investigator (Co-I)

Name of PI: Clements (Single PI)

Grant Number: R01HL135236

External Granting Agency: NIH/NHLBI

Grant Title: Surgical Cardioprotection through BKCa-Dependent Modulation of Mitochondrial Supercomplexes.

Project Dates: 07/15/2018–06/30/2022

Direct Costs Per Year: $25,000

4% Effort

1. Role: Principal Investigator

Grant Number: R01HL136757 (Single PI)

External Granting Agency: NIH/NHLBI

Grant Title: Regulation of mitochondrial calcium uniporter in the heart

Project Dates: 06/15/17-05/31/23 (NCE)

Direct Costs Per Year: $250,000

50% Effort

1. Role: Subaward Principal Investigator (Co-I)

Name of PI: Terentyev (Single PI)

Grant Number: R01HL142588

External Granting Agency: NIH/NHLBI

Grant Title: Novel Mechanisms of Regulation of SK channels: Implications for Cardiac Arrhythmia

Project Dates: 08/01/2019 - 05/31/2023

Direct Costs Per Year: $30,500

5% Effort

1. Role: Principal Investigator

Grant Number: 16SDG27260248 (Single PI)

External Granting Agency: American Heart Association

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

Project Dates: 01/01/16-12/31/20 (NCE)

Direct Costs Per Year: $70,000

25% Effort

1. Role: Sponsor

Name of PI: Tsobze (Single PI)

Grant Number: 2019 APS Hearst Undergraduate Summer Research Fellows

External Granting Agency: American Physiological Society and Hearst Foundations

Grant Title: Role of Mitochondrial Proline rich Tyrosine Kinase 2 (Pyk2) inhibitory peptide in modulating Mitochondrial Ca2+overload

Project Dates: 05/01/2019 – 5/31/2020

Direct Costs Per Year: $6,800

1% Effort

1. Role: Principal Investigator

Grant Number: N/A (Single PI)

External Granting Agency: American Physiological Society

Grant Title: 2017 Shih-Chun Wang Young Investigator Award

Project Dates: 02/1/17-01/31/2020

Direct Costs Per Year: $10,500

1% Effort

1. Role: Host laboratory Principal Investigator

Name of PI: Ilatovskaya (Single PI)

Grant Number: 2018 Research Career Enhancement Award

External Granting Agency: American Physiological Society

Grant Title: Mitochondria imaging and isolation for mitoplast electrophysiology

Project Dates: 08/01/2018–07/31/2019

Direct Costs Per Year: $8,251

1% Effort

1. Role: Principal Investigator (Single PI)

Grant Number: Medical Research Grant #20164376

External Granting Agency: Rhode Island Foundation

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

Project Dates: 04/01/2017-09/20/2018

Direct Costs Per Year: $25,000

5% Effort

1. Role: Pilot Project Principal Investigator

Name of PI: Shaw (Single PI)

Grant Number: 5P30GM1114750

External Granting Agency: NIH/NIGMS

Grant Title: COBRE Center for Perinatal Biology, Pilot Project “Role of mitochondrial Ca2+ and ROS in the early postnatal cardiac development”

Project Dates: 06/01/2017-04/30/2018

Direct Costs Per Year: $50,000

10% Effort

1. Role: Pilot Project Principal Investigator

Name of PI: Ramratnam (Single PI)

Grant Number: 5P30GM110759

External Granting Agency: NIH/NIGMS

Grant Title: COBRE Center for Cancer Research Development, Pilot Project, Pilot Project “Role of tyrosine Phosphorylation in the mitochondrial Ca2+ uniporter”

Project Dates: 12/01/2016-04/30/2017

Direct Costs Per Year: $3,500

2.5% Effort

1. Role: Co- Investigator

Name of PI: Sheu (Single PI)

Grant Number: R01 HL093671

External Granting Agency: NIH/NHLBI

Grant Title: Ca2+ and ROS Crosstalk Signaling in Cardiac Mitochondria

Project Dates: 03/01/2015-01/02/2016

Direct Costs Per Year: $250,000

20% Effort

1. Role: Principal Investigator

Grant Number: H1403 Medical Research Grant (Single PI)

External Granting Agency: W.W. Smith Foundation

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

Project Dates: 03/01/2015-12/31/2015

Direct Costs Per Year: $125,000

20% Effort

1. Role: Principal Investigator

Grant Number: 14BGIA18830032 (Single PI)

External Granting Agency: American Heart Association

Grant Title: Regulation of mitochondrial Ca2+ uniporter by adrenergic signaling in cardiomyocytes

Project Dates: 01/01/2014-12/31/2015

Direct Costs Per Year: $70,000

35% Effort

1. Role: Principal Investigator

Grant Number: Research Career Enhancement Award (Single PI)

External Granting Agency: American Physiological Society

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

Project Dates: 01/01/2014-12/31/2015

Year: $4,000

2.5% Effort

1. Role: Principal Investigator

Grant Number: Hiroshi and Aya Irisawa Memorial Promotion Award (Single PI)

External Granting Agency: Physiological Society of Japan

Grant Title: Role of 𝛼1-adrenergic signaling in cardiac excitation-contraction coupling

Project Dates: 07/01/2011-06/30/2012

Direct Costs Per Year: $12,250

5% Effort

1. Role: Principal Investigator

Grant Number: 09POST231007 (Single PI)

External Granting Agency: American Heart Association

Founders Affiliate Grant

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

Project Dates: 07/01/2009-06/30/2011

Direct Costs Per Year: $85,000

95% Effort

1. Role: Principal Investigator

Grant Number: Grant-in-Aid (Single PI)

External Granting Agency: Ministry of Education, Culture, Sports, Science and Technology for Young Scientists, Japan

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

Project Dates: 04/30/2008-03/31/2011

Direct Costs Per Year: $25,500

20% Effort

(Discontinuance from 04/2008 due to my position transfer to abroad)

1. Role: Principal Investigator

Grant Number: Medical Science Research Award (Single PI)

External Granting Agency: Kato Memorial Bioscience Foundation

Grant Title: Molecular mechanism of CaMKII activation by cardiac 𝛼1-adrenoceptor stimulation

Project Dates: 01/01/2007-08/31/2008

Direct Costs Per Year: $24,500

10% Effort

1. Role: Principal Investigator

Grant Number: Young Investigator's Research Grant (Single PI)

External Granting Agency: Japan Heart Foundation

Grant Title: Role of CaMKII in the excitation-contraction coupling during 𝛼1-adrenoceptor stimulations in mammalian heart

Project Dates: 01/01/2006-12/31/2007

Direct Costs Per Year: $12,250

10% Effort

1. Role: Principal Investigator

Grant Number: Fellowship Award (Single PI)

External Granting Agency: Japan Foundation of Cardiovascular Research

Grant Title: Determination of intracellular signal transduction pathways after the subtype-specific 𝛼1-adrenoceptor stimulations in mammalian cardiomyocytes

Project Dates: 01/01/2006-12/31/2007

Direct Costs Per Year: $12,250

10% Effort

1. Role: Principal Investigator

Grant Number: Graduate Student's Research Grant (Single PI)

Granting Agency: Jikei University Research Foundation

Grant Title: Regulation mechanisms of L-type Ca2+ channel by alpha1-adrenoceptor stimulation in cardiomyocytes

Project Dates: 04/01/2005-03/01/2006

Direct Costs Per Year: $12,250

10% Effort

**University Sources**

**Current**

1. Role: Co- Sponsor

Name of PI: Matthew Dugan

Grant Number: Willson Scholarship

Granting Agency: Lillehei Heart Institute, University of Minnesota
Grant Title: N/A

Project Dates: 06/01/2024-09/30/2024
Direct Costs Per Year: $6,000

1% Effort

1. Role: Role: Co- Sponsor

Name of PI: Matthew Dugan

Grant Number: UMF Medical Student Research Grant

Granting Agency: University of Minnesota Foundation
Grant Title: Role of anoctamin-1 on hyperproliferation of endothelial cells in pulmonary arterial hypertension.Project Dates: 07/01/2024-06/31/2025
Direct Costs Per Year: $3,500

1% Effort

**Past**

1. Role: Sponsor

Name of PI: Polina, Phan (Multi-PI)
Grant Number: 2020 IEM Annual Conference Pilot Project Grant
Granting Agency: Institute of Engineering in Medicine, University of Minnesota
Grant Title: Blocking SARS-COV-2 viroporins for preventing sudden cardiac death during COVID-19
Project Dates: 01/01/2021-12/17/2022
Direct Costs Per Year: $5,000

1. Role: Sponsor

Name of PI: Adhikari, Ravikumar (Multi-PI)

Grant Number: 2020 IEM Annual Conference Pilot Project Grant

Granting Agency: Institute of Engineering in Medicine, University of Minnesota

Grant Title: Targeting mitochondrial ROS for preventing sudden cardiac death in malignant hyperthermia

Project Dates: 01/01/2021-12/31/2021

Direct Costs Per Year: $5,000

1. Role: Principal Investigator

 Grant Number: OACA COVID19 Response Grants (Single PI)

 Granting Agency: Office of Academic Clinical Affairs (OACA), University of Minnesota

 Grant Title: Magnesium supplementation for preventing sudden cardiac death by COVID-19 viroporins in patients with pre-existing hypertension

 Project Dates: 05/01/2020-04/30/2021

Direct Costs Per Year: $5,000

1. Role: Contact Co-Principal Investigator

Name of PI: O-Uchi, Talkachova (Multi-PI)
Grant Number: IEM COVID19 Response Grants
Granting Agency: Institute of Engineering in Medicine, University of Minnesota
Grant Title: Targeting SARS-CoV-2 Viroporins for Protecting COVID-19 Patients with Pre-Existing Hypertension from Sudden Cardiac Death
Project Dates: 07/01/2020–06/30/2021
Direct Costs Per Year: $10,000

1. Role: Co-Principal Investigator

Name of MPIs: Talkachova, O-Uchi, Dudley (Multi-PI)

Grant Number: 2019 Group Program Grant

Granting Agency: Institute of Engineering in Medicine, University of Minnesota Grant Title: Cardiac working Group targeting multi-scale mechanisms of arrhythmia

Project Dates: 02/01/2019-8/31/2020

Direct Costs Per Year: $60,000

1. Role: Principal Investigator

Grant Number: Research Award (Single PI)

Granting Agency: Jikei University

Grant Title: Regulation mechanisms of CaMKII activity at cardiac transverse‐tubules

Project Dates: 10/01/2007-03/31/2008

Direct Costs Per Year: $12,250

10% Effort

**Publications**

 **Peer-Reviewed Publications**

1. Landherr M, Polina I, Cypress MW, Chaput I, Nieto B, Jhun BS, Polina I, **O-Uchi J**\*. SARS-CoV-2-ORF3a variant Q57H reduces its pro-apoptotic activity in host cells. ***F1000Research 2024,*** *13:331*. **\*Corresponding author.**

**Impact factor:** N/A

**Times cited:** 0

Role: Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review

1. Nieto B, Cypress MW, Jhun BS\*, **Jin O-Uchi J**\*. Adeno-associated virus-based approach for genetic modification of cardiac fibroblasts in rat hearts. \*Co-Corresponding author. ***Physiol. Rep.* 2024.** 12(6):e15989. doi: 10.14814/phy2.15989. **[Cover Image]** PMID: 38538007 **\*Co-corresponding authors.**

**Impact factor:** 2.5

**Times cited:** 1

**Role:** Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review

1. Kazmirczak F, Hartweck LM, Vogel NT, Mendelson JB, Park AK, Raveendran RM, **O-Uchi J**, Jhun, BS, Prisco, SZ, Prins KW. Intermittent Fasting Activates AMP-Kinase to Restructure Right Ventricular Lipid Metabolism and Microtubules in Two Rodent Models of Pulmonary Arterial Hypertension ***JACC: Basic Transl. Sci***. **2023** 20;8(3):239-254. PMID: 37034280

**Impact factor:** 8.648

**Times cited:** 7

 **Role:** Conducted experimental studies, Data acquisition, Manuscript editing, Manuscript review

1. Wolf FI, Maier JA, Rosanoff A, Barbagallo M, Baniasadi S, Castiglioni S, Cheng FC, Day SC, Costello RB, Dominguez LJ, Elin RJ, Gamboa-Gomez C, Guerrero-Romero F, Kahe K, Kisters K, Kolisek M, Kraus A, Iotti S, Mazur A, Mercado-Atri M, Merolle L, Micke O, Gletsu-Miller N, Nielsen F, **O-Uchi J**, Piazza O, Plesset M, Pourdowlat G, Rios FJ, Rodriguez-Moran M, Scarpati G, Shechter M, Song Y, Spence LA, Touyz RM, Trapani V, Veronese N, von Ehrlich B, Vormann J, Wallace TC, Cmer Center For Magnesium Education Research, Gesellschaft Für Magnesium-Forschung E V Germany, Sdrm Society International Society For The Development Of Research On Magnesium. The magnesium global network (MaGNet) to promote research on magnesium in diseases focusing on covid-19 [The magnesium global network (MaGNet) to promote research on magnesium in diseases focusing on covid-19]. ***Magnes Res.*** **2021** 34(2):90-92. PMID: 34524085.

**Impact factor:** 1.588

**Times cited:** 3

 **Role:** *Manuscript editing, Manuscript review*

1. Vang A, da Silva Gonçalves Bos D, Fernandez-Nicolas A, Zhang P, Morrison AR, Mancini TJ, Clements RT, Polina I, Cypress MW, Jhun BS, Hawrot E, Mende U, **O-Uchi J**, Choudhary G. α7 Nicotinic acetylcholine receptor mediates right ventricular fibrosis and diastolic dysfunction in pulmonary hypertension. ***JCI Insight***, 6(12):e142945, **2021**

**Impact factor:** 8.315

**Times cited:** 15

**Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Krishnappa D, Wang W, Rooney MR, Norby FL, Oldenburg NC, Soliman EZ, Alonso A, **O-Uchi J**, Dudley SC Jr, Lutsey PL, Chen LY. Life's Simple 7 cardiovascular health score and premature atrial contractions: The atherosclerosis risk in communities (ARIC) study. ***Int J Cardiol.*** S0167-5273(21)00394-6, **2021**.

**Impact factor:** 3.229

**Times cited:** 3

**Role:** *Defined intellectual content, Manuscript editing, Manuscript review*

1. Murphy KR, Baggett B, Cooper LL, Lu YC, **O-Uchi J**, Sedivy JM, Terentyev D, Koren G. Diminished Autophagy Contributes to Aberrant Ca2+ Homeostasis and Arrhythmogenesis in Aging Rabbit Hearts. 10:1277. ***Front. Physiol.***, **2019.**

**Impact factor:** 3.48

**Times cited:** 2

**Role:** *Developed Study design, Defined intellectual content, Conducted literature research, Manuscript editing, Manuscript review*

1. Camara KS, Stowe DF, **O-Uchi J**, Bazil JN. Genetic Modification of Cardiac Tissue. ***Front Cardiovasc Med,*** 6:93., **2019.**

**Impact factor:** 4.79

**Times cited:** 9

**Role:** *Conducted literature research, Manuscript editing, Manuscript review*

1. Parks XX\*, Ronziera E\*, **O-Uchi J**, Lopes CM. Fluvastatin inhibits Rab5-mediated IKs internalization caused by chronic Ca2+-dependent PKC activation. (\*Equal contribution). ***J Mol Cell Cardiol.***, 129: 314-32, **2019.**PMID: 30898664.

**Impact factor:** 5.68

**Times cited:** 11

**Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Adaniya SM\*, **O-Uchi J**\*, Cypress M, Jhun BS. Post-translational modifications of mitochondrial fission and fusion proteins: implications for physiology and cardiac disease. ***Am. J. Physiol Cell Physiol.*** **2019** (\***Equal contribution**) PMID: 30758993

**Impact factor:** 3.602

**Times cited:** 48

**Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Manuscript preparation, Manuscript editing, Manuscript review*

1. Cao JL, Adaniya SM, Cypress, M, Suzuki Y, Kusakari Y, Jhun BS, **O-Uchi J**\*. Mitochondrial Calcium Handing in Cardiac Muscles. *Arch. Biochem. Biophys*., 663: 276-287, **2019**. PMID: 30684463 **\*Corresponding author.**

**Impact factor:** 3.118

**Times cited:** 7

**Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Manuscript preparation, Manuscript editing, Manuscript review*

1. Hamilton S, Terentyeva R, Kim TY, Bronk P, **O-Uchi J**, Csordás G, Choi BR, Terentyev D. Pharmacological modulation of mitochondrial Ca2+ content regulates sarcoplasmic reticulum Ca2+ release via oxidation of the ryanodine receptor by mitochondria-derived reactive oxygen species. ***Front. Physiol.***, 9:1831, **2018**. PMID: 30622478

**Impact factor:** 3.48

**Times cited:** 27

**Role:** *Defined intellectual content, Manuscript preparation, Manuscript editing, Manuscript review*

1. Jhun BS\*#, **O-Uchi J\***#, Adaniya SM, Cypress M, Yoon Y. Adrenergic regulation of Drp1-Driven Mitochondrial Fission in Cardiac Physio-Pathology. ***Antioxidants (Basel)***,18;7(12). pii: E195, **2018**.(\***Equal contribution**). PMID: 30567380#**Corresponding authors.**

**Impact factor:** 4.52

**Times cited:** 27

**Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Conducted literature research, Manuscript preparation, Manuscript editing, Manuscript review*

1. Jhun BS\*#, **O-Uchi J\*#**, Adaniya SM, Mancini TJ, Landi AK, Cao JL, Xu X, Yoon Y,Choudhary G, Clements RT, Mende U, Sheu SS. Protein kinase D activation inducesmitochondrial fragmentation and dysfunction in cardiomyocytes. ***J Physiol.*** 596(5):827-855, **2018**. PMID: 29313986 (#**Equal contribution**) **\*Corresponding authors.**

**Impact factor:** 5.037

**Times cited:** 24

**Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Allawzi AM, Vang A, Clements RT, Jhun BS, Kue NR, Mancini T, Landi AK, Terentyev D, **O-Uchi J**, Comhair SA, Erzurum SC, Choudhary G. Activation of Anoctamin-1 LimitsPulmonary Endothelial Cell proliferation via p38-MAPK-dependent Apoptosis. ***Am J Respir Cell Mol Biol.*** 58(5):658-667, **2018**. PMID: 29100477

**Impact factor:** 4.1

**Times cited:** 24

**Role:** *Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Mishra J, Jhun BS, Hurst S, **O-Uchi J\*,** Csordás G\*, Sheu SS\*. The Mitochondrial Ca2+Uniporter: Structure, Function and Pharmacology. ***Handb Exp Pharmacol.*** 240:129-156,2017. PMID: 28194521 **\*Corresponding authors.**

**Impact factor:** 15.55

**Times cited:** 35

**Role:** *Guarantor of integrity of entire study, Developed Study design, Defined intellectual content, Conducted literature research, Manuscript preparation, Manuscript editing, Manuscript review*

1. Rajtik T, Carnicka S, Szobi A, Giricz Z, **O-Uchi J**, Hassova V, Svec P, Ferdinandy P, Ravingerova T, Adameova A. Oxidative activation of CaMKIIδ in acute myocardial ischemia/reperfusion injury: A role of angiotensin AT1 receptor-NOX2 signaling axis. ***Eur J Pharmacol.*** 771:114-22, **2016**. PMID: 26694801

**Impact factor:** 3.04

**Times cited:** 16

**Role:** *Defined intellectual content, Conducted literature research, Manuscript preparation, Manuscript editing, Manuscript review*

1. Rajtik T, Carnicka S, Szobi A, Giricz Z, **O-Uchi J**, Hassova V, Svec P, Ferdinandy P, Ravingerova T, Adameova A. Data on necrotic and apoptotic cell death in acute myocardial ischemia/reperfusion injury. ***Data Brief.*** 7:730-4, **2016**. PMID: 27054186

**Impact factor:** 0.970

**Times cited:** 3

**Role:** *Defined intellectual content, Conducted literature research, Manuscript preparation, Manuscript editing, Manuscript review*

1. Jhun BS, Mishra J, Monaco S, Fu D, Jiang W, Sheu SS, **O-Uchi J\*.** The mitochondrial Ca2+ uniporter: regulation by auxiliary subunits and signal transduction pathways. ***Am J Physiol Cell Physiol.*** 311(1):C67-80, **2016**. PMID: 27122161 **\*Corresponding author**

**Impact factor:** 3.602

**Times cited:** 13

**Role:** *Guarantor of integrity of entire study, Developed Study design, Defined intellectual content, Conducted literature research, Manuscript preparation, Manuscript editing, Manuscript review*

1. **O-Uchi J**, Rice JJ, Ruwald MH, Parks XX, Ronzier E, Moss AJ, Zareba W, Lopes CM. Impaired IKs channel activation by Ca2+-dependent PKC shows correlation with emotion/arousal-triggered events in LQT1. ***J Mol Cell Cardiol.*** 79:203-211, **2015.** PMID: 25479336.

**Impact factor:** 5.68

**Times cited:** 15

**Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. **O-Uchi J\***, Sorenson J, Jhun BS, Mishra J, Hurst S, Williams K, Sheu SS, Lopes CM. Isoform-specific dynamic translocation of PKC by α 1 -adrenoceptor stimulation in live cells. ***Biochem Biophys Res Commun.*** 465(3):464-70, **2015**.PMID: 26277396**\* Corresponding author.**

**Impact factor:** 2.47

**Times cited:** 9

**Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Morimoto S, Hongo K, Kusakari Y, Komukai K, Kawai M, **O-Uchi J**, Nakayama H, Asahi M, Otsu K, Yoshimura M, Kurihara S. Genetic modulation of the SERCA activity does not affect the Ca2+ leak from the cardiac sarcoplasmic reticulum. ***Cell Calcium.*** 55(1):17-23. **2014**. PMID: 24290743.

**Impact factor:** 3.72

**Times cited:** 6

**Role:** *Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript editing, Manuscript review*

1. **O-Uchi J**\***,** Ryu SY, Jhun BS, Hurst S, Sheu SS. Mitochondrial Ion Channels/Transporters as Sensors and Regulators of Cellular Redox Signaling. ***Antioxid Redox Signal.*** 21(6):987-1006, **2014**. PMID: 24180309 **\*Corresponding author.**

**Impact factor:** 7.407

**Times cited:** 53

**Role:** *Guarantor of integrity of entire study, Developed Study design, Defined intellectual content, Conducted literature research, Manuscript preparation, Manuscript editing, Manuscript review*

1. **O-Uchi J**\*, Jhun BS, Xu S, Hurst S, Raffaello A, Liu X, Yi B, Zhang H, Gross P, Mishra J, Ainbinder A, Kettlewell S, Smith GL, Dirksen RT, Wang W, Rizzuto R, Sheu SS. Adrenergic signaling regulates mitochondrial Ca2+ uptake through Pyk2-dependent tyrosine phosphorylation of the mitochondrial Ca2+ uniporter. ***Antioxid Redox Signal.*** 21(6):863-79, **2014**. PMID: 24800979.  **\* Corresponding author.**

**Impact factor:** 7.407

**Times cited:** 58

**Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Jakob R, Beutner G, Sharma VK, Duan Y, Gross RA, Hurst S, Jhun BS, **O-Uchi J**\*, Sheu SS. Molecular and functional identification of a mitochondrial ryanodine receptor in neurons. ***Neurosci Lett.*** 575:7-12. **2014**. PMID: 24861510. **\* Corresponding author.**

**Impact factor:** 2.18

**Times cited:** 38

**Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. **O-Uchi J**\*, Komukai K, Kusakari Y, Morimoto S, Kawai M, Jhun BS, Hurst S, Hongo K, Sheu SS, Kurihara S. Alpha1-adrenenoceptor stimulation inhibits cardiac excitation-contraction coupling through tyrosine phosphorylation of beta1-adrenoceptor. ***Biochem Biophys Res Commun.*** 433(2):188-93, **2013**. PMID: 23454381 **\* Corresponding author.**

**Impact factor:** 2.47

**Times cited:** 4

**Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. **O-Uchi J,** Jhun BS, Hurst S, Bisetto S, Gross P, Chen M, Kettlewell S, Park J, Oyamada H, Smith GL, Murayama T, Sheu SS. Overexpression of ryanodine receptor type 1 enhances mitochondrial fragmentation and Ca2+-induced ATP production in cardiac H9c2 myoblasts. ***Am J Physiol Heart Circ Physiol.*** 305(12):H1736-51, **2013**. PMID: 24124188

**Impact factor:** 3.57

**Times cited:** 27

**Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Goldenberg, I\*, Thottathil, P\*, Lopes, CM, Moss, AJ, McNitt S, **O-Uchi J**, Robinson JL, Zareba W, Ackerman MJ, Kaufman ES, Towbin JA, Vincent M, Barsheshet A. (\*Equal contribution). Trigger-specific ion-channel mechanisms, risk factors, and response to therapy in type 1 long QT syndrome. ***Heart Rhythm*.** 9(1):49-56, **2012.** PMID: 21871251

**Impact factor:** 5.076

**Times cited:** 43

**Role:** *Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Jhun BS\*, **O-Uchi, J**\*, Wang W, Ha CH, Zhao J, Kim JY, Wong C, Dirksen RT, Lopes CM, Jin ZG. (\***Equal contribution**). Adrenergic signaling controls RGK-dependent trafficking of cardiac voltage-gated L-type Ca2+ channels through PKD1. ***Circ Res.*** 110(1):59-70, **2012**. PMID: 22076634

 **Impact factor:** 15.2

 **Times cited:** 22

 **Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. **O-Uchi J**, Pan S, Sheu SS. Perspectives on: SGP symposium on mitochondrial physiology and medicine: molecular identities of mitochondrial Ca2+ influx mechanism: updated passwords for accessing mitochondrial Ca2+-linked health and disease. ***J Gen Physiol.*** 139(6):435-43, **2012.** **[Cover Image]** PMID: 22641638

 **Impact factor:** 4.788

 **Times cited:** 31

 **Role:** *Guarantor of integrity of entire study, Developed Study design, Defined intellectual content, Conducted literature research, Manuscript preparation, Manuscript editing, Manuscript review*

1. Barsheshet A\*, Goldenberg I\*, **O-Uchi J**\*, Moss AJ, Jons C, Shimizu W, Wilde AA, McNitt S, Zareba W, Robinson JL, Ackerman MJ, Cypress M, Gray DA, Hofmann, Kanters JK, Kaufman ES, Platonov PG, Qi M, Towbin JA, Vincent, GM, Lopes CM (\***Equal contribution**). Mutations in cytoplasmic loops of the KCNQ1 channel and the risk of life-threatening events: implications for mutation-specific response to β-blocker therapy in type 1 long-QT syndrome. ***Circulation.*** 125(16):1988-96, **2012.** PMID: 22456477

 **Impact factor:** 19.309

 **Times cited:** 152

 **Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Hoefen R, Reumann M, Goldenberg, I, Moss AJ, **O-Uchi J**, Gu Y, McNitt S, Zareba W, Jons C, Kanters J, Platonov P, Shimizu W, Wilde AA, Rice JJ. In Silico Cardiac Risk Assessment of Long QT type 1 patients: clinical predictability of cardiac models. ***J Am Coll Cardiol.*** 60(21):2182-91, **2012**. PMID: 23153844

 **Impact factor:** 16.834

 **Times cited:** 26

 **Role:** *Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Horr, S, Goldenberg, I, Moss, AJ, **O-Uchi, J**, Barsheshet, A, Connelly, H, Gray, DA, Zareba, W, Lopes, CM. Ion channel mechanisms related to sudden cardiac death in phenotype-negative long-QT syndrome genotype-phenotype correlations of the KCNQ1(S349W) mutation. ***J Cardiovasc Electrophysiol.*** 22(2):193-200, **2011**. PMID: 20662986

 **Impact factor:** 3.475

 **Times cited:** 7

 **Role:** *Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Jons, C\*, **O-Uchi, J**\*, Moss, AJ, Reumann, M, Rice, JJ., Goldenberg, I, Zareba, W, Wilde, AA, Shimizu, W, Kanters, JK, McNitt, S, Hofman, N, Robinson, JL, Lopes, CMB. (\*Equal contribution).Use of Mutant-Specific Ion Channel Characteristics for Risk Stratification of Long QT Syndrome Patients. ***Science Translational Medicine.*** (2011)3(76):76ra28, **2011**. **[Cover Image]** PMID: 21451124

 **Impact factor:** 16.796

 **Times cited:** 40

 **Role:** *Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Komukai K., **O-Uchi J**., Morimoto S., Kawai M., Hongo K., Yoshimura M. & Kurihara S. Role of Ca2+/calmodulin-dependent kinase II in the regulation of cardiac L-type Ca2+ current during endothelin-1 stimulation. ***Am J Physiol Heart Circ Physiol.*** 298(6):H1902-7, **2010**. PMID: 20304814

 **Impact factor:** 3.57

 **Times cited:** 16

 **Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Williams, DM, Lopes, CM, Rosenhouse-Dantsker, A, Connelly, HL, Matavel, A, **O-Uchi J**, McBeath, E, Gray, DA. Molecular basis of decreased Kir4.1 function in SeSAME/EAST syndrome. ***J Am Soc Nephrol.*** 21(12):2117-29, **2010**. PMID: 21088294

 **Impact factor:** ‎8.966

 **Times cited:** 56

 **Role:** *Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. **O-Uchi, J\***, Lopes, CM. Combined blockade of β- and α1-adrenoceptors in left ventricular remodeling induced by hypertension: beneficial or not? ***Hypertens Res***. 33(10):984-5, **2010**. PMID: 20720551 **\*Corresponding author.**

 **Impact factor:** 3.581

 **Times cited:** 4

 **Role:** *Guarantor of integrity of entire study, Developed Study design, Defined intellectual content, Conducted literature research, Manuscript preparation, Manuscript editing, Manuscript review*

1. Morimoto S., **O-Uchi J.**, Kawai M., Hoshina T., Kusakari Y., Komukai K., Sasaki H., Hongo K. & Kurihara S. Protein kinase A-dependent phosphorylation of ryanodine receptors increases Ca2+ leak in mouse heart. ***Biochem Biophys Res Commun.*** 4;390(1):87-92, **2009.** PMID: 19781523

 **Impact factor:** 2.47

 **Times cited:** 21

 **Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Matsuba D, Terui T, **O-Uchi J,** Tanaka H, Ojima T, Ohtsuki I, Ishiwata S, Kurihara S, Fukuda N. Protein kinase A-dependent modulation of Ca2+ sensitivity in fast skeletal muscle reconstituted with cardiac troponin. ***J Gen Physiol.*** 133(6):571-581, **2009.** PMID: 19433622

 **Impact factor:** 4.788

 **Times cited:** 19

 **Role:** *Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Hama T., Yuza Y., Saito Y., **O-Uchi J.,** Kondo S., Okabe M., Yamada H., Kato T., Moriyama H., Kurihara S. & Urashima M.. Prognostic significance of epidermal growth factor receptor phosphorylation and mutation in head and neck squamous cell carcinoma. ***Oncologist,*** 14(9):900-908, **2009.** PMID: 19726454

 **Impact factor:** 13.926.

 **Times cited:** 100

 **Role:** *Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. [**O-Uchi J**](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Search&itool=pubmed_Abstract&term=%22O%2DUchi+J%22%5BAuthor%5D)\*. Role of cardiac α1-adrenoceptor-subtype-induced signal transduction in the regulation of L-type Ca2+ channels. (*Japanese*). ***Journal of the Physiological Society of Japan*** 71(3):76, **2009**.

 **\*Corresponding author.**

 **Impact factor:** N/A

 **Times cited:** 0

 **Role:** *Guarantor of integrity of entire study, Developed Study design, Defined intellectual content, Conducted literature research, Manuscript preparation, Manuscript editing, Manuscript review*

1. **O-Uchi J\***, Sasaki H, Morimoto S, Kusakari Y, Shinji H, Obata T, Hongo K, Komukai K, Kurihara S. Interaction of α1-adrenoceptor subtypes with different G proteins induces opposite effects on cardiac L-type Ca2+ channel. ***Circ Res.*** 102:1378-1388, **2008**.PMID: 18467629

 **\*Corresponding author.**

 **Impact factor:** 15.2

 **Times cited:** 63

 **Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Fukuda N, **O-Uchi J,** Kurihara S. Neuronal NO synthase-derived NO: a novel relaxing factor in myocardium? ***Circ Res.*** 102(2):148-150, **2008**. PMID: 18239143

 **Impact factor:** 15.2

 **Times cited:** 3

 **Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Manuscript preparation, Manuscript editing, Manuscript review*

1. [**O-Uchi J**](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Search&itool=pubmed_Abstract&term=%22O%2DUchi+J%22%5BAuthor%5D)\*. Role of CaMKII in the excitation-contraction coupling during alpha1-adrenoceptor stimulations in mammalian heart (Japanese). ***Heart*.** 39 (12):1154, **2007**.

 **\* Corresponding author**.

 **Impact factor:** N/A

 **Times cited:** 0

 **Role:** *Guarantor of integrity of entire study, Developed Study design, Defined intellectual content, Conducted literature research, Manuscript preparation, Manuscript editing, Manuscript review*

1. Hirano S, Kusakari Y, **O-Uchi J**, Morimoto S, Kawai M, Hongo H, Kurihara S. Intracellular Mechanism of the Negative inotropic effect induced by α1-adrenoceptor stimulation in mouse myocardium. ***J Physiol Sci.*** 56(4):297-304, **2006.** PMID: 16884559

 **Impact factor:** 2.757

 **Times cited:** 17

 **Role:** *Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. [**O-Uchi J**](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Search&itool=pubmed_Abstract&term=%22O%2DUchi+J%22%5BAuthor%5D)\*, [Sasaki H](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Search&itool=pubmed_Abstract&term=%22Sasaki+H%22%5BAuthor%5D), [Kurihara S](http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Search&itool=pubmed_Abstract&term=%22Kurihara+S%22%5BAuthor%5D). Structural and functional relation of signal transduction in alpha1-adrenoceptor stimulation in cardiomyocyte. *J Electr Microsc Technol Med Biol.* 20(2):125-126, **2006**. **\* Corresponding author.**

 **Impact factor:** N/A

 **Times cited:** 0

 **Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Manuscript preparation, Manuscript editing, Manuscript review*

1. Ishikawa T, **O-Uchi J**, Mochizuki S, Kurihara S. Evaluation of the cross-bridge-dependent change in the Ca2+ affinity of troponin C in aequorin-injected ferret ventricular muscles. ***Cell Calcium.*** 37(2):153-162, **2005.** PMID: 15589995

 **Impact factor:** 3.72

 **Times cited:** 5

 **Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. **O-Uchi J\***, Komukai K, Kusakari Y, Obata T, Hongo K, Sasaki H, Kurihara S. α1-Adrenoceptor stimulation potentiates L-type Ca2+ current through Ca2+/calmodulin-dependent PK II (CaMKII) activation in rat ventricular myocytes. ***Proc Natl Acad Sci U S A.*** 102(26):9400-9405, **2005.** PMID: 15964981 **\* Corresponding author**

 **Impact factor:** 9.504

 **Times cited:** 50

 **Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. **O-Uchi J**, Komukai K, Tohyama J, Inada K, Iwano K, Yamane T, Shibata T, Mochizuki S Coronary artery spasm discovered in thorough examination of perioperative VT in a 26-year-old Japanese male. ***Jpn Heart J.*** 44(6):1021-1026, **2003**. PMID: 14711196

 **Impact factor:** 2.017

 **Times cited:** 67

 **Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Fukuda N, **O-Uchi J**, Sasaki D, Kajiwara H, Ishiwata S, Kurihara S. Acidosis or inorganic phosphate enhances the length dependence of tension in rat skinned cardiac muscle. ***J Physiol.*** 536(Pt 1):153-160, **2001.** PMID: 11579165

 **Impact factor:** 5.037

 **Times cited:** 34

 **Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

**Non-Peer-Reviewed Publications**

1. Landherr M, Polina I, Cypress MW, Chaput I, Nieto B, Jhun BS, Polina I, **O-Uchi J**\*. Supplementary materials for manuscript "SARS-CoV-2-ORF3a variant Q57H reduces its pro-apoptotic activity in host cells". ***figshare****.* Dataset, **2023**. <https://doi.org/10.6084/m9.figshare.24803106.v1>
2. Polina P, Mishra J, Cypress MW, Landherr M, Valkov N, Chaput I, Nieto B, Mende U, Zhang P, Jhun BS, **O-Uchi J\*.** Mitochondrial Ca2+ uniporter (MCU) variants form plasma-membrane channels **\*Corresponding author. *bioRxiv.*** **2023** 2:2023.07.31.551242. doi: 10.1101/2023.07.31.551242. PMID: 37577584. **\* Corresponding author.**

**Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Zhang P., Ford K, Sung JH, Suzuki Y, Landherr M, Moellaer J, Chaput I, Polina P, Kelly M, Nieto B, Tachibana T, Kusakari K, Cypress MW, Drenkova K, Adaniya SM, Mishra J, Mende U, Jhun BS, **O-Uchi J\*.** c-Src-dependent phosphorylation of Mfn2 regulates endoplasmic reticulum-mitochondria tethering ***bioRxiv.*** **2022.**02.21.481295; doi: 2022.02.21.481295 **\*Corresponding author.**

**Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. **O-Uchi J**. Mitochondrial Ca2+ and Hear Failure -HEARTʼs Column Translational Cardiology- (Japanese) ***Heart*** **2022**; 54 (3), 331-336.

**Role:** *Guarantor of integrity of entire study, Defined intellectual content, Conducted literature research, Manuscript preparation, Manuscript editing, Manuscript review*

1. **O-Uchi J.** RyR1 Mutation Associated with Malignant Hyperthermia Induces Cardiac Arrhythmia via Mitochondrial Calcium Overload. ***figshare.* C**onference contribution, **2021.** <https://doi.org/10.6084/m9.figshare.16807192.v2>
2. **O-Uchi J**. Medical Research in United State (Japanese) ***Annual Report of Centre for International Affairs of The Jikei University 2020***

**Role:** *Guarantor of integrity of entire study, Defined intellectual content, Conducted literature research, Manuscript preparation, Manuscript editing, Manuscript review*

1. **O-Uchi J**. Recent progress in Long QT syndrome research (Japanese) ***Arrhythmia News&Views*** (Life Science Publishing) **2013**.

**Role:** *Guarantor of integrity of entire study, Defined intellectual content, Conducted literature research, Manuscript preparation, Manuscript editing, Manuscript review*

1. **O-Uchi J**. Translational Research of Long QT syndrome (Japanese). ***Cardioangiology***, **2011**;70(5):511-516.

**Role:** *Guarantor of integrity of entire study, Defined intellectual content, Conducted literature*

*research, Manuscript preparation, Manuscript editing, Manuscript review*

1. **O-Uchi J.** Use of Mutant-Specific Ion Channel Characteristics for Risk Stratification of Long QT Syndrome Patients. ***Heart News and Views* 2010**; 18; 6-8.

**Role:** *Guarantor of integrity of entire study, Defined intellectual content, Conducted literature* *research, Manuscript preparation, Manuscript editing, Manuscript review*

1. **O-Uchi J.** Estimation of molecular mechanism underling CaMKII activation by cardiac alpha1-adrenocepor stimulation (Japanese). ***Annual Report of Kato Memorial Bioscience Foundation* 2009**.

**Publications in Submission or in Progress**

1. Polina P, Mishra J, Cypress MW, Landherr M, Valkov N, Chaput I, Nieto B, Mende U, Zhang P, Jhun BS, **O-Uchi J\*.** Mitochondrial Ca2+ uniporter (MCU) variants form plasma-membrane channels **\*Corresponding author. (In revision,** ***Commun. Biol. 2024*)**

**Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Zhang P., Ford K, Sung JH, Suzuki Y, Landherr M, Moellaer J, Chaput I, Polina P, Kelly M, Nieto B, Tachibana T, Kusakari K, Cypress MW, Drenkova K, Adaniya SM, Mishra J, Mende U, Jhun BS, **O-Uchi J\*.** c-Src-dependent phosphorylation of Mfn2 regulates endoplasmic reticulum-mitochondria tethering **\*Corresponding author. (In revision, *EMBO Rep 2024*)**

**Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Adhikari N Jhun BS, **O-Uchi J\***. Molecular mechanism of sudden cardiac death in malignant hyperthermia. **\*Corresponding author.** (In preparation)

 **Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Cao JL, Adaniya SM, Yang D, Jhun BS, **O-Uchi J\***. Tyrosine Phosphorylation of mitochondrial calcium uniporter regulates mitochondrial calcium uptake. **\*Corresponding author.** (In preparation)

 **Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

1. Adhikari N#, **O-Uchi J\*#**, Zhou X, Cypress MW, Iuliia Polina I, Landherr M, Chaput I, Suckow M, Choudhary G, Bong Sook Jhun BS**\***. Mitochondrial PKD Activates Mitochondrial Fission and Proliferative Signaling in Cardiac Fibroblasts. **\*Co-Corresponding authors.** **#Co-first authors** (In preparation)

**Role:** *Guarantor of integrity of entire study, Developed Study concept, Developed Study design, Defined intellectual content, Conducted literature research, Conducted experimental studies, Data acquisition, Manuscript preparation, Manuscript editing, Manuscript review*

**Chapters in Books**

1. **O-Uchi J**, Jhun BS, Polina I, Sheu SS. Organellar Ion Channels and Transporters. Cardiac Electrophysiology: From Cell to Bedside. ***Cardiac Electrophysiology: From Cell to Bedside (8th edition).*** (Elsevier), 70-84, **2021**.
2. **O-Uchi J**, Jhun BS, Mishra J, Sheu SS. Organellar Ion Channels and Transporters. Cardiac Electrophysiology: From Cell to Bedside. ***Cardiac Electrophysiology: From Cell to Bedside (7th edition).*** (Elsevier) 66-79, **2018.**
3. **O-Uchi J**, Jhun BS, Sheu SS. Structural and Molecular Basis of Mitochondrial ion channel function. ***Cardiac Electrophysiology: From Cell to Bedside (6th edition).*** (Elsevier) 71-84, **2013**

**Patents**

1. (WO2012154452) STRATIFICATION, THERAPIES, TARGETED TREATMENT AND PREVENTION OF LIFE-THREATENING VENTRICULAR TACHYA

Inventors: MOSS, Arthur, J.; (US); GOLDENBERG, Ilan; (IL); **OUCHI, Jin**; (US); BASTOS LOPES, Coeli Maria; (US); SHESHET, Alon, Eli Bar; (US)

**Presentations**

**Invited Oral Presentations at International Professional Meetings, and Conferences**

1. **O-Uchi, Jin.** “Mitochondrial calcium uniporter complex and its physiological and pathological roles in the heart” Symposium ”New horizons in cardiorenal ion transport”, The Pan-American Physiological Sciences 2023 (PANAM Physiological Sciences 2023), November 28th, 2023, Puerto Varus, Chilie.
2. **O-Uchi, Jin.** “Use of Magnesium for Preventing Cardiac Damages by SARS-CoV-2” XVI International Magnesium Symposium, “Magnesium in Health and Disease”, International Society for the Development of the Research on Magnesium. June 23rd, 2022, Glasgow, Scotland, UK (online meeting).
3. **O-Uchi, Jin.** “Magnesium Supplementation for preventing sudden cardiac death by COVID-19 viroporins in patients with pre-existing hypertension” Global Mg Research Meeting, Center for Magnesium Education and Research and the International Society for the Development of Research on Magnesium (SDRM). September 23rd 2020, Pahoa, HI USA (online meeting).
4. **O-Uchi, Jin.** “Sudden cardiac Death in Malignant Hyperthermia” The 5th China Wine City International Cardiovascular Congress in 2019, Southwest Medical University and its affiliated Institute of Cardiovascular Research. June 9, 2019, Luzhou City, Sichuan, China.
5. **O-Uchi, Jin.** "Role of mitochondrial calcium in cardiac pathophysiology" Graduate Student Seminar, Chungnam National University, College of Pharmacy, March 12, 2019, Daejeon, South Korea.
6. **O-Uchi, Jin.** "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, June 3, 2017. Tokyo, Japan.
7. **O-Uchi, Jin.** "Physiological role of mitochondrial calcium homeostasis in the heart" Basic Medical Science Seminar. Department of Cell Physiology, The Jikei University School of Medicine, June 2, 2017. Tokyo, Japan.
8. **O-Uchi, Jin.** “Post-translational modification of mitochondrial Ca2+ uniporter mediates mitochondrial Ca2+ overload and cell death in the heart” 4th Cardiovascular Forum for Promoting Centers of Excellence and Young Investigators, International Academy of Cardiovascular Sciences North American Section, September 23, 2016, Sherbrooke QC, Canada.
9. **O-Uchi, Jin.** “Phosphorylation of mitochondrial Ca2+ uniporter regulates mitochondrial Ca2+ 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, North American Section, September 5, 2014, Winnipeg, MB, Canada.
10. **O-Uchi, Jin.** “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, February 27, 2013, Tokyo, Japan.
11. **O-Uchi, Jin.** “Tyrosine kinase activated by α1-adrenergic stimulation inhibits cardiac contractility by directly phosphorylating β1-adrenoceptor” Invited Lecture, The 88th Annual Meeting of the Physiological Society of Japan, March 28, 2011, Yokohama, Japan.
12. **O-Uchi, Jin.** “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, March 18, 2011, Yokohama, Japan.
13. **O-Uchi, Jin.** “Novel Strategy of Risk Stratification for Long QT Syndrome Patients” CIMS-COM 2011, February 5, 2011, Ahmedabad, India.
14. **O-Uchi, Jin.** “Regulation of Slow delayed rectifier K+ current by PKC isoforms” 4th World Congress International Academy of Cardiovascular Sciences February 1, 2011, Vadodara, India.
15. **O-Uchi, Jin.** “Novel Strategy of Risk Stratification for Long QT Syndrome Patients.” International Academy of Cardiovascular Sciences Japan Section Meeting, July 3-4, 2010, Tokyo, Japan.
16. **O-Uchi, Jin.** “Use of Mutant-Specific Ion Channel Characteristics for Risk Stratification of Long QT Syndrome Patients.” 10th International Society for Heart Research World Congress, May 14, 2010, Kyoto, Japan.
17. **O-Uchi, Jin.** “Structural and functional relation of signal transduction in alpha1-adrenoceptor stimulation in cardiomyocytes” 5th International Symposium on Electron Microscopy in Medicine and Biology, September 2005, Shijiazhuang, Republic of China.

**Invited Oral Presentations at National Professional Meetings, and Conferences**

1. **O-Uchi, Jin.** “ER-Mitochondria Calcium Transport and Cardiac Fibrosis” The 6th Asian Cardiovascular Symposium (ACS), Academy of Cardiovascular Research Excellence (ACRE), July 21st, 2024, Chicago, IL.
2. **O-Uchi, Jin.** “Role of Mitochondrial Ca2+ and ROS for Cardiac Fibrosis” Center Seminar, Center for Translational Medicine, Department of Medicine, Thomas Jefferson University. July 15th, 2024, Philadelphia PA.
3. **O-Uchi, Jin.** “Role of Mitochondrial Tyrosine Kinases in Cardiac Health and Disease.” Department Seminar, Department of Biomedical Sciences, Marshall University. June 12th, 2024, Huntington, WV.
4. **O-Uchi, Jin** “Role of MCU variants in platelets activation.” Center Seminar, Sol Sherry Thrombosis Research Center, Department of Cardiovascular Sciences, Temple University, June 5th, 2024, Philadelphia PA,
5. **O-Uchi, Jin.** “Role of mitochondrial calcium and ROS in right ventricular fibrosis“, Center seminar Hypertension and Kidney Center, University of South Florida. April 18th, 2024, Tampa, FL.
6. **O-Uchi, Jin.** “ER-Mitochondrial Calcium transport and right ventricular fibrosis”, APS foundation Science Workshop “Novel Ion Transport Mechanisms in Cardiac Remodeling and Arrhythmias” at American Physiological Society Summit, April 6nd, 2024, Long Beach CA.
7. **O-Uchi, Jin.** “Novel Variants of Mitochondrial Calcium Uniporter (MCU) and their Physiological and Pathological Roles" Department of Physiology Research Seminar Series, Department of Physiology, Medical College of Georgia, Augusta University, Feb 9th, 2023, Augusta, GA.
8. **O-Uchi, Jin.** " COVID-19 viroporins and the heart" CVRI Data Club, Cardiovascular Research Center, Rhode Island Hospital, Feb 3rd, 2021, Providence, RI (online meeting).
9. **O-Uchi, Jin.** "Role of mitochondrial calcium in the heart" Deportment Seminar, Department of Biology, Providence College, October 22nd, 2020, Providence, RI (online meeting).
10. **O-Uchi, Jin.** "Phosphorylations in the Termini of Mitochondrial Calcium Uniporter Regulate Mitochondrial Calcium Uptake" APS Featured Topics Symposium: Ion Channels, Solute and Molecular Transporters In Heath and Disease, Experimental Biology Annual Meeting, American Physiological Society Cell and Molecular Physiology Section, April 9, 2019. Orlando FL.
11. **O-Uchi, Jin.** "Targeting mitochondrial calcium as novel antioxidant therapy for cardiovascular diseases" Renal Grand Rounds, Division of Nephology, Department of Medicine, Medical University of South Carolina, March 2019, Charleston, SC.
12. **O-Uchi, Jin.** Role of Mitochondrial Calcium and ROS in Cardiac Fibroblast Proliferation Under the Early Postnatal Heart Development” Fifth Annual Neonatal Cardiopulmonary Biology Young Investigators Forum, September 7, 2018, Chicago, IL
13. **O-Uchi, Jin.** “Physiological and pathophysiological role of mitochondrial calcium in the heart” Department Seminar, Department of Biochemistry and Molecular Biology, Michigan State University, October 5th, 2017, East Lancing, MI.
14. **O-Uchi, Jin.** “Mitochondrial Ca2+ Uniporter as a Potential Target for the Treatment of Cardiovascular Diseases" Special Lecture, Lillehei Heart Institute, University of. July 7, 2017, Minneapolis, Minnesota.
15. **O-Uchi, Jin.** “Mitochondrial Ca2+ homeostasis as potential target for the treatment of cardiovascular diseases" Department Seminar, Department of Anesthesiology, University of Maryland School of Medicine, June 20th, 2017, Baltimore, MD.
16. **O-Uchi, Jin.** “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 and Midwest Section of the American federation for Medical Research, April 21, 2017, Chicago, IL.
17. **O-Uchi, Jin.** “Mitochondrial Ca2+ homeostasis as potential target for the treatment of cardiovascular diseases” Cardiac and Vascular surgery Division seminar, Cardiovascular Research Institute, Loyola University, April 19, 2017, Chicago, IL
18. **O-Uchi, Jin.** "Physiological and pathophysiological role of mitochondrial calcium influx mechanism" Department Seminar Series. Department of Regenerative Medicine and Cell Biology, Medical University of South Carolina, Nov 9, 2016, Charleston, SC.
19. **O-Uchi, Jin.** “Characterization of the cardiac phenotype of malignant hyperthermia-associated mutation of RyR1” Society of General Physiologists 69th Annual Meeting and Symposium,. September 18, 2015, Woods Hole, MA.
20. **O-Uchi, Jin.** “Pyk2-Dependent Phosphorylation of Mitochondrial Ca2+ Uniporter Modulates Mitochondrial Ca2+ Uptake” Experimental Biology Annual Meeting: American Physiological Society Cell and Molecular Physiology Section, March 29, 2015, Boston MA.
21. **O-Uchi, Jin.** “Adrenergic Regulation of Mitochondrial Ca2+ Handling: Cardiac Physiology and Pathophysiology” CVRC Data Club, Cardiovascular Research Center, Rhode Island Hospital, Alpert Medical School of Brown University, March 27, 2015, Providence RI.
22. **O-Uchi, Jin.** “Molecular Mechanism of Mitochondrial Ca2+ Influx: Cardiac Physiology and Pathophysiology” Departmental Seminar, Department of Anesthesiology, Medical College of Wisconsin,. February 20, 2015, Milwaukee WI.
23. **O-Uchi, Jin.** “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, April 15, 2013, Chicago, IL.
24. **O-Uchi, Jin.** “CaMKII: an important modulator of cardiac L-type Ca2+ channels in alpha1-adrenoceptor stimulation.” PSJ seminar, The 85th Annual Meeting of the Physiological Society of Japan,. March 26, 2008, Tokyo, Japan.
25. **O-Uchi, Jin.** “Intracellular regulatory mechanisms of L-type Ca2+ channel by alpha1-adrenoceptor stimulation in mammalian ventricular myocytes” Annual symposium of National Institute for Physiological Sciences “Ion channels and Transporters in Cardiovascular Science,” Okazaki, Japan December 12, 2007, Okazaki, Japan.

**Invited Oral Presentations at Regional Professional Meetings, and Conferences**

1. **O-Uchi, Jin.** “Endoplasmic Reticulum-Mitochondria Contact Sites and Cardiac Fibrosis" LHI Lecture Series, Department of Medicine, University of Minnesota, April 17, 2024, Minneapolis, MN.
2. **O-Uchi, Jin.** "Potential Impacts of SARS-CoV-2 on Cardiac Function." LHI Lecture Series, Department of Medicine, University of Minnesota, February 16, 2022, Minneapolis, MN.
3. **O-Uchi, Jin.** “Cardiac Complications with COVID-19" M Health Fairview Grand Rounds, M Health Fairview/St. John’s Hospital, December 16th 2021, Minneapolis, MN (Online Meeting).
4. **O-Uchi, Jin.** “How can we protect COVID-19 patients with pre-existing cardiovascular diseases from sudden cardiac death?" 2nd CIG event, Cardiology Interest Group, University of Minnesota Medical School, October 22nd 2020, Minneapolis, MN (Online Meeting).
5. **O-Uchi, Jin.** “Sudden Cardiac Death and Mitochondrial Calcium" LHI Lecture Series, Department of Medicine, University of Minnesota, February 12, 2019, Minneapolis, MN.
6. **O-Uchi, Jin.** "Molecular Mechanism underlying Sudden cardiac Death in Malignant Hyperthermia" DOM Research Seminar Series, Department of Medicine, University of Minnesota,. September 16, 2019, Minneapolis, MN.
7. **O-Uchi, Jin.** "Mitochondrial Calcium Handling: Cardiac Physiology and Pathophysiology" IBP Seminar Series, Department of Integrative Biology & Physiology, University of Minnesota, February 14, 2019, Minneapolis, MN.
8. **O-Uchi, Jin.** "Regulation of Mitochondrial Calcium Uptake in the Heart”. Cardio Palooza 10. Department of Integrative Biology & Physiology, University of Minnesota, July 24, 2018, Minneapolis, MN.
9. **O-Uchi, Jin.** "Malignant hyperthermia-associated mutation of leaky RyR1 and mitochondrial damage in the heart”. CVRC Data Club. Cardiovascular Research Center, Department of Medicine, Rhode Island Hospital, Brown University, January 24, 2018, Providence, RI.
10. **O-Uchi, Jin.** “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, October 30, 2017, Providence RI.
11. **O-Uchi, Jin.** "Mitochondrial calcium homeostasis as potential target for cardiovascular medicine" CardioPlumonary Vascular Biology COBRE seminar, Ocean State Research Institute, Providence VA Medical Center, April 7, 2017, Providence RI.
12. **O-Uchi, Jin.** "Role of mitochondrial calcium and ROS in the heart development and remodeling" Pediatric Research Colloquium, Women & Infant Hospital, April 7, 2017, Providence RI.
13. **O-Uchi, Jin.** "Physiological role of mitochondrial calcium influx mechanism" CVRC Data Club. Cardiovascular Research Center, Department of Medicine, Rhode Island Hospital, Brown University, January 11, 2017, Providence RI.
14. **O-Uchi, Jin.** “Mitochondrial Ca2+ and ROS in the heart” Vascular Research Lab meeting, Providence Veterans Affairs Medical Center, June 16, 2016, Providence RI.
15. **O-Uchi, Jin.** “Role of Mitochondrial Ca2+ and ROS in the heart” MPPB Department Seminar Series, Department of Molecular Pharmacology, Physiology and Biotechnology, Brown University, May 13, 2016, Providence RI.
16. **O-Uchi, Jin.** "Molecular and functional regulation of mitochondrial calcium uptake" CTM Seminar Series, Center for Translational Medicine, Department of Medicine, Thomas Jefferson University, December 17, 2015, Philadelphia, PA.
17. **O-Uchi, Jin.** “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, February 5, 2013, Philadelphia, PA.
18. **O-Uchi, Jin.** “Estimation of molecular mechanism underling CaMKII activation by cardiac alpha1-adrenocepor stimulation” Annual meeting of Kato Memorial Bioscience Foundation, March 2, 2007.
19. **O-Uchi, Jin.** “Regulation of Cardiac Ca channels by adrenergic stimulation.”The 1st Sophia-Jikei Biomedical Science Joint Symposium, Tokyo, Japan. November 11, 2006, Tokyo, Japan.

**Peer-reviewed Oral Presentations at Professional Meetings, and Conferences.**

1. Kelly M, Nieto B, Cypress MW, Yang B, Chandran S, Rhee B, Dugan M, Suckow MA, Jhun BS, **O-Uchi J**. c-Src activates cardiac fibroblasts and promotes right ventricular fibrosis in pulmonary arterial hypertension. J. Investig. Med. 2024 (in Press) **(Selected for CSCTR Trainee Abstract Award)**.
2. Jhun BS, Nieto B, Cypress MW, Yang B, Suckow MA, **O-Uch J**. c-Src facilitates ER-to-mitochondria Ca2+ transport and activates cardiac fibroblasts under pulmonary arterial hypertension. *Physiology* 2024 (in Press) **(Selected for APS Featured Topics Symposium).**
3. Jhun BS, **O-Uchi J**. Inhibition of mitochondrial protein kinase D protects right ventricles from cardiac fibrosis and dysfunction under pulmonary arterial hypertension. The Pan-American Physiological Sciences 2023 (PANAM Physiological Sciences 2023) (in Press)
4. Polina I, Guo Y, Jhun BS, Tolkacheva EG, **O-Uchi J**. SARS-CoV-2 ORF3a causes cellular damage and electrophysiological dysfunction in cardiomyocytes. *J Mol Cell Cardiol.* 2023 (in press)
5. Kelly M, Polina P, Nieto B, Jhun BS, **O-Uchi J**. Phosphorylations of mitochondrial calcium uniporter in the heart failure. J. Investig. Med. 67;5. 2023 **(Selected for CSCTR Oral Abstract Award)**
6. Nieto B, **O-Uchi J**, Cypress MW, Landherr M, Chaput I, Polina I, Suckow M, Jhun BS. Role of mitochondrial PKD on right ventricular fibrosis under pulmonary hypertension. *Physiology* 2023
38;S1 https://doi.org/10.1152/physiol.2023.38.S1.5733278 **(Selected for APS Featured Topics Symposium)**
7. Chaput I, Cypress MW, Landherr M, Polina I, Yoon Y, Bong Sook Jhun BS, Choudhary G, **O-Uchi J**. A Ca2+-activated Cl- Channel Anoctamin-1 Regulates Mitochondrial Morphology. *FASEB J* S1.R4128, 2022 **(Selected for APS Featured Topics Symposium)**
8. Zhou X, Adhikari N, Cypress MW, Iuliia Polina I, Landherr M, Chaput I, Suckow M, Choudhary G, **O-Uchi J**, Bong Sook Jhun BS. Mitochondrial PKD Activates Mitochondrial Fission and Proliferative Signaling in Cardiac Fibroblasts. *FASEB J* 36.S1.R6274, 2022 **(Selected for APS Featured Topics Symposium)**
9. Adhikari N, Vasanth Rajkumar V, Jhun BS, Talkachova A, **O-Uchi J**. RyR1 mutation associated with malignant hyperthermia induces cardiac arrythmia via mitochondrial calcium overload. *FASEB J* 2021, 35.S1.04146 **(Selected for APS Featured Topics Symposium)**
10. Polina I, Guo Y, Jhun BS, Tolkacheva EG, **O-Uchi J**. Expression of SARS-CoV-2 Viroporins Triggers Cardiac Arrhythmia. *FASEB J* 2021, 35.S1.04486 **(selected for APS Featured Topics Symposium)**
11. Zhou HD, Polina I, Cypress MW, Jhun BS, Zhang P, **O-Uchi J**. Role of Src-Dependent Phosphorylation of Mitofusin 2 in the Endoplasmic Reticulum-Mitochondria Tethering. *FASEB J* 2021, 35.S1.02460 **(Selected for APS Featured Topics Symposium)**
12. Dileepan G, Polina I, Cypress M, Suzuki Y, Adhikari N, Jhun BS, **O-Uchi J**. Role of Src homology/collagen adaptor protein p66Shc in Pyk2 translocation into mitochondria under Gq protein–coupled receptor stimulation. *FASEB J* 2020; 34.s1.07016.  **(Selected for APS Featured Topics Symposium)**
13. **O-Uchi J**, Cao JL, Adaniya SM, Jhun BSJ, Sheu SS.Phosphorylations in the Termini of Mitochondrial Calcium Uniporter Regulate Mitochondrial Calcium Uptake. *FASEB J*., 2019. vol. 33 Issue. 1 Supplement 824.24.
14. Cao JL, Adaniya SM, Landi AK, Yang D, Jhun BS, Sheu SS, **O-Uchi J**. Role of Tyrosine Phosphorylation of Mitochondrial Calcium Uniporter in Regulating Mitochondrial Calcium Homeostasis. *Biophys J.* 114(3):44a, 2018**.**
15. **O-Uchi J**, Mishra J, Jhun BS, Sheu SS. Malignant hyperthermia-associated mutation of leaky RyR1 induces mitochondrial damage in the heart. *J Investig Med.* 65; 810, 2017.
16. **O-Uchi J**, Mishra J, Jhun BS and Sheu SS. Malignant hyperthermia-associated mutation of RyR1 induces mitochondrial Ca2+ overload in the cardiomyocytes. *FASEB J* 2017. vol. 31no.1 Supplement 1080.5.
17. Murphy KR, Lu YC, **O-Uchi J**, Terentyev D Koren G. The Role of Autophagy in Aged Cardiomyocyte Arrhythmogenesis. *FASEB J*., 2017. vol. 31 no. 1 Supplement 1080.4.
18. **O-Uchi J.** Post-translational modification of mitochondrial Ca2+ uniporter mediates mitochondrial Ca2+ overload and cell death in the heart. *Can J Physiol Pharmacol*., 2016.
19. Hurst S, Gomez L, [Jhun BS,](http://www.fasebj.org/search?author1=Bong+Sook+Jhun&sortspec=date&submit=Submit) **O-Uchi J**, Sheu SS. Truncation of GSK-3β in Cardiac Mitochondria is the Master Switch of the mPTP. *FASEB J.* 29(1); 979.3, 2015.
20. **O-Uchi J**, [Mishra](http://www.fasebj.org/search?author1=Jyotsna+Mishra&sortspec=date&submit=Submit) J, [Jhun BS,](http://www.fasebj.org/search?author1=Bong+Sook+Jhun&sortspec=date&submit=Submit)  Hurst S, Fu D, Gomez L, Sheu SS. Characterization of the cardiac phenotype of malignant hyperthermia-associated mutation of RyR1. J Gen Physiol 146:264 2015.
21. Parks XX, Ronzier E, Abraham RE, **O-Uchi J,** Lopes CM. Statin Inhibits IKs Internalization in Response to Prolonged Stress Stimulus. *Biophys J.* 108(2): 349a, 2015.
22. **O-Uchi J**, Smith GL, Dirksen RT, Wang W, Rizzuto R, Sheu SS. Phosphorylation of mitochondrial Ca2+ uniporter regulates mitochondrial Ca2+ uptake and apoptotic cell death in cardiomyocytes *Curr Res Cardiol* 1(1):50, 2014.
23. **O-Uchi J**, Porter GA Jr, Kang SH, Boncompagni S, Sokolova N, Gross P, Jhun BS, Beutner G, Brookes P, Blaxall BC, Dirksen RT, Protasi F, Pan S, Sheu SS. Malignant hyperthermia mutation of RyR1 (Y522S) increases catecholamine-induced cardiac arrhythmia through mitochondrial injury. Circ Res. 111:4 Supplement A370, 2012.
24. Lopes CMB, Hoefen R, Reumann M, **O-Uchi J**, Moss AJ, Jons C, McNitt S, Zareba W, Rice JJ, Goldenberg I. *In Silico* Cardiac Risk Assessment of Long QT Patients: Clinical Predictability of Cardiac Models. *Circulation.* 2011;124:A12787.
25. **O-Uchi, J,** Lopes, CMB. Calcium-Dependent PKC Activation Inhibits Slow Repolarizing Cardiac Current by Decreasing Ion Channel Membrane Expression. *Circulation.* 2011;124:A16072.
26. **O-Uchi, J**., Lopes, C.M.B. Regulation of Slow delayed rectifier K+ current by PKC isoforms. *Exp Clin Cardiol.,* 2011.
27. **O-Uchi, J**., Barsheshet, A., Jons, C., Moss, A.J.,Lopes, C.M.B. Novel Strategy of Risk Stratification for Long QT Syndrome Patients. *Exp Clin Cardiol.,* 2011.
28. Pan S, Wang N, Sun P, Sokolova N, Gross P, **O-Uchi J**, Sheu SS. Ca2+ uptake by cardiac mitochondria under mitochondrial Ca2+ uniporter inhibition. *J Gen Physiol.* 2011;138:74A.
29. **O-Uchi, J.**, Kusakari, Y., Fujiwara, E., Komukai, K., Morimoto,S., Kawai, M., Hongo, K., Komukai, K., Lopes, C.M.B., Kurihara, S. Tyrosine kinase activated by α1-adrenergic stimulation inhibits cardiac contractility by directly phosphorylating β1-adrenoceptor. *J Physiol Sci.* 2011.
30. **O-Uchi, J.**, Barsheshet, A., Jons, C., Moss, A.J.,Lopes, C.M.B. Risk Stratification and Treatment for Long QT Syndrome Type1 Patients-Combination Analysis of Clinical Information and Cellular Electrophysiology-. *Circ J.* 2011.
31. **O-Uchi, J.**, Lopes, C.M.B. cPKC-activation of KNCQ1/KCNE1 channel is impaired in Long QT type 1. *Biophys J*. 100(3), 2011.
32. Barsheshet, A., Goldenberg, I., **O-Uchi, J.**, Moss, A.J., Jons, C., Shimizu, W., Wilde, A.M., McNitt, S., Zareba, W., Robinson, J.L., Ackerman, M.J., Kanters, J.K., Kaufman, E.S., Platonov, P.G., Qi, M., Towbin, J.A., Vincent, G.M., Lopes, C.M.B. Mutations in Cytoplasmic Loops are Associated with Increased Risk for Cardiac Events in Type-1 Long QT Syndrome. *Circulation,* 122: A13466, 2010.
33. **O-Uchi, J.**, Barsheshet, A., Rice, J.J., Goldenberg, I., Moss, A.J., Lopes, C.M.B. Impaired KNCQ1/KCNE1 activation by α-AR is associated with emotion/arousal triggered events in Long QT syndrome type 1. *Upstate New York Cardiac Electrophysiology Society* Suppl, 2010.
34. **O-Uchi, J.**, Jons, C., Moss, A.J., Lopes, C.M.B. Novel Strategy of Risk Stratification for Long QT Syndrome Patients. Exp Clin Cardiol., 15: 21, 2010.
35. Hongo,K., Morimoto, S., **O-Uchi, J.**, Kusakari, Y., Urashima, T., Date, T., Komukai, K., Kawai, M., Ohnuki, Y., Saeki, Y., Morimoto, S., Yoshimura, M., Kurihara, S. Role of renin-angiotensin system in heart failure due to decreased Ca2+ sensitivity of the myofilament. J Mol Cell Cardiol. 2010.
36. Morimoto, S., **O-Uchi, J.**, Kawai, M., Hoshina, T., Kusakari, Y., Komukai, K., Sasaki, H., Hongo, K., Kurihara, S. Protein kinase A–dependent phosphorylation of ryanodine receptors is important for the increase in Ca2+ leak from sarcoplasmic reticulum in mouse heart . J Mol Cell Cardiol. 2010.
37. Komukai, K., **O-Uchi, J.**, Hongo, K., Kawai, M., Morimoto, S., Yoshimura, M., Kurihara, S. Factors modulating the effect of endothelin-1 on L-type Ca2+ current. Circ J. 74 (Suppl.I):742, 2010.
38. **O-Uchi, J.**, Jons, C., Moss, A.J., Goldenberg, I., Zareba, W., Wilde, A.A., Shimizu, W., Kanters, J.K., McNitt, S., Robinson, J.L., Lopes, C.M.B.: Slow Rate of Ion Channel Activation Identifies High Cardiac Risk for Type 1 Long QT Syndrome Patients With Moderate QTc Prolongation. Circulation. 120: S660 - S661, 2009.
39. Komukai, K., **O-Uchi, J.**, Morimoto, S., Kawai, M., Hongo, K., Yoshimura, M., Kurihara, S.: Endothelin-1 Increases L-type Ca Current of Rat Ventricular Myocytes via an Activation of Protein Kinase C and Ca/calmodulin Dependent Protein Kinase II. Circulation. 120: S695, 2009.
40. **O-Uchi, J.**, Fujiwara, E.M., Matavel, A., Lopes, C.M.B.: Classic PKC facilitates IKs voltage dependence of activation through phosphorylation of an isoform specific site in the KCNE1 subunit *Upstate New York Cardiac Electrophysiology Society* Suppl:5, 2009.
41. **O-Uchi, J.**, Komukai, K., Morimoto,S., Kawai, M., Hongo, K., Kurihara, S.: Cardiac Alpha1a-adrenoceptor Stimulation Inhibits L-type Ca2+ Current In The Presence Of Beta-adrenoceptor Stimulation Through Tyrosine Kinase. Biophys J. 96(3) pp. 222a, 2009.
42. **O-Uchi, J**., Kurihara, S. CaMKII: an important modurator of cardiac L-type Ca2+ channels in α1-adrenoceptor stimulation. *J Physiol Sci*. 58:S45, 2008.
43. Komukai, K., **O-Uchi, J.**, Morimoto,S., Kawai, M., Hongo, K., Kurihara, S. Endotherine-1 increase L-Type Ca current via an activation of Ca/calmodulin-dependent kinase II in rat ventricular myocytes. *Circ J.* 72:214, 2008.
44. **O-Uchi J**, Kurihara S. Alpha1A-adrenoceptor Stimulation Inhibits L-type Ca2+ Current in the Presence of β-adrenoceptor Stimulation in Rat Ventricular Myocytes. *Upstate New York Cardiac Electrophysiology Society* (Suppl.):6, 2008.
45. Komukai, K., **O-Uchi, J.**, Morimoto, S., Kawai, M., Hongo, K., Kurihara, S. Effect of endothelin-1 on L-type Ca current in rat ventricular myocytes. J. Card Fail. 13: S36, 2007.
46. Hongo K, Morimoto S, Kawai M, Komukai K, **O-Uchi J,** Kusakari Y, Morimoto S, Kurihara S. Altered Ca2+ handling could contribute to the cardaic sudden death in knock-in mouse of dilated cardiomyopathy. Exp Clin Cardiol., 12(2): 100–106. 2007**.**
47. **O-Uchi J**, Sasaki H and Kurihara S. Intracellular regulation mechanisms of the changes in L-type Ca2+ channel induced by alpha1-adrenoceptor stimulation. Exp Clin Cardiol., 11(2):141, 2006
48. **O-Uchi, J**., Kurihara, S. L-type Ca2+ current is regulated via both PTX-sensitive and -insensitive pathways during apha1-adrenoceptor stimulation. J Mol Cell Cardiol. 40:890-891, 2006.
49. **O-Uchi, J.**, Komukai, K., Kusakari, Y., Obata, T., Hongo, K., Sasaki, H., Kurihara, S. CaMKII is involved in L-type Ca2+ current potentiation induced by alpha1-adrenoceptor stimulation in rat ventricular myocytes. Exp Clin Cardiol. 10:131, 2005.
50. **O-Uchi, J.**, Komukai, K., Kusakari, Y., Morimoto, S., Kawai, M., Hongo, K., Kurihara, S. Opposite effects of α1A-and α1B-adrenoceptor stimulation on L-type Ca2+ current through different signaling pathways in rat ventricular myocytes. J Mol Cell Cardiol. 39:1009, 2005.
51. **O-Uchi, J.**, Komukai, K., Tohyama, J., Inada, K., Iwano, K., Yamane, T., Shibata, T., Mochizuki, S. Coronary artery spasm discovered in thorough examination of perioperative VT in a young man (Japanese). Circ J. 67(Suppl.III):912, 2003.
52. **O-Uchi, J.**, Maruyama, Y., Ikeda, M., Yamamoto, Y., Nakayama, M., Hosoya, T. Acute heart failure caused by exacerbation of chronic renal failure due to malignant hypertension treated by ACEI (Japanese) The Journal of the Japanese Society of Internal Medicine (Kanto section, 2001.10) (Suppl.): 25, 2001.

**Poster Abstract Presentations at Professional Meetings, and Conferences**

* 1. Dugan M, Cypress MW, D’Silva N, Zhang P, Nieto B, Chandran S, Rhee B, O-Uchi J, Chaudhary G, Jhun BS. Expression of a Ca2+-activated chloride channel anoctamin-1 in the mitochondria induces cell proliferation. J. Investig. Med. 2024 (in Press) **(Selected for CSCTR Trainee Abstract Award).**
	2. Yang B, Cypress MW, Nieto B, Jhun BS, O-Uchi J. Genetic enhancement of mitochondrial Ca²⁺ buffering capacity prevents apoptotic signaling activation in response to cytosolic Ca²⁺ elevation **(Selected for APS Barbara A. Horwitz and John M. Horowitz Undergraduate Research Award)**.

 *Physiology* 2024 (in press).

Nieto B, Cypress MW, Chandran S, Dugan M, **O-Uchi J**, Jhun BS. Genetic modification of cardiac fibroblasts in adult rats using adeno-associated virus serotype 9. *Physiology* 2024 (in press).

* 1. **O-Uchi J**, Jhun BS. Short MCU variant forms plasma-membrane calcium pathway in the platelets. The Pan-American Physiological Sciences 2023 (PANAM Physiological Sciences 2023) (in Press)
	2. Jhun BS, Cypress MW, Nieto B, **O-Uchi J**. Novel Variants of Mitochondrial Calcium Uniporter Form Plasma-Membrane Channels in Human Platelets (Selected for Late-Breaking Basic science in AHA 2023 Annual Meeting). Circulation 2023 (in press).
	3. Polina P, Chaput I, Landherr M, Cypress MW, Bong Sook Jhun BS, Choudhary G, **O-Uchi J**. Role of a novel MCU variant in Ca2+ handling in human platelets. *Physiology* 2023 38:S1. https://doi.org/10.1152/physiol.2023.38.S1.5733260
	4. Chaput I, Kelly M, Landherr M, Polina I, Nieto B, Cypress MW, Jhun BS, Zhang P, **O-Uchi J**. Role of tyrosine phosphorylation of Mfn2 in endoplasmic reticulum-mitochondria coupling. *Physiology* 2023 38:S1. DOI: 10.1152/physiol.2023.38.S1.5733327
	5. Landherr M, **O-Uchi J**, Cypress MW, Chaput I, Jhun BS, Polina I. Impact of ORF3a-Q57H variant of SARS-CoV-2 on apoptotic signaling cascades. *Physiology* 2023 38:S1. https://doi.org/10.1152/physiol.2023.38.S1.5732631
	6. Nieto B, Cypress MW, **O-Uchi J**, Jhun BS. AAV-mediated gene expression and deletion in cardiac fibroblasts in vivo. *Physiology* 2023 38:S1. https://doi.org/10.1152/physiol.2023.38.S1.5733613
	7. Landherr M, Cypress MW, Chaput I, Jhun BS, **O-Uchi J**, Polina I. Variation in ORF3a Protein of SARS-CoV-2 Decreases The Severity of Host Cell Damage. *FASEB J* 36.S1.R4149*,* 2022
	8. Liu M, Liu H, Kang GJ, Feng F, **O-Uchi J**, Dudley SC. TRPM7 Mediates Hypomagnesemia-Induced Mitochondrial Dysfunction, Diastolic Heart Failure, and Death. *Circulation*, Volume 144, Issue Suppl\_116, 2021
	9. Xie A, Kang GJ, Kim EJ, Polina I, Feng F, Jhun BS, **O-Uchi J**, Dudley SC. C-Src Contributes to Mitochondrial Ca2+ Uniporter Increase and Arrhythmic Risk in Ischemic Cardiomyopathy. *Circulation*, Volume 144, Issue Suppl\_116, 2021
	10. Novel approach for the electrophysiological characterization of mitochondrial calcium uniporter. *FASEB J* 35.S1.04486Cypress MW, Vang A, Thompson H, Fernandez-Nicolas A, Mancini T, Jhun BS, Clements RT, Choudhary G, **O-Uchi J**. *FASEB J* 2021, 35.S1.04443
	11. Polina I, Xie A, Mishra J, Adhikari N, Clements R, Jhun BS, Dudley S, **O-Uchi J**. Novel approach for the electrophysiological characterization of mitochondrial calcium uniporter. *FASEB J* 35.S1.04486
	12. Cypress MW, Vang A, Thompson H, Fernandez-Nicolas A, Mancini T, Jhun BS, Clements RT, Choudhary G, **O-Uchi J**. Ca2+-Activated Cl- Channel Anoctamin-1 Interacts with Mitochondrial Fusion Protein OPA1. *FASEB J* 2021, 35.S1.04443
	13. Polina I.A, Guo Yu, Cypress MW, Tolkacheva E.G, Jhun B.S, **O-Uchi J**. Expression of SARS-CoV-2-ORF3a protein induces cardiomyocyte damage Biophys J. 2022; 121 (3):237a.
	14. Xie A, Kang GJ, Kim EJ, Ploina I, Fenf F, Jhun BS, **O-Uchi J**, Dudley SC. C-src Phosphorylates the Mitochondrial Ca2+ Uniporter in Nonischemic Cardiomyopathy. *Circulation*. 2020; 142:A13033
	15. **O-Uchi J**, Jhun BS. Clinical FAK/PYK2 Inhibitor Protects Cardiomyocytes From ROS Overproduction and Apoptotic Cell Death Under Adrenergic Stimulation. *J Investig Med.* 2020;68:1034.
	16. Polina I, Mishra J, Xie A, Adhikari N, Jhun BS, Dudley S, **O-Uchi J**. Transcript variant of MCU protects mitochondira from Ca2+ overload and ROS overproduction in cardiac myocytes *J Investig Med.* 2020;68:1037.
	17. Sung JH, Ford KA. Moeller J, Suzuki Y, Cypress MW, Jhun BS, **O-Uchi J**, Zhang P. Phosphorylation of Mitofusin 2 Regulates Endoplasmic Reticulum-Mitochondrial Calcium Coupling. *FASEB J* 2020; 34.s1.08911.
	18. Cypress MW, Vang A, Fernandez-Nicolas A, Mancini T, Jhun BS, Clements RT, Choudhary G, **O-Uchi J**. Role of Mitochondrial Ca2+-Activated Cl- Channel anoctamin-1 and mitochondrial fusion protein OPA1 in pulmonary arterial hypertension. *FASEB J* 2020; 34.s1.07091
	19. Tsobze DA, Polina I, Dileepan G, Suzuki Y, Cypress MW, Jhun BS, **O-Uchi J**. Targeting Pyk2-specific inhibitory peptide in the mitochondrial matrix. FASEB J 2020; [34.s1.06926](https://doi.org/10.1096/fasebj.2020.34.s1.06926).
	20. **O-Uchi J**, Vang A, Cypress M, Fernandez-Nicolas, Mancini T, Jhun BS, Clements RT, Choudhary G. Role of Mitochondrial Expression of the Calcium-Activated Chloride Channel Anoctamin-1 in Pulmonary Artery Endothelial Cells. *Biophys J.* 2019; 118(3):448a
	21. Terentieva R, Hamilton S, Kim TY, Polina I, Bromk P, **O-Uchi J**, Koren G, Gyorke S, Belevych A, Choi BR, Telentyev D. Tyrosine Kinase Pyk2 in Hypertrophic Hearts: Cellular Mechanisms of Anti-Arrhythmic Effects. *Biophys J.* 2019; 118(3):566a
	22. Sung JH, Ford KA, Moeller J, Suzuki Y, Cypress MW, Jhun BS, **O-Uchi J**, Zhang P. Tyrosine Phosphorylation of mitofusin 2 modulates endoplasmic Reticulum-mitochondrial coupling. *Biophys J.* 2019; 118(3):L3347
	23. Polina I, Mishra J, Xie A, Adhikari N, Jhun BS, Dudley S, **O-Uchi J.** Short MCU variant forms Ca2+ -permeable channels outside of mitochondria. *Biophys J.* 2019; 118(3):L3347
	24. Cao JL, Adaniya SA, Mende U, Jhun BS, **O-Uchi J**. Phosphorylation of Mitochondrial Calcium Uniporter Promotes Mitochondrial Calcium Overload in the Heart. *Circulation.* 2019;140:A17231
	25. Jhun BS, Suzuki Y, Cypress MW, Zhang P, Mende U, **O-Uchi J**. Mitochondrial Calcium Uniporter Regulates Proliferative Activity of Cardiac Fibroblasts Under Angiotensin II Stimulation. *Circ Res* 2019;125:A251
	26. **O-Uchi1 J**, Jhun BS, Mende U, Sheu SS. MCU phosphorylation regulates cardiac mitochondrial calcium uptake. *J Mol Cell Cardiol.* 2019 (in press).
	27. **O-Uchi J**, Jhun BS. Mitochondrial Calcium Uniporter Regulates Proliferative Signaling Pathway in Neonatal Cardiac Fibroblasts. *FASEB J* 2019 vol. 33 Issue 1 Supplement 719.8.
	28. Cypress MW, Adaniya SM, Suzuki Y, Clements R, **O-Uchi J**, Jhun BS, Choudhary. Anoctamin-1 Expression at the Mitochondrial Membrane of Pulmonary Artery Endothelial Cells. *FASEB J* 2019 vol. 33 Issue 1 Supplement lb608.
	29. **O-Uchi J**, Adaniya SM, Suzuki Y, Cypress MC, Jhun BS. Mitochondrial Calcium and Reactive Oxygen Species Control Cardiac Fibroblast Proliferation. *J Investig Med.* 2019;67:862, A20.
	30. Cypress MW, Adaniya SM, Suzuki Y, Clements R, **O-Uchi J**, Jhun BS, Choudhary. Mitochondrial Expression of the Calcium-Activated Chloride Channel Anoctamin-1 in Pulmonary Artery Endothelial Cells. *J Investig Med.* 2019;67:932, A28.
	31. Suzuki Y, Cao JL, Adaniya SM, Jhun BS, **O-Uchi J**. Regulation of Mitochondrial Calcium Uptake via Tyrosine Phosphorylation of Mitochondrial Calcium Uniporter. *J Investig Med.* 2019; 67: 864, B13.
	32. Mancini T, **O-Uchi J**, Hamilton S, Terentyeva R, Choudhary G, Terentyev D, Clements RT. Mitochondrial Gain-Of-Function BKCa Channel Attenuates Mitochondrial Dysfunction Associated with Hypoxic Injury. *Biophys J.* 2019;116(3), p382a.
	33. Hamilton S, Terentyeva R, Kim TY, Bronk P, **O-Uchi J**, Csordas G, Choi BR, Terentyev D. Pharmacological Modulation of Mitochondrial Ca2+ Uptake Regulates Sarcoplasmic Reticulum Ca2+ Release via Oxidation of Ryanodine Receptor by Reactive Oxygen Species. *Biophys J.* 2019;116(3), p268a
	34. Adaniya SM, **O-Uchi J**, Jhun BS. PKD-dependent phosphorylation of DLP1 induces mitochondrial fragmentation and dysfunction in cardiomyocytes. Cardio Palooza 10, July 2018, Minnepolis, MN.
	35. Jhun BS, Adaniya SM, Zhang P, Mende U, Sheu SS, **O-Uchi J**. Mitochondrial calcium influx-mediated superoxide generation induces cell proliferation under Gq-protein coupled receptor stimulation in rat cardiac fibroblasts. Gordon Research Conference: Cardiac Regulatory Mechanisms, June 8-13, 2018, New London, New Hampshire, USA
	36. Cao J, Adaniya S, Ma H, King M, Yang D, Jhun BS, Mende U, Sheu SS, **O-Uchi J**. Tyrosine phosphorylation of mitochondrial Ca2+ uniporter (MCU) in regulates mitochondrial Ca2+ uptake in the heart. Gordon Research Conference: Cardiac Regulatory Mechanisms, June 8-13, 2018, New London, New Hampshire, USA
	37. Jhun BS, Adaniya S, King ME, Sheu SS, **O-Uchi J**. Mitochondrial calcium uptake-mediated superoxide production induces cardiac fibroblast proliferation under Gq-protein coupled receptor stimulation. *Biophys J.* (late abstract) 2018.
	38. Jhun BS, Adaniya SM, King ME, Zhang P, **O-Uchi J**. Mitochondrial calcium influx-mediated superoxide generation induces cardiac fibroblast proliferation under angiotensin II stimulation. *FASEB J* 2018 vol. 33 Issue 1 Supplement 750.20
	39. Cao JL, Adaniya SM, Yang D, King ME, Jhun BS, Mende U, Sheu SS, **O-Uchi J**. Proline-rich tyrosine kinase 2 phosphorylates mitochondrial calcium uniporter and regulates mitochondrial calcium uptake. *FASEB J* 2018 vol. 33 Issue 1 Supplement 750.34
	40. **O-Uchi**, Jhun, Sheu SS. Malignant hyperthermia-associated mutation of leaky RyR1 induces mitochondrial Ca2+ overload in the heart. *FASEB J* 2018 vol. 33 Issue 1 Supplement 903.21c.
	41. Cao JL, Adaniya SM, Yang D, Jhun BS, **O-Uchi J**. Tyrosine Phosphorylation of mitochondrial calcium uniporter regulates mitochondrial calcium uptake. Lifespan Hospitals Research Symposium, November 2017, Providence, RI.
	42. Cao JL, Adaniya SM, Landi AK, Jhun BS, **O-Uchi J**. Role of tyrosine phosphorylation of mitochondrial Ca2+ uniporter (MCU) homeostasis regulation. Brown University Summer Research Symposium, August 2017, Providence, RI.
	43. Adaniya SM, Cao JL, Landi AK, Jhun BS**, O-Uchi J.** Effect of PKD and PKA on mitochondrial fragmentation and dysfunction in cardiomyocytes. Brown University Summer Research Symposium, August 2017, Providence, RI.
	44. Cao JL, Adaniya SM, Yang D, Jhun BS, O-Uchi J. Tyrosine Phosphorylation of mitochondrial calcium uniporter regulates mitochondrial calcium uptake. Lifespan Hospitals Research Symposium, November 2017, Providence, RI. Basic science research Award. 25th Annual Lifespan Research Symposium, Lifespan, Providence RI
	45. **O-Uchi J**, Jhun BS, Sheu SS. Malignant hyperthermia-associated mutation of leaky RyR1 induces mitochondrial Ca2+ overload in the heart. *FASEB J* 2018 (in Press)
	46. **O-Uchi J.**, Fu D, Mishra J, Jhun BS, Sheu SS. Mitochondrial Ca2+ Uptake and Superoxide Generation Regulates Angiotensin II-Induced Proliferation in Neonatal Cardiac Fibroblasts. *Biophys J.* 112(3), 95a, 2017.
	47. Polina I, Terentyeva R, Roder K, Koren G, **O-Uchi J**, Terentyev D Assessment of Ca2+ Sensitivity of SK Channels in Rat Ventricular Cardiomyocytes using Intrinsic CA2+ Cycling Machinery. *Biophys J*. 112(3), 99a, 2017.
	48. Mishra J, Fu D, Jhun BS, Sheu SS, **O-Uchi J**. Angiotensin II-mediated Proliferation of Neonatal Cardiac Fibroblasts and Role of Mitochondrial Ca2+ Uptake and Superoxide Generation. *FASEB J* 2017. vol. 31 no. 1 Supplement lb690.
	49. Valkov N, Yang D, Jhun BS, Zhang P, **O-Uchi J**. Role of transcript variants of Mitochondrial Ca2+ Uniporter. *FASEB J* 2017. vol. 31 no. 1 Supplement 1007.18.
	50. Valkov N, Kim TY, Liu M, Moeller J, King M, **O-Uchi J**, Chen Q, Choi BR, Zhang P. Pathologic Role of MicroRNA-365 in the Heart. *FASEB J* 2017 vol. 31 no. 1 Supplement 721.3.
	51. Terentyeva R, Polina I, Hamilton S, Roder K, Koren G, **O-Uchi J**, Terentyev D. Differential Regulation of Sk Channels by CaMKII and Pyk2 Under Adrenergic Stimulation. *Circ Res*. 2017;121:A473.
	52. Parks XX, Ronzier E, O-Uchi J, Lopes CM. DYN-Mediated Internalization of KCNQ1/KCNE1 Channels under Sustained CPKC Activation. *Biophys J.* 110(3), 104a–105a, 2016.
	53. Mishra J\*, Hurst S, Jhun BS, Sheu SS, **O-Uchi J**. Tyrosine Phosphorylation of Mitochondrial Ca2+ Uniporter Dictates Mitochondrial Ca2+ Overload and Cardiomyocyte Death. *FASEB J* 2016 30:1224.11.
	54. **O-Uchi J**, Mishra J, Jhun BS, Hurst S, Fu D, Gomez L, Sheu SS. Malignant Hyperthermia-associated Mutation of RyR1 Induces Mitochondrial Damages and Cellular Oxidation in the Heart. *FASEB J* 2016, 30:960.5.
	55. **O-Uchi J**, Fu D, Mishra J, Jhun BS, Hurst S, Fu D, Gomez L, Sheu SS. Angiotensin II-mediated Mitochondrial Ca2+ Uptake and Superoxide Generation Activate Proliferative Pathway in Neonatal Cardiac Fibroblasts. *FASEB J* 2016, 30:960.
	56. Jhun BS, **O-Uchi J**, Mishra J, Jhun BS, Hurst S, Mende U, Sheu SS. PKD Translocation to the Outer Mitochondrial Membrane Induces Mitochondrial Fragmentation and Cell Death via DLP1 Phosphorylation in Cardiomyocytes. *FASEB J* 2016, 30:742.
	57. **O-Uchi J.** Mishra J, Jhun BS, Sheu SS. Post transcriptional and post translational modifications of Mitochondrial Ca2+ Uniporter (MCU) in cardiac cells. Gordon Research Conference: Cardiac Regulatory Mechanisms, June 5-10, 2016, New London, New Hampshire, USA.
	58. Jhun BS, **O-Uchi J.** Peng Zhang P, Mende U, Sheu SS. GqPCR-mediated PKD activation induces mitochondrial ragmentation and dysfunction via phosphorylation of DLP1 in cardiomyocytes. Gordon Research Conference: Cardiac Regulatory Mechanisms, June 5-10, 2016, New London, New Hampshire, USA.
	59. Jhun BS, Xu X, Mishra J, Hurst S, **O-Uchi J**, Sheu SS. Small-Molecule PKD Inhibitor Prevents Mitochondrial Fragmentation and Dysfunction during Gq-Protein Coupled Receptor Stimulation in Cardiac Cells. *Biophys J.* 108(2): 608a, 2015.
	60. **O-Uchi J**, Hurst S, Mishra J, Xu X, Jhun BS, Sheu SS. Tyrosine Phosphorylation of Mitochondrial Ca2+ Uniporter Regulates Mitochondrial Ca2+ Uptake. *Biophys J.* 108(2): 609a, 2015.
	61. **O-Uchi J**, Hurst S, [Fontana](http://www.fasebj.org/search?author1=Jacopo+Fontana&sortspec=date&submit=Submit) J, [Mishra](http://www.fasebj.org/search?author1=Jyotsna+Mishra&sortspec=date&submit=Submit) J, [Xu](http://www.fasebj.org/search?author1=Xiaole+Xu&sortspec=date&submit=Submit) X, [Fu](http://www.fasebj.org/search?author1=Deming+Fu&sortspec=date&submit=Submit) D, [Jhun](http://www.fasebj.org/search?author1=Bong+Sook+Jhun&sortspec=date&submit=Submit) BS, A[peria](http://www.fasebj.org/search?author1=Anita+Aperia&sortspec=date&submit=Submit) A, and [Sheu](http://www.fasebj.org/search?author1=Shey-Shing+Sheu&sortspec=date&submit=Submit) SS. Pyk2-Dependent Phosphorylation of Mitochondrial Ca2+ Uniporter Modulates Mitochondrial Ca2+ Uptake. FASEB J. 29(1); 844.11, 2015.
	62. [Jhun BS,](http://www.fasebj.org/search?author1=Bong+Sook+Jhun&sortspec=date&submit=Submit)  **O-Uchi J**, [Mishra](http://www.fasebj.org/search?author1=Jyotsna+Mishra&sortspec=date&submit=Submit) J, [Xu](http://www.fasebj.org/search?author1=Xiaole+Xu&sortspec=date&submit=Submit) X, Hurst S, Mende U, Sheu SS. PKD Regulates Mitochondrial Morphology and Function via Phosphorylation of DLP1 in Cardiac Myocytes. *FASEB J.* 29(1); LB615, 2015.
	63. **O-Uchi J**, Porter G, Kang SH, Boncompagni S, Sokolova N, Gross P, Jhun BS, Beutner G, Brookes P, Blaxall B, Dirksen RT, Protasi F, Pan S, Sheu SS. RyR1 mutation associated with malignant hyperthermia facilitates catecholaminergic stress-included arrhythmia via mitochondrial injury and oxidative stress. FASEB J 28:893.8, 2014.
	64. **O-Uchi J**, Jhun BS, Xu S, Hurst S, Raffaello A, Liu X, Yi B, Gross P, Ainbinder A, Kettlewell S, Smith GL, Dirksen RT, Wang W, Rizzuto R, Sheu SS. FASEB J 28:893.9, 2014.
	65. Jhun BS, **O-Uchi J**, Hurst S, Mende U, Sheu SS. Cardiac Gq-protein coupled receptor stimulation induces mitochondrial fragmentation and dysfunction through PKD-dependent phosphorylation of DLP1. Gordon Research Conference: Cardiac Regulatory Mechanisms, June 8-13, 2014, New London, New Hampshire, USA
	66. **O-Uchi J**, Jhun BS, Hurst S, Kettlewell S, Smith G, Dirksen RT, Wang W, Rizzuto R, Sheu SS. Tyrosine phosphorylation of the mitochondrial Ca2+ uniporter regulates mitochondrial Ca2+ uptake and cardiomyocyte death signaling under adrenergic stimulation. Gordon Research Conference: Cardiac Regulatory Mechanisms, June 8-13, 2014, New London, New Hampshire, USA
	67. **O-Uchi J**, Jhun BS, Xu S, Hurst S, Raffaello A, Ainbinder A, Dirksen RT, Sun J, Rizzuto R, Sheu SS. Adrenergic Stimulation Enhances Mitochondrial Ca2+ Uptake and Cell Death Signaling Through Pyk2-Dependent Tyrosine Phosphorylation of the Mitochondrial Ca2+ Uniporter. *Circulation.* 2013;128:A18531.
	68. **O-Uchi J**, Jhun BS, Sheu SS. Overexpression of RyR1 enhances Ca2+-induced mitochondrial ATP production in cardiac H9c2 cells. Biophys J. 104(2):440, 2013.
	69. **O-Uchi J**, Jhun BS, Sheu SS. Adrenergic stimulation accelerates mitochondrial Ca2+ uptake by PYK2-dependent phosphorylation of mitochondrial Ca2+ uniporter in cardiac H9c2 cells. Biophys J. 104(2):657, 2013.
	70. **O-Uchi J**, Jhun BS, Hurst S, Sheu SS. Alpha1-adrenergic signaling regulates mitochondrial Ca2+ uptake through tyrosine phosphorylation of mitochondrial Ca2+ uniporter in cardiac cells. J Mol Cell Cardiol. 65: S97, 2013.
	71. Jhun BS, **O-Uchi J**, Hurst S, Sheu SS. Alpha1-adrenoceptor stimulation induces mitochondrial fragmentation and dysfunction through PKD1 in H9c2 cardiac myoblasts. J Mol Cell Cardiol. 65: S152, 2013.
	72. Hurst S, **O-Uchi J**, Jhun BS, Sheu SS. Truncated Glycogen Synthase Kinase 3β (T-GSK3β) Increases Mitochondrial Fragmentation, Reactive Oxygen Species (ROS) Generation, and Cell Injury. Circ Res.113:4 Supplement A266, 2013.
	73. Jhun BS, **O-Uchi J**, Hurst S, Sheu SS. Adrenergic Stimulation Induces Mitochondrial Fragmentation and Cell Injury through PKD1-dependent Phosphorylation of DLP1 in H9c2 Cardiac Myoblasts. Circ Res.113:4 Supplement A093, 2013.
	74. **O-Uchi J**, Jhun BS, Hurst S, Sheu SS. FAK/Pyk2 Inhibitor Prevents Mitochondrial Ca2+ Overload and Cardiac Injury during Adrenergic Stimulation. Circ Res.113:4 Supplement A150, 2013.
	75. **O-Uchi J**, Jhun BS, Hurst S, Raffaello A, Ainbinder A, Dirksen RT, Sun J, Rizzuto R, Sheu SS. Adrenergic Stimulation Enhances Mitochondrial Ca2+ Uptake and Cell Death Signaling Through Pyk2-Dependent Tyrosine Phosphorylation of the Mitochondrial Ca2+ Uniporter. Circulation*.* 128:22 Supplement A18531, 2013.
	76. **O-Uchi J**, Pan S, Jhun BS, Gross P, Wang N, Sheu SS. Overexpression of ryanodine Receptor type I induces mitochondrial fragmentation in cardiac H9c2 cells. Biophys J. (late abstract), 2012.
	77. Sorenson, J., **O-Uchi, J.**, Williams, K., Lopes, C.M.B. Isoform-specific translocation of PKC in HEK293T cells by alpha1-adrenergic stimulation. Biophys J. 100(3), 2011.
	78. Williams, K., **O-Uchi, J.**, Martinez-Perez, A.M., Lopes, C.M.B. Chronic PKC activation inhibits the repolarizing cardiac current IKs by decreasing functional ion channel expression at the plasma membrane. Biophys J. 100(3), 2011.
	79. Martinez-Perez, A.M., **O-Uchi, J.**, Lopes, C.M.B. Species-specific PKC activation of IKs channels. Biophys J. 100(3), 2011.
	80. **O-Uchi, J.**, Barsheshet, A., Goldenberg, I., Moss, A.J., Lopes, C.M.B. Mutations in cytoplasmic loops are associated with increased risk for cardiac events in type-1 long QT syndrome. J Mol Cell Cardiol. 51: S19, 2011.
	81. **O-Uchi, J**, Rice JJ, Goldenberg I, Moss AJ, Lopes CMB. Impaired KCNQ1/KCNE1 Channel Activation by Alpha-Adrenergic Receptor is Associated with Emotion/Arousal Triggered Events in Long QT Syndrome Type 1. (Poster presentation) Circulation. 2011;124:A16820.
	82. **O-Uchi J.,** Fujiwara,E., Matavel,A., Lopes,C.M.B. Ca2+-Dependent PKC Facilitates Voltage-Dependent Activation of IKs Through Phosphorylation of An Isoform Specific Site on the KCNE1 Subunit. Biophys J. 98(3) pp. 535a, 2010.
	83. Morimoto, S., **O-Uchi, J.**, Kawai, M., Kusakari, Y., Komukai, K., Sasaki, H., Yoshimura, M., Hongo, K., Kurihara, S. Beta-Adrenergic Stimulation Enhances Ca2+ Leak From Sarcoplasmic Reticulum Through Protein Kinase A-Dependent Phosphorylation of Ryanodine Receptor under Physiological Condition. Circulation, 122: A10380, 2010.
	84. Hongo, K., Morimoto, S., **O-Uchi, J.**, Kusakari, Y., Komukai, K., Kawai, M., Yoshimura, M., Morimoto, S., Ohtsuki, I., Takeda, N., Kurihara, S.: Renin-Angiotensin system plays an important role in the pathogenesis of DCM in mice. J Physiol Sci. 2009 59: 24, 2009.
	85. Komukai, K., **O-Uchi, J.**, Morimoto, S., Kawai, M., Hongo, K., Yoshimura, M., Kurihara, S. Endotherin-1 potentiates L-type Ca current by activating CaMKII in rat ventricular myocytes. J Physiol Sci. 59: 126, 2009.
	86. Morimoto, S., **O-Uchi, J.**, Kawai, M., Komukai, K., Sasaki, H., Yoshimura, M., Hongo, K., Kurihara, S. β-adrenoceptor stimulation increased Ca leak from sarcoplasmic reticulum without dissociation of FKBP12.6 under physiolgical condition. J Physiol Sci. 59: 129, 2009.
	87. **O-Uchi J**, Lopes CM. IKS Is Activated By Both Ca2+ Dependent And Independent Isoforms Of PKC. Biophys J. 96(3) pp. 171a, 2009.
	88. Fukuda, N., Matsuba, D., Terui, T., **O-Uchi, J**., Tanaka, H., Ojima, T., Ohtsuki, I., Ishiwata, S., Kurihara, S.: Protein Kinase A-based Modulation Of Ca2+ Sensitivity In Skinned Skeletal Muscle Fibers Reconstituted With Cardiac Troponin. Biophys J. 96(3) pp. 501a, 2009.
	89. **O-Uchi, J.**, Hongo, K., Morimoto, S., Komukai, K., Kawai, M., Ohtsuki, I., Morimoto, S., Kurihara, S. Decreased Ca2+ affinity of thin filament is an important factor for the development of cardiac dysfunction in mouse model of dilated cardiomyopathy. Thick and Thin Filament Regulation in Striated Muscle (Madison, WI) (Suppl.):52, 2008.
	90. **O-Uchi, J.**, Komukai, K., Morimoto,S., Kawai, M., Hongo, K., Kurihara, S. Cardiac α1-adrenoceptor stimulation inhibits L-type Ca2+ current in the presence of β-adrenoceptor stimulation. J Physiol Sci. 58:S180, 2008.
	91. Serizawa, T., **O-Uchi, J.**, Fukuda, N., Kurihara, S., Ishiwata, S. Observation of sarcomeric oscillations by quantum dots in skinned rat ventricular myocytes. J Physiol Sci. 58:S66, 2008.
	92. Morimoto, S., **O-Uchi, J.**, Kawai, M., Komukai, K., Hongo, K., Sasaki, H., Kurihara, S. β-adrenoceptor stimulation accelerates Ca2+ turnover through PKA-dependent phosphorylation in saponin-treated mouse myocardium. J Physiol Sci. 58:S179, 2008.
	93. **O-Uchi, J.**, Morimoto, S., Komukai, K., Shinji, H., Kawai, M., Hongo, K., Sasaki, H., Kurihara, S. Molecular mechanisms of subtype-specific α1-adrenoceptor stimulation effects on cardiac L-type Ca2+ channels. Biophys J. (late abstract):102a, 2007.
	94. Serizawa, T., **O-Uchi, J.**, Fukuda, N., Kurihara, S., Ishiwata, S. SPOC in a single cardiomyocytes. Biophysics. 47:S58, 2007.
	95. **O-Uchi, J.**, Komukai, K., Kusakari, Y., Morimoto, S., Kawai, M., Hongo, K., Sasaki, H., Kurihara, S. α1A- and α1B-adrenoceptor stimulation oppositely modulates L-type Ca2+ current via different signaling pathways in rat ventricular myocytes. Biophys J. (abstract):102a, 2006.
	96. **O-Uchi, J.**, Komukai, K., Kusakari, Y., Morimoto, S., Kawai, M., Hongo, K., Sasaki, H., Kurihara, S. Two different subtypes of α1-adrenoceptor modulate L-type Ca2+ channel via different intracellular signal transduction pathways in rat ventricular myocytes. J Physiol Sci. 56:S127, 2006.
	97. **O-Uchi, J**., Komukai, K., Kusakari, Y., Morimoto, S., Hongo, K., Sasaki, H., Kurihara, S. L-type Ca2+ current is oppositely regulated via different receptor-subtype and G-protein pathways during alpha1-adrenoceptor stimulation in rat ventricular myocytes. Gordon Research Conferences, Cardiac Regulatory Mechanism (New London, NH), 2006.
	98. **O-Uchi, J.**, Morimoto, S., Sasaki, H., Kurihara, S. Different roles of alpha1-adrenoceptor subtypes in the regulation of cardiac L-type Ca2+ current. 6th Congress of the Federation of the Asian and Oceanian Physiological Societies (FAOPS 2006) (Seoul, Korea), 2006.
	99. **O-Uchi, J.**, Komukai, K., Kusakari, Y., Hirano, S., Kawai, M., Hongo, K., Kurihara, S. Mechanisms underlying the regulation of L-type Ca2+ current during alpha1-adrenoceptor stimulation in adult rat ventricular myocytes. Jpn J Physiol. 54:S96, 2004.
	100. Fukuda, N., **O-Uchi, J.**, Kajiwara, H., Ishiwata, S., Kurihara, S. Effect of acidosis on length dependence of tension generation in skinned cardiac muscle. Biophys J. 80:259A, 2001
	101. **O-Uchi, J.**, Ishikawa, T., Kurihara, S. Effect of Ca2+ sensitizer EMD57033 on Ca2+ transient and contraction in aequorin-injected ferret ventricular muscles (Japanese). Tokyo Jikeikai Medical Journal 113: 497, 1998.

**TEACHING AND CURRICULUM DEVELOPMENT**

**University of Minnesota**

**Course/Lecture List**

Invited Lecturer, Department of Integrative Biology and Physiology 2019-present

“Critical Readings in Physiology” for PhD student: 2.0 hr/year

Invited Lecturer, Wallen Alpert Medical School of Brown University 2018-2020

“Integrated Medical Sciences III: Cardiovascular”

for Year 2 medical students: 1.5 hr/year

**Warren Alpert Medical School of Brown University**

**Course/Lecture List**

Lecturer 2016-2017

“Integrated Medical Sciences III: Cardiovascular”

 Year 2 medical students: 1.5 hr/year

**The Jikei University School of Medicine**

**Course/Lecture List**

Teaching Instructor 2006-2008

 “Medical case studies”

 Year 3 medical school students: 30 hr/year

Teaching Instructor 2003-2007

 “Basic medical science”

 Year 2 medical school students: 60 hr/year

**ADVISING AND MENTORING**

**University of Minnesota**

**Post-doctoral fellows supervised**

 Michael W Cypress, Ph.D., Research Scientist IV 2018-present

Iuliia Polina, Ph.D., Research Scientist V 2019-2023 Current Position: N/A

 Neeta Adhikari, PhD., Research Scientist V 2019-2021

Current Position: Senior Research Specialist

 Histology Core, University of North Dakota,

 Grand Forks, ND

 Yuta Suzuki, M.D., Ph.D., Post-doctoral fellow 2018-2020

 Current Position: Researcher, Mayo Clinic, Rochester MN

**Junior Faculty supervised**

Xiaoxu Zhou, M.D., Ph.D., Research Assistant Professor 2021-2022

Current Position: Research Assistant Professor

 Rhode Island Hospital and Brown University, Providence RI

**Visiting Scholars Hosted**

Jacob Welch, Vanderbilt University, Nashville, TN 2024

Nathan DeMichaelis (co-mentoring with Dr. Bong Sook Jhun),

Dartmouth College, Hanover, NH 2024

Benjamin Yang, California Institute of Technology, Pasadena, CA 2023

Madeline Kelly, University of Chicago, Chicago, IL 2022

Maria Landherr, St. Olaf College, Northfield, MN 2021

Dora Azeudong Tsobze, Normandale Community College, Bloomington, MN 2019

Stephanie M Adaniya, Brown University, Providence RI 2018

**Graduate Student Activities**

Medical School Students Research Projects

Maria Landherr, B.S. 2024-present

 Matthew Dugan, B.S. (co-mentoring with Dr. Bong Sook Jhun) 2023-present

Doctoral Students Advise

Xiangzhen Kong, B.S. 2021-2022

Doctoral Students Advised

Jae Hwi Sung, M.S. 2019-2020

 External Doctoral Committee Member

Salwa Hafez, M.S., Brown University, Providence RI 2018-present

 MS Students Advise

 Madeline Kelly, B.S.. (remote position) 2024- present

Wake Forest University Graduate School of Arts and Sciences, Winston-Salem, NC

**Undergraduate Student Activities**

 **Undergraduate Research Projects**

Nathan DeMichaelis (co-mentoring with Dr. Bong Sook Jhun) 2024- present

Dartmouth College, Hanover, NH

 Amelia Carrizales 2024- present

Brian Rhee 2023- present

 Sanjana Chandran 2023- present

Benjamin Yang (remote position) 2023- present

California Institute of Technology, Pasadena, California

Madeline Kelly (remote position), University of Chicago, Chicago, IL 2023-2024

Current position: MS program, Wake Forest University Graduate School of Arts and Sciences, Winston-Salem, NC

 Isabel Chaput 2020- 2023

 Current position: N/A

 Maria Landherr 2021- 2022

 St. Olaf College, Northfield, MN

 Current position: Medical School Student

 University of Minnesota, Minneapolis, MN

Hannah Thompson 2020

 Current position: Administrator

 University of Minnesota, Minneapolis, MN

 Kamelia Drenkova 2020

 Macalester College, Saint Paul, MN

 Current position: Research Assistant

 New York University, New York, NY

 Gayathri Dileepan 2019-2020

 Current position: Medical Scientist Training Program Student

 The Ohio State University, Columbus, OH

 Dora Azeudong Tsobze 2019-2020

 Normandale Community College, Bloomington, MN

 Current position: N/A

 Seonmi Park, B.A. 2019-2020

 Current position: University of Minnesota

**Undergraduate Honor theses directed**

Gayathri Dileepan B.S. 2020-2021

 Current position: Medical Scientist Training Program Student

 The Ohio State University, Columbus, OH

**Other Mentoring Activities**

 **Additional Supervisory Role**

 Brian Rhee, Research Assistant 2024- present

Nathan DeMichaelis, Research Assistant (co-mentoring with Dr. Bong Sook Jhun) 2024- present

Sanjana Chandran, Research Assistant 2024- present

Bridget Nieto, B.A., Research Scientist II 2022-present

Maria Landherr, B.S., Research Scientist I 2022-2023

 Current position: Medical School Student

 University of Minnesota, Minneapolis, MN

Isabel Chaput, Research Assistant 2020- 2023

Maria Landherr, Research Assistant　 2021- 2022

 Current position: Medical School Student

 University of Minnesota, Minneapolis, MN

 Hannah Thompson, B.A., Research Scientist I 2020-2021

 Current position: Administrator

 University of Minnesota, Minneapolis, MN

 Kamelia Drenkova, Research Assistant 2020

 Current position: Research Assistant

 New York University, New York, NY.

Jordan Schlichting, Research Scientist 2019

 Current position: N/A

**Brown University and Rhode Island Hospital**

**Undergraduate Student Activities**

 **Undergraduate research projects**

 Jessica L Cao, B.S. 2017-2018

Current position: Residency,

Department of Surgery, University of Chicago, Chicago IL

Stephanie M Adaniya 2017-2018

 Current position: MD, PhD Program Student

University of Washington, Seattle, WA.

Henley Ma 2017-2018

Current position: Medical School Student,

Warren Alpert Medical School of Brown University, Providence RI

Milla Shin 2017-2018

Current position: Software Engineer

Amazon Web Services

 **Undergraduate Honor theses directed**

Jessica Cao, B.S. 2017-2018

Current position: Residency,

Department of Surgery, University of Chicago, Chicago IL

**Graduate Student Activities**

 **Master’s Theses Directed**

Kara Ford M.S. 2017 2016-2017

Current position: Senior Research Associate,

Intellia Therapeutics, Inc., Cambridge, MA

**Doctoral Students Advised**

Salwa Hafez, M.S. 2017

Current position: Graduate Student

Brown University, Providence RI

Nedyalka Valkov, Ph.D., 2017 2016-2017

Current position: Postdoctoral Fellow,

Massachusetts General Hospital, Boston, MA

Kevin Murphy, Ph.D., 2017 2016-2017

Current position: Postdoctoral Fellow,

Johns Hopkins University, Baltimore, MD

**Doctoral Committees Served on**

Salwa Hafez, M.S. 2017-2018

Current position: Graduate Student

Brown University, Providence RI

**Visiting Scholars Hosted**

Amy K Landi 2017

Quinnipiac University, Hamden, CT

Current Position: Principal Specialist

External QA Operations

**Junior Faculty supervised**

Bong Sook Jhun, Ph.D., Research Instructor, and Research Assistant Professor 2017-2018

Current Position: Assistant Professor,

University of Minnesota, Minneapolis MN

**Other Mentoring Activities**

 Additional Supervisory Role

 Michelle King, B.S., Senior Research Assistant 2017-2018

 Current Position: Research Assistant,

Providence VA Medical Center, Providence RI

 Faculty Trainer 2017-2018

Graduate Program in Molecular Pharmacology and Physiology,

Department of Molecular Pharmacology, Physiology and Biotechnology

Dongqin Yang, B.S., Senior Research Assistant 2016-2018

 Current Position: Research Assistant

Brown University, Providence RI

Jacob Moeller, B.S., Research Assistant 2016

 Current Position: Ph.D student

University of California, Berkeley, CA

**Thomas Jefferson University**

**Post-doctoral fellows supervised**

Jyostna Mishra, Ph.D. 2014-2015

Current Position: Post-doctoral fellow,

Department of Anesthesiology,

Medical college of Wisconsin, Milwaukee, WI

**Visiting Scholars Hosted**

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

Current Position: Clinical Fellow,
National Defense Medical College, Saitama, Japan

**Other Mentoring Activities**

 **Additional Supervisory Role**

Sarah Monaco, M.S. (Research Assistant) 2014-2015

Current Position: Postdoctoral Fellow

Children's Hospital of Philadelphia, Philadelphia, PA

**University of Rochester**

**Other Mentoring Activities**

 **Additional Supervisory Role**

Jaimie Sorenson, B.S., Research Assistant 2010-2011

Current Position: Lecturer

Johns Hopkins University, Baltimore, MD

Michael Cypress, B.S., Research Assistant 2010-2011

 Current Position: Research Scientist IV

University of Minnesota, Minneapolis MN

**Jikei University School of Medicine**

**Graduate Student Activities**

 **Doctoral Students co-advised**

Satoshi Morimoto, M.D, Ph.D. 2011 2006-2011

Current Position: Lecturer

Department of Medicine Jikei University School of Medicine, Tokyo Japan

Takanori Hama, M.D, Ph.D., 2010 2006-2010

Current Position: Lecturer

Department of Otolaryngology, Jikei University School of Medicine, Tokyo Japan

**Summary of Awards to Trainees and Junior Faculty**

|  |  |  |  |
| --- | --- | --- | --- |
| **Trainee Name** | **Name of Award** | **Institution Presenting Award** | **Year Received** |
| Benjamin Yang | Caltech Summer Undergraduate Research Fellowship | California Institute of Technology (Caltech) | 2024 |
| Matthew Dugan, B.S. | Wilson Scholarship | Lillehei Heart Institute (LHI), University of Minnesota (UMN) | 2024 |
| Benjamin Yang | Barbara A. Horwitz and John M. Horowitz Undergraduate Research Award | American Physiological Society (APS) | 2024 |
| Matthew Dugan, B.S. | Medical Student Research Grant | UMN Foundation | 2024 |
| Brian Rhee | APS Summer Undergraduate Research Fellowship | APS | 2024 |
| Madeline Kelly | Trainee Abstract Award | Central Society for Clinical and Translational Research (CSCTR) | 2024 |
| Matthew Dugan, B.S. | Trainee Abstract Award | CSCTR | 2024 |
| Benjamin Yang | Barbara A. Horwitz and John M. Horowitz Undergraduate Abstract Award | APS | 2024 |
| Benjamin Yang | LHI Summer Research Scholarship | LHI, UMN | 2023 |
| Madeline Kelly | Oral Abstract Award | CSCTR | 2023 |
| Bridget Nieto, B.S. | Invited Speaker for “Featured Topic session” at APS Summit 2023 | APS, Cell and Molecular Physiology Section (CaMPS)  | 2023 |
| Iuliia Polina, Ph.D. | New Investigator Award  | APS, CaMPS | 2023 |
| Isabel Caput | Finalist, Robert Gunn Student Award | APS, CaMPS |  2023 |
| Madeline Kelly | 2nd place at the 2022 IEM Annual Conference Poster Competition | Institute of Engineering in Medicine (IEM), UMN | 2022 |
| Madeline Kelly | LHI-AHA Summer Research Scholarship | LHI, UMN and American Heart Association (AHA) | 2022 |
| Xiaoxu Zhou, M.D., Ph.D. | Invited Speaker for “Featured Topic session” at 2022 Experimental Biology Meeting | APS, CaMPS | 2022 |
| Isabel Caput | Invited Speaker for “Featured Topic session” at 2022 Experimental Biology Meeting | APS, CaMPS | 2022 |
| Isabel Caput | Finalist, Robert Gunn Student Award | APS, CaMPS |  2022 |
| Maria Landherr | Barbara A. Horwitz and John M. Horowitz Undergraduate Abstract Award | APS | 2022 |
| Iuliia Polina, Ph.D. | Physiological Reports Research Award  | APS and Journal “Physiological Reports” | 2022 |
| Iuliia Polina, Ph.D. | Biophysical Society Travel Award | Biophysical Society | 2022 |
| Maria Landherr | 2nd place, LHI Summer Scholar Poster Session | LHI, UMN | 2021 |
| Maria Landherr | LHI Summer Research Scholarship | LHI, UMN and AHA  | 2021 |
| Iuliia Polina, Ph.D. | 2020 IEM Annual Conference Pilot Project Grant | IEM, UMN | 2021 |
| Neeta Adhikari, Ph.D. | 2020 IEM Annual Conference Pilot Project Grant | IEM, UMN | 2021 |
| Hanna Thompson (Hanana D Zhou) | Invited Speaker for “Featured Topic session” at 2021 Experimental Biology Meeting | APS, CaMPS | 2021 |
| Neeta Adhikari, Ph.D. | Invited Speaker for “Featured Topic session” at 2021 Experimental Biology Meeting | APS, CaMPS | 2021 |
| Iuliia Polina, Ph.D. | Invited Speaker for “Featured Topic session” at 2021 Experimental Biology Meeting | APS, CaMPS | 2021 |
| Seonmi Park | Laboratory Student Scholarship | Society for Clinical Pathology Foundation |  2020 |
| Jae Hwi Sung, M.S. | Lifson-Johnson Award | UMN Medical School | 2020 |
| Gayathri Dileepan | Life Science Summer Undergraduate Research Program (LSSURP) | UMN Medical School | 2020 |
| Michael W. Cypress, Ph.D. | 1st Prize, Postdoctoral Research Recognition Award | APS, CaMPS | 2020 |
| Iuliia Polina, Ph.D. | Trainee Travel Award | CSCTR | 2020 |
| Gayathri Dileepan | Invited Speaker for “Featured Topic session” at 2020 Experimental Biology Meeting | APS, CaMPS | 2020 |
| Jae Hwi Sung, M.S. | Allan Hemingway Scholarship | UMN Department of Integrative Biology and Physiology | 2019 |
| Dora Azeudong Tsobze  | APS Hearst Undergraduate Summer Research Fellowship | APS and Hearst Foundations | 2019 |
| Gayathri Dileepan | LHI Summer Research Scholarship | LHI, UMN | 2019 |
| Bong Sook Jhun, Ph.D | Career Development Award | AHA  | 2018 |
| Jessica Cao, B.S. | Education Committee Travel Award | Biophysical Society  | 2018 |
| Bong Sook Jhun, Ph.D.  | New Investigator Award | APS, CaMPS | 2018 |
| Bong Sook Jhun, Ph.D.  | Medical Research Grant Award | Rhode Island Foundation | 2018 |
| Stephanie M. Adaniya | Undergraduate Teaching & Research Award  | Brown University | 2018 |
| Milla Shin | Undergraduate Teaching & Research Award  | Brown University | 2018 |
| Hanley Ma  | PLME Summer Research Assistantship (SRA)  | Brown University | 2018 |
| Hanley Ma | Summer Internship Program in Biomedical Research (SIP) | NIH/NILBI | 2018 |
| Jessica Cao, B.S | Morris L. Povar Prize in Physiology | Brown University | 2018 |
| 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 |
| Jyostna Mishra, Ph.D.  | 1st Prize, Postdoctoral Research Recognition Award | APS, CaMPS | 2016 |

**PROFESSIONAL SERVICE AND PUBLIC OUTREACH**

**Service The Discipline/Profession/Interdisciplinary Area(s)**

 **Editorships/Journal Reviewer Experience**

|  |  |  |
| --- | --- | --- |
| ***Role*** | ***Journal*** | ***Date*** |
| Ad hoc reviewer | Heliyon | 2024-present |
| Associate Editor | *Frontiers in Physiology, Mitochondrial Research* | 2022-present |
| Ad hoc reviewer | *STAR Protocols* | 2021-present |
| Ad hoc reviewer | *Translational Research* | 2020-present |
| Ad hoc reviewer | *Journal of Clinical Medicine* | 2020-present |
| Ad hoc reviewer | *Journal of Molecular and Cellular Cardiology* | 2019-present |
| Ad hoc reviewer | *Cell Signaling* | 2019-present |
| Ad hoc reviewer | *Oxidative Medicine and Cellular Longevity* | 2019-present |
| Ad hoc reviewer | *European Journal of Pharmacology* | 2019-present |
| Ad hoc reviewer | *Stem Cells International*  | 2019-present |
| Ad hoc reviewer | *Developmental Dynamics* | 2019-present |
| Ad hoc reviewer | *Pharmacological Research* | 2019-present |
| Ad hoc reviewer | *The FASEB Journal*  | 2019-present |
| Ad hoc reviewer | *Scientific Reports* | 2019-present |
| Ad hoc reviewer | *Cells*  | 2019-present |
| Ad hoc reviewer | *Journal of Physiological Sciences* | 2019-present |
| Ad hoc reviewer | *Archives of Pharmacol Research* Sciences  | 2018-present |
| Ad hoc reviewer | *Experimental and Therapeutic Medicine*  | 2018-present |
| Ad hoc reviewer | *Oncology Letters*  | 2018-present |
| Editorial Board Member | *JSM Biochemistry and Molecular Biology* | 2018-present |
| Ad hoc reviewer | *Frontiers in Endocrinology* | 2018-present |
| Ad hoc reviewer | *Mitochondrion*  | 2018-present |
| Ad hoc reviewer | *Frontiers in Endocrinology* | 2018-present |
| Ad hoc reviewer | *Mitochondrion*  | 2018-present |
| Ad hoc reviewer | *International Journal of Molecular Medicine*  | 2018-present |
| Ad hoc reviewer  | *Frontiers in Pharmacology* | 2016-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-present |
| 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-present |
| Ad hoc reviewer | *Apoptosis* | 2015-present |
| Ad hoc reviewer | *Journal of Bioenergetics and Biomembranes* | 2015-present |
| Ad hoc reviewer | *Drug Design, Development and Therapy*  | 2014-present |
| Editorial Board Member | *Frontiers in Cell and Developmental Biology*  | 2014-present |
| Ad hoc reviewer | *International Journal of Molecular Sciences* | 2014-present |
| Ad hoc reviewer | *Journal of Psychological Abnormalities in Children* | 2014-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 |
| Editorial Board Member | *Frontiers in Physiology*  | 2012-present |
| Ad hoc reviewer | *Hypertension Research*  | 2010-present |
| Guest Associate Editor | *Journal of Cardiovascular Development and Diseases* *Special Issue "Cardiac Ion Channels in Cardiac Health and Disease"* | 2018-2019 |
| Guest Associate Editor | *Frontiers in Cardiovascular Medicine**Special Issue "Genetic Modification of Cardiac Tissue”* | 2017-2019 |
| Ad hoc reviewer | *JSM Biochemistry and Molecular Biology* | 2017 |
| Editorial Board Member | *Journal of Biochemistry and Molecular Biology Research* | 2014 |
| Ad hoc reviewer | *Clinical Medicine Insights*: Cardiology  | 2014 |
| Ad hoc reviewer | *World Journal of Gastroenterology* | 2014 |
| Ad hoc reviewer | *World Journal of Gastroenterology* | 2014 |
| Ad hoc reviewer | *World Journal of Stem Cells* | 2014 |

**Review panels for external funding agencies, and foundations.**

|  |  |  |
| --- | --- | --- |
| Ad-hoc member | Peer Review CommitteeNIH Study Section MPPB | 2024-present |
| Member | Peer Review CommitteeBarbara A. Horwitz and John M. Horowitz Undergraduate Research AwardAmerican Physiological Society | 2023-present |
| Member | Peer Review Committee, Innovative Project AwardAmerican Heart Association | 2023-present |
| Member | Peer Review CommitteeSummer Undergraduate Research Fellowship (SURF) American Physiological Society | 2023-present |
| Ad hoc reviewer | Ad hoc Peer Review Committee Medical Research CouncilUK Research and Innovation Swindon, United Kingdom | 2019-present |
| Member | Peer Review Committee Basic Cell –Membranes and Subcellular Organelles American Heart Association | 2018-present |

**Committee memberships**

|  |  |  |
| --- | --- | --- |
| Vice Chair (elected) | American Physiological Society (APS),Cell and Molecular Physiology Section (CaMPS) | 2024-present |
| Member | Steering Committee, APS CAMPS | 2021-present |
| Chair (elected)  | Award Selection Committee, APS CAMPS | 2021-2024 |
| Member | APS Career Opportunities in Physiology Committee | 2021-2024 |
| Member | Awards Selection Committee, APS Cardiovascular Section | 2018-2021 |
| External Referee | Yisang Yoon, Ph.D.Evaluation for promotion to ProfessorAugusta University, Augusta, GA | 2020 |



|  |  |  |
| --- | --- | --- |
| Session Chair | Webinars: The 2024 Hugh Davson Distinguished Lectureship of the APS Cell & Molecular Physiology Section | 2024 |
| Session Co-Chair | PhysioHub Session “Davson@Hub” at 2024 American Physiological Society (APS) Summit | 2024 |
| Session Chair | Feature Topics session “Ion Channels/Transporters in Health and Disease” at 2022 Experimental Biology Meeting | 2022 |

**Service to the University/Medical School/Department**

 **University of Minnesota**

 **Department/Unit Service**

|  |  |  |
| --- | --- | --- |
| Interviewer | Physician-Scientist Training Program (PSTP)Department of Medicine | 2019- present |
| Member | Selection Committee, for Summer Research Scholars Program, Lillehei Heart Institute | 2019- 2022  |
| Session Chair | Oral Session at IEM Annual Conference, Institute of Engineering in Medicine (IEM) | 2020 |
| Member | Judge for Poster Session at IEM Annual Conference, Institute of Engineering in Medicine (IEM) | 2019- present |
| Member | Search Committee for Investigator at the rank of Associate/Full Professor, Department of Medicine, Division of Cardiology  | 2018-2020 |
| Member | Selection Committee for Young Investigator Competition for Maurice Visscher Symposium | 2019 |
| Member | Poster Awards Committee, Cardio Palooza 10, Department of Integrative Biology & Physiology | 2018 |

**Brown University/Rhode Island Hospital**

 **Department/Unit Service**

|  |  |  |
| --- | --- | --- |
| Member | Search Committee for Investigator at the rank of Assistant/Associate Professor, Department of Medicine, Division of Cardiology, Rhode Island Hospital | 2017-2018 |
| Organizer | Research Seminar Series (monthly), "Frontiers in Medical Science Research: Advanced Methodology and Technology" | 2017-2018 |

**Thomas Jefferson University**

 **Department/Unit Service**

|  |  |  |
| --- | --- | --- |
| Associate Director | Microscope/Imaging Core, Center for Translational Medicine (CTM) (Director: Dr. Shey-Shing Sheu) | 2014 – 2016 |