

CURRICULUM VITAE

A. PERSONAL DATA

1. Name **SAKTHIVEL SADAYAPPAN, PhD, MBA, FAHA, FCVS**

Nationality: U. S. Citizen

2. Department Office Address:

Division of Cardiovascular Health and Disease
Room 4935, 4th Floor, Cardiovascular Center
Department of Internal Medicine
University of Cincinnati College of Medicine
231 Albert Sabin Way
Cincinnati, OH 45267-0575, USA



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3. Degrees Earned

2007-09	MBA	Part-time, University of Cincinnati, Cincinnati, OH 45221, USA
1993-99	Ph.D.	Biochemistry, Madurai Kamaraj University, Madurai 625021, India
1989-91	M.Sc.	Botany, VHNSN College, Virudhunagar 626001, India
1984-87	B.Sc.	Botany, The American College, Madurai 625002, India

4. PhD Dissertation title: Molecular Aspects of Cardiac Hypertrophy

Mentor: Chellam Rajamanickam, PhD; Professor of Biochemistry
Madurai Kamaraj University, Madurai 625021, India

5. Awards and Honors

Jan 2019:	Fellow of the UC graduate school, University of Cincinnati
Oct 2017:	Shark Tank, Heart, Lung and Vascular Institute, University of Cincinnati
Apr 2016:	Educator of the year for teaching first year medical students, Loyola University Chicago
Apr 2015:	Educator of the year for teaching first year medical students, Loyola University Chicago
Oct 2013:	Research Champion (second time), American Heart Association Chicago, Chicago, IL
Apr 2013:	Fellow of Cardiovascular Section (FCVS) of the American Physiological Society
Oct 2012:	Junior Scientist of the Year, Loyola University Chicago, Maywood, IL
Dec 2012:	Research Champion (first time), American Heart Association Chicago, Chicago, IL
Jul 2012:	Fellow of American Heart Association (FAHA)
Apr 2012:	APS Frontiers in Physiology Research Teacher's Fellowship
Jun 2005:	New Investigator Travel Award at the AHA summer meeting in Keystone, CO
May 1997:	DAAD Fellowship, Max-Planck-Institute, Exp. Cardiology, Bad Nauheim, Germany

6. Employment records

(a). Research Training

2007 Certificate Course "*Preparing for Feature Faculty*", University of Cincinnati, OH 45221, USA

Jun 2005 - Nov 2006 Research Associate, Children's Hospital Medical Center, Cincinnati, OH

Jun 2002 - May 2005 Postdoctoral Research Fellow, Cincinnati Children's Hospital, Cincinnati, OH
Dec 1998 - May 2002 Postdoctoral Research Fellow, Max-Planck-Institute, Bad Nauheim, Germany
May 1997 - Dec 1997 DAAD Fellow, Max-Planck-Institute, Bad Nauheim, Germany
Oct 1993 - Apr 1997 Graduate Student, Biochemistry, Madurai Kamaraj University, India
Aug 1991 - Sep 1993 Research Assistant, Biochemistry, Madurai Kamaraj University, India

(b). Academic Appointments

Jan 2019 – Present **Associate Chairman for Basic Research**
Department of Internal Medicine
University of Cincinnati College of Medicine
Cincinnati, OH 45267-0575, USA

Dec 2019 – Present **Consultant**
Amgen
Cardiometabolic Disorders Research & Development
South San Francisco, CA

Aug 2016 – Present **Director**
Heart Branch of the Heart, Lung and Vascular Institute
University of Cincinnati College of Medicine
Cincinnati, OH 45267-0575, USA

Aug 2016 – Present **Professor** (Tenured)
Department of Internal Medicine
Division of Cardiovascular Health and Disease
University of Cincinnati College of Medicine
Cincinnati, OH 45267-0575, USA

Aug 2017 – Present **Affiliate Faculty Member**
Department of Systems Biology and Physiology Program
University of Cincinnati College of Medicine
Cincinnati, OH 45267-0575, USA

Aug 2017 – Present **Affiliate Faculty Member**
Department of Pathology & Molecular Medicine Graduate Program
University of Cincinnati College of Medicine
Cincinnati, OH 45267-0575, USA

Aug 2016 – Present **Affiliate Faculty Member**
Department of Pharmacology and Cell Biophysics
University of Cincinnati College of Medicine
Cincinnati, OH 45267-0575, USA

Oct 2016 – Present **Affiliate Faculty Member**
Department of Molecular Genetics, Biochemistry and Microbiology
University of Cincinnati College of Medicine
Cincinnati, OH 45267-0575, USA

Oct 2016 – Present **Affiliate Faculty Member**
 Division of Molecular Cardiovascular Biology
 The Heart Institute
 Cincinnati Children's Hospital Medical Center
 Cincinnati, OH 45267-0575, USA
 Email: sakthivel.sadayappan@cchmc.org

Sep 2015 – Present **Visiting Professor**
 Integrated Cardio Metabolic Centre (ICMC)
 Karolinska Institutet
 SE 141 86 Stockholm, Sweden

Jul 2015 – Present **Consultant**
 Cardiomyopathy Program
 Bristol-Myers Squibb
 Princeton, New Jersey 08543

Jul 2015 – Jul 2016 **Division Director**
 Heart Failure, Cardiovascular Research Institute
 Loyola University Chicago, Maywood, IL 60153

Jul 2014 – Jul 2016 **Associate Professor (Tenured)**
 Department of Cell and Molecular Physiology,
 Loyola University Chicago, Maywood, IL 60153

Sep 2011 – Feb 2013 **Consultant**
 Regenerative Medicine, LifeCell International Pvt Ltd
 Madras, India

Sep 2009 – Aug 2016 **Affiliate Faculty Member**
 Cardiovascular Research Institute
 Loyola University Chicago, Maywood, IL 60153

Sep 2009 – Aug 2016 **Affiliate Faculty Member**
 Signal Transduction Research Institute
 Loyola University Chicago, Maywood, IL 60153

Sep 2009 – Jun 2014 **Assistant Professor (Tenure-Track)**
 Department of Cell and Molecular Physiology,
 Loyola University Chicago, Maywood, IL 60153

Dec 2006 – Aug 2009 **Research Instructor (Research-Track)**
 Division of Molecular Cardiovascular Biology
Affiliated to University of Cincinnati
 Children's Hospital Medical Center, Cincinnati, OH 45229

7. Leadership trainings

1. Executive Development workshop for Interim and Aspiring Leaders, AAMC Learning Center, May 3-5, 2012, Washington, D.C.
2. 2016 AHA Research Leaders Academy on July 24-26, 2016 in San Antonio, TX.

3. Leadership and Management Foundations in Academic Medicine and Science, AAMC Learning Center, March 14-16, 2018, Washington, D.C.
4. 2017 AHA Research Leaders Academy on September 17-19, 2017 in Denver, CO.
5. AAMC Academic Internal Medicine Leadership training, Philadelphia, April 14-17, 2019

B. TEACHING

1. Record of courses taught over the last five years, indicating course level (graduate/undergraduate/executive), class size and summary student evaluations

(a). University Medical School

2010 – 2016

Name of course:
 Loyola Description of Teaching role:
 Type of students:
 Average number of students each year:
 Contact hrs involved:
 Amount of preparation in hours:
Total hrs:

Loyola University Chicago
 Function of Human Body (FHB)
 Small Group Facilitator
 First year Medical Students
 >150 medical students
 16 hrs
 10 hrs
26 hrs

2010 – 2016

Name of course:
 Loyola Description of Teaching role:
 Type of students:
 Average number of students each year:
 Contact hrs involved:
 Amount of preparation in hours:
Total hrs:

Loyola University Chicago
 Function of Human Body (FHB)
 Lecturer, Metabolism
 First year Medical Students
 >150 medical students
 10 hrs
 30 hrs
40 hrs Mean Evaluation Score: 4.61/5.00 (2015)

2010 – 2016

Name of course:
 Loyola Description of Teaching role:
 Type of students:
 Average number of students each year:
 Contact hrs involved:
 Amount of preparation in hours:
Total hrs:

Loyola University Chicago
 Function of Human Body (FHB)
 Review Session and Recap
 First year Medical Students
 >150 medical students
 1 hour and 45 minutes
 1 hour
3 hrs

2010 – 2016

Name of course:
 Loyola Description of Teaching role:
 Type of students:
 Average number of students each year:
 Contact hrs involved:
 Amount of preparation in hours:
Total hrs:

Loyola University Chicago
 Function of Human Body (FHB)
 Sandwich Conference
 First year Medical Students
 >150 medical students
 4 hrs
 2 hrs
6 hrs

(b). Graduate School Educational Effort

2011 – 2016:

Name of course:
Loyola Description of Teaching role:
Type of students:
Average number of students each year:
Contact hrs involved:
Amount of preparation in hours:
Total hrs:

Loyola University Chicago

Cell Physiology, PIOL 417
Lecturer
Master Medical Physiology Students
31 students
6 hrs
18 hrs
24 hrs

2011 – 2016:

Name of course:
Loyola Description of Teaching role:
Type of students:
Average number of students each year:
Contact hrs involved:
Amount of preparation in hours:
Total hrs:

Loyola University Chicago

Biochemistry Physiology, PIOL 420
Lecturer
Master Medical Physiology Students
31 students
10.5 hrs
31.5 hrs
42 hrs

2014 – 2016:

Name of course:
Loyola Description of Teaching role:
Type of students:
Average number of students each year:
Contact hrs involved:
Title: Biomarkers for myocardial infarction

Loyola University Chicago

Clinical Biochemistry
Guest Lecturer
Summer students, Midwestern University
10 students
2 hrs

2014 – 2016:

Name of course:
Loyola Description of Teaching role:
Type of students:
Average number of students each year:
Contact hrs involved:
Amount of preparation in hours:
Total hrs:

Loyola University Chicago

Biochemistry and Molecular Biology
Lecturer
Graduate Students
30 students
6 hrs
18 hrs
24 hrs

2017 – :

Name of course:
Description of Teaching role:
Type of students:
Average number of students each year:
Contact hrs involved:
Amount of preparation in hours:
Total hrs:

University of Cincinnati

Medical Sciences Program
Guest Lecturer for Dr. Becker
Undergraduate Students
30 students
1 hr
3 hrs
4 hrs

2017 – :

Name of course:
Description of Teaching role:
Type of students:
Average number of students each year:

University of Cincinnati Medical Center

Cardiovascular Research Scholars
Guest Lecturer for Dr. Rubinstein
Medical students
10 students

Contact hrs involved:	1 hr
Amount of preparation in hours:	3 hrs
Total hrs:	4 hrs

2. Graduate students supervised, degree, thesis/project title

1. Darshini Desai

Graduate Student (PhD)

Jun 2019 – Present

Thesis title: Heart failure in distal arthrogryposis

Role: Mentor

2. Remon Azer

Graduate Student (PhD)

Jun 2019 – Present

Thesis title: Molecular mechanisms of cardiac arrhythmias in patients with compound mutations

Role: Mentor

3. Mohit Kumar (AHA funded)

Graduate Student (PhD)

Jan 2016 – Present

Thesis title: *Phosphorylation and function of cardiac myosin binding protein-C*

Role: Mentor

4. Thomas Lynch (AHA funded)

Graduate Student (PhD)

Dec 2012 – Aug 2016

Thesis title: *The role of cardiac myocyte death and inflammation in sarcomere protein-mutated cardiomyopathies.*

Role: Mentor

Current status: Postdoc at Abbvie, Chicago, IL

5. Brian Lin

Graduate Student (PhD)

Jan 2012 – Jun 2016

Thesis title: *Heart and Sole: The functional role of fast-skeletal myosin binding protein-C in cardiac and skeletal function.*

Role: Mentor

Currently Postdoc with Dr. David Kass, John's Hopkins

6. David Barefield (AHA funded)

Graduate Student (PhD)

Sep 2009 - Jun 2014

Thesis title: *Haploinsufficiency of cardiac myosin binding protein-C in the development of hypertrophic cardiomyopathy.*

Role: Mentor

Currently Postdoc with Dr. Elizabeth McNally, Northwestern and K99 funded

3. Graduate student thesis committees

(a) Graduate Student Thesis Committee

Michael Petrany, CCHMC
 Nivedhitha Velayutham, UC
 Samuel Slone, UC
 Lisa Green, UC
 Melanie Gartz, MCW
 Jiuzhou Huo, CCHMC
 Anne E. Roessler, Loyola
 Sangeetha Kandai, IIT-Madras
 Kristin Luther, Loyola
 Ryan Himes, Loyola
 Stefan Mazurek, Loyola
 Sara Prins, Loyola

Mentor: Douglas Millay, PhD May 2018 – Present
 Mentor: Katherine Yutzey, PhD May 2018 – Present
 Mentor: Mike Tranter, PhD May 2018 – Present
 Mentor: Mike Tranter, PhD May 2018 – Present
 Mentor: Jennifer Strande, MD, PhD May 2018 – Present
 Mentor: Jeff Molkentin, PhD Nov 2016 – Present
 Mentor: Keith Jones, PhD April 2016 – Present
 Mentor: Rama Verma, PhD Jul 2015 – Jun 2017
 Mentor: Keith Jones, PhD Mar 2013 – Oct 2016
 Mentor: Seth Robia, PhD Jun 2012 – May 2015
 Mentor: Aleksey Zima, PhD Jun 2011 – Dec 2014
 Mentor: Toni Pak, PhD Jun 2010 – Sep 2014

(b) Graduate Students – Lab rotations

Brittany C. Duncan	Graduate Student (PhD)	Nov 2018 – Feb 2019
Remon Azer	Graduate Student (PhD)	Oct 2018 – Jan 2019
Darshini Desai	Graduate Student (PhD)	Aug 2018 – Nov 2018
Xiaolong Ma	Graduate Student (PhD)	Aug 2018 – Nov 2018
Latia Tucker	Graduate Student (PhD)	Jan 2017 – Mar 2017
Ameera Bukhari	Graduate Student (PhD)	Jan 2016 – Mar 2016
Anh Phan	Graduate Student (PhD)	Apr 2015 – May 2015
Olga Raguimova	Graduate Student (PhD)	Jan 2013 – Mar 2013
Niya Morris	Graduate Student (PhD)	Sep 2012 – Nov 2012
Ryan Himes	Graduate Student (PhD)	May 2012 – Jun 2012

(c) Master Students – Thesis

Alex Beiersdorfer	Master student (MS)	Jan 2017 – Dec 2017
Larissa Reinkensmeyer	Master student (MS)	Jan 2016 – Mar 2016

4. Mentoring and Advisory activities

(a) Faculty mentoring committees

Leyla Esfandiari, PhD Assistant Professor Electrical Engineering and Computing Systems University of Cincinnati	Faculty mentor	Sep 2018 – Present
Deeptankar DeMazumder, MD, PhD Assistant Professor of Medicine University of Cincinnati	Faculty mentor K99 funded	Jan 2017 – Present

(b) Training postdoctoral fellows

Rohit Singh, PhD	Postdoctoral Fellow (Amgen)	Jan 2018 – Present
Fnu Mohammed Arif, PhD	Postdoctoral Fellow (AHA funded)	Aug 2017 – Present
James McNamara, PhD	Postdoctoral Fellow (AHA funded)	Jun 2016 – Present
Taejeong Song, PhD	Postdoctoral Fellow (AHA funded)	May 2016 – Present
Shiva Kumar Viswanathan, PhD	Postdoctoral Fellow (AHA funded)	May 2016 – Present
Jennifer Schwanekamp, PhD	Postdoctoral Fellow (T32 funded)	Jul 2017 – Aug 2018
Suresh Govindan, PhD	Postdoctoral Fellow (AHA funded)	Feb 2011 – Dec 2015

Diederik Kuster, PhD	<i>Postdoctoral Fellow</i> (AHA funded)	<i>Jan 2012 – Apr 2014</i>
Xiang Ji, PhD	<i>Postdoctoral Fellow</i>	<i>Jan 2011 – Dec 2012</i>
Saminathan Muthusamy, PhD	<i>Postdoctoral Fellow</i>	<i>Jan 2010 – May 2011</i>

(c) Training summer students

Hannah Kim, Undergraduate	<i>Research Intern</i>	<i>July 2018 – Present</i>
Ryann Scarberry, Undergraduate	<i>Research Intern (WISE fellowship)</i>	<i>July 2018 – Present</i>
Lillian Walton, Undergraduate	<i>Research Intern</i>	<i>Jan 2018 – Present</i>
Jacob Fedlman, Undergraduate	<i>Research Intern (APS funded)</i>	<i>Nov 2017 – Present</i>
Shelby Fallon, Undergraduate	<i>Research Intern</i>	<i>Oct 2017 – Present</i>
Poonam Desai, Undergraduate	<i>Research Intern</i>	<i>Oct 2016 – Present</i>
Matthew Kasson, Medical student	<i>Research Intern</i>	<i>Oct 2016 – Present</i>
Andrew Thomas, Medical student	<i>Research Intern</i>	<i>Jan 2016 – Mar 2016</i>
Vishnu Kaverimanian, Highschool	<i>Summer Student</i>	<i>Jun 2015 – Aug 2015</i>
Cecelia Dygdon, Schoolteacher	<i>Summer Student (APS funded)</i>	<i>Jun 2015 – Aug 2015</i>
Renata Kukla, Medical student	<i>Summer Student</i>	<i>Jun 2014 – Aug 2014</i>
Allison Giuffre, Premed	<i>Summer Student (APS funded)</i>	<i>Jun 2014 – Aug 2015</i>
<i>APS Bruce Award Winner at the EB meeting on April 03, 2016</i>		
Mark Wojdyla, Medical student	<i>Summer Student</i>	<i>Jun 2014 – Aug 2014</i>
Aravindakshan Jagadeesan	<i>Summer Student</i> (APS funded)	<i>Jun 2013 – Aug 2013</i>
Anukool Vasudevan, Premed	<i>Summer Student</i>	<i>Jun 2013 – Aug 2013</i>
Premalatha Babu, Premed	<i>Summer Student</i>	<i>Jun 2012 – Aug 2012</i>
Aravindakshan Jagadeesan, Premed	<i>Summer Student</i>	<i>Jun 2012 – Aug 2012</i>
Mehera Beidas, Schoolteacher	<i>Summer Student</i> (APS funded)	<i>Jun 2012 – Aug 2012</i>
Arjun Kaverimanian, Premed	<i>Summer Student</i>	<i>Jun 2012 – Aug 2012</i>
Angelia Raheja, Premed	<i>Summer Student</i>	<i>Jun 2011 – Aug 2011</i>
James Crooks, Medical student	<i>Summer Student</i>	<i>Jun 2011 – Aug 2011</i>
Raven Woodard, Premed	<i>Summer Student</i>	<i>Jun 2010 – Aug 2010</i>
Tanvi Marketkar, Graduate program	<i>Research Volunteer</i>	<i>Nov 2012 – Feb 2013</i>

(d) International Students

Sholeh Bazafshan Kondori, MD, Fellowship	Shahid Beheshti University, Iran	<i>Feb 2018 – Jan 2019</i>
Annkathrin Heiden, Medical student	University of Frankfurt/M, Germany	<i>Jul 2017 – Aug 2017</i>
Bibrita Bhar, Master student	Madurai Kamaraj University, India	<i>May 2017 – July 2017</i>
Nandini Sadagopan, Master student,	Intern Student, VIT, India	<i>Jun 2015 – May 2016</i>
Mendy Huisman, Medical student	Intern Student, the Netherlands	<i>Dec 2012 – Apr 2013</i>
Kady Karioredjo, Pharmacy student	Intern Student, the Netherlands	<i>May 2012 – Nov 2012</i>

(e) Medical Residents

Kamal Kassem, MD	Internal Medicine Resident, UC	<i>Jul 2018 – Present</i>
Jay Patel, DO, MS	Internal Medicine, Cleveland	<i>Jan 2019 – Present</i>

C. RESEARCH

1. PEER-REVIEWED PUBLICATIONS

From University of Cincinnati since Aug 2016:

1. McNamara JW, Singh RR, **Sadayappan S**. Cardiac myosin binding protein-C phosphorylation regulates the super-relaxed state of myosin. *Proc Natl Acad Sci U S A*. 2019 May 29. pii: 201821660. doi: 10.1073/pnas.1821660116. [Epub ahead of print]
2. Kuster DWD, Lynch TL, Barefield DY, Sivaguru M, Kuffel G, Zilliox MJ, Lee KH, Craig R, Namakkal-Soorappan R, **Sadayappan S**. Altered C10 domain in cardiac myosin binding protein-C results in hypertrophic cardiomyopathy. *Cardiovasc Res*. 2019 May 3. pii: cvz111. doi: 10.1093/cvr/cvz111. [Epub ahead of print]
3. Tabish A, Arif M, Song T, Elbeck Z, Becker RC, Knöll R, **Sadayappan S**. Association of intronic DNA methylation and hydroxymethylation alterations in the epigenetic etiology of dilated cardiomyopathy. *Am J Physiol Heart Circ Physiol*. 2019 Apr 26. doi: 10.1152/ajpheart.00758.2018. [Epub ahead of print]
4. Goh Q, Song T, Petrany MJ, Cramer AA, Sun C, **Sadayappan S**, Lee SJ, Millay DP. Myonuclear accretion is a determinant of exercise-induced remodeling in skeletal muscle. *eLife*. 2019 Apr 23;8. pii: e44876. doi: 10.7554/eLife.44876.
5. Boyer JG, Prasad V, Song T, Lee D, Fu X, Grimes KM, Sargent MA, **Sadayappan S**, Molkentin JD. ERK1/2 signaling induces skeletal muscle slow fiber-type switching and Arif M, **Sadayappan S**, Becker RC, Martin LJ, Urbina EM. Epigenetic modification: a regulatory mechanism in essential hypertension. *Hypertens Res*. 2019 Mar 13. doi: 10.1038/s41440-019-0248-0
6. Barefield BY, McNamara JW, Lynch TL, Kuster DWD, Govindan S, Haar L, Wang Y, Taylor EN, Lorenz JN, Nieman ML, Zhu G, Luther PK, Varró A, Dobrev D, Ai X, Janssen PML, Kass DA, Jones WK, Gilbert RJ, **Sadayappan S**. Ablation of the calpain-targeted site in cardiac myosin binding protein-C is cardioprotective during ischemia-reperfusion injury. *J Mol Cell Cardiol*. 2019 129:236-246.
7. Becker RC, Cotarlan V and **Sadayappan S**. The rapid proliferation of solicited content online journals: a quest to disseminate knowledge? *J Thromb Thrombolysis*. 2019 Feb 26. doi: 10.1007/s11239-019-01827-8. [Epub ahead of print]
8. **Sadayappan S**. Cardiovascular Leaders Are Made, not Born. *Circ Res*. 2019;124:484–487
9. Song T, Manoharan P, Millay DP, Koch SE, Rubinstein J, Heiny JA, **Sadayappan S**. Dilated cardiomyopathy-mediated heart failure induces a unique skeletal muscle myopathy with inflammation. *Skelet Muscle*. 2019 Jan 24;9(1):4. doi: 10.1186/s13395-019-0189-y.
10. Toepfer CN, Wakimoto H, Garfinkel AC, McDonough B, Liao D, Jiang J, Tai AC, Gorham JM, Lunde IG, Lun M, Lynch TL 4th, McNamara JW, **Sadayappan S**, Redwood CS, Watkins HC, Seidman JG, Seidman CE. Hypertrophic cardiomyopathy mutations in MYBPC3 dysregulate myosin. *Sci Transl Med*. 2019 Jan 23;11(476). pii: eaat1199. doi: 10.1126/scitranslmed.aat1199.
11. Ikeda S, Mizushima W, Sciarretta S, Abdellatif M, Zhai P, Mukai R, Fefelova N, Oka SI, Nakamura M, Del Re DP, Farrance I, Park JY, Tian B, Xie LH, Kumar M, Hsu CP, **Sadayappan S**, Shimokawa H, Lim DS, Sadoshima J. Hippo Deficiency Leads to Cardiac Dysfunction Accompanied by Cardiomyocyte Dedifferentiation During Pressure Overload. *Circ Res*. 2019 Jan 18;124(2):292-305. doi: 10.1161/CIRCRESAHA.118.314048.
12. O'Leary TS, Snyder J, **Sadayappan S**, Day SM, Previs MJ. MYBPC3 truncation mutations enhance actomyosin contractile mechanics in human hypertrophic cardiomyopathy. *J Mol Cell Cardiol*. 2018 Dec 11;127:165-173. doi: 10.1016/j.yjmcc.2018.12.003.
13. McNamara JW, Grimes KM and **Sadayappan S**. Basic Cardiovascular Sciences Scientific Sessions 2018: Innovating in Cardiovascular Research. *Circ Res*. 2018; 123:1024-1029.

14. McNamara JW, **Sadayappan S**. Skeletal myosin binding protein-C: An increasingly important regulator of striated muscle physiology. *Arch Biochem Biophys*. 2018; 660:121-128.
15. Viswanathan SK, Puckelwartz MJ, Mehta A, Ramachandra CJA, Jagadeesan A, Danielson RF-5, Bhat RV, Wong P, Kandoi S, Schwanekamp JA, Kuffel G, Pesce LL, Zilliox MJ, Durai NB, Verma Molokie RE, Suresh DP, Khoury PR, Thomas A, Sanagala T, Tang HC, Becker RC, Knöll R, Shim W, McNally EM, and **Sadayappan S**. Association of cardiomyopathy with MYBPC3 D389V and MYBPC3Δ25bp intronic deletion in South Asian Descendants. *JAMA Cardiol*, 2018 3(6): 481-488.
16. **Sadayappan S**. My life, My heart and My(osin) binding protein-C. *Circ Res*. 2018;122:918-920.
17. Springer TI, Johns CW, Cable J, Lin BL, **Sadayappan S** and Finley NL. Calcium-dependent interaction occurs between slow skeletal myosin binding protein-C and calmodulin. *Magnetochemistry* 2018, 4(1): 1; doi:10.3390/magnetochemistry4010001
18. Smyrniak I, Goodwin N, Wachten D, Skogestad J, Aronsen JM, Robinson EL, Demydenko K, Segonds-Pichon A, Oxley D, **Sadayappan S**, Sipido K, Bootman MD, Llewelyn Roderick H. Contractile responses to endothelin-1 are regulated by PKC phosphorylation of cardiac myosin binding protein-C in rat ventricular myocytes. *J Mol Cell Cardiol*. 2018 Feb 19. pii: S0022-2828(18)30046-4 PMID: 29470978
19. Huang W, Feng Y, Liang J, Yu H, Wang C, Wang B, Wang M, Jiang L, Meng W, Cai W, Medvedovic M, Chen J, Paul C, Davidson WS, **Sadayappan S**, Stambrook PJ, Yu XY, Wang Y. Loss of microRNA-128 promotes cardiomyocyte proliferation and heart regeneration. *Nat Commun*. 2018 Feb 16;9(1):700 PMID: PMC5816016
20. Lin BL, Li A, Mun JY, Previs MJ, Previs SB, Campbell SG, Dos Remedios CG, Tombe PP, Craig R, Warshaw DM, **Sadayappan S**. Skeletal myosin binding protein-C isoforms regulate thin filament activity in a Ca²⁺-dependent manner. *Sci Rep*. 2018 Feb 8;8(1):2604 PMID: PMC5805719
21. Robbins N, Gilbert M, Kumar M, McNamara JW, Daly P, Koch SE, Conway G, Effat M, Woo JG, **Sadayappan S**, Rubinstein J. Probenecid improves cardiac function in patients with heart failure with reduced ejection fraction *in vivo* and cardiomyocyte calcium sensitivity *in vitro*. *J Am Heart Assoc*. 2018 Jan 13;7(2) PMID: 29331959
22. Viswanathan SK, Sanders HK, McNamara JW, Jagadeesan A, Jahangir A, Tajik AJ, **Sadayappan S**. Hypertrophic cardiomyopathy clinical phenotype is independent of gene mutation and mutation dosage. *PLoS One*. 2017 Nov 9;12(11):e0187948 PMID: PMC5679632
23. Arif M, Pandey R, Alam P, Jiang S, **Sadayappan S**, Paul A, Ahmed RPH. MicroRNA-210-mediated proliferation, survival, and angiogenesis promote cardiac repair post myocardial infarction in rodents. *J Mol Med (Berl)*. 2017 Dec;95(12):1369-1385 PMID: 28948298
24. Grimes KM, Barefield DY, Kumar M, McNamara JW, Weintraub ST, de Tombe PP, **Sadayappan S**, Buffenstein R. The naked mole-rat exhibits an unusual cardiac myofilament protein profile providing new insights into heart function of this naturally subterranean rodent. Manuscript accepted for publication in *Pflügers Archiv*. 2017; 469(12):1603-1613 PMID: 28780592
25. **Sadayappan S**. The myofilament field revisited in the age of cellular and molecular biology. *Circ Res*. 2017 121(6):601-603 PMID: PMC5658034
26. Tong CW, Dusio GF, Govindan S, Johnson DW, Kidwell DT, De La Rosa LM, Rosas PC, Liu Y, Ebert E, Newell-Rogers MK, Michel JB, Trzeciakowski JP, **Sadayappan S**. Usefulness of released cardiac myosin binding protein-C as a predictor of cardiovascular events. *Am J Cardiol*. 2017; 120(9):1501-1507 PMID: 28847594
27. **Sadayappan S**. Cardiovascular early careers: past and future. *Circ Res* 2017 (121):100-102. PMID: 28684620
28. Lynch TL, Kuster DWD, Gonzalez B, Balasubramanian N, Nair N, Day S, Calvino JE, Tan Y, Liebetrau C, Troidl C, Hamm CW, Güçlü A, McDonough B, Marian AJ, van der Velden J, Seidman CE, Huggins GS and **Sadayappan S**. Cardiac Myosin Binding Protein-C Autoantibodies are potential early indicators of cardiac dysfunction and patient outcome in Acute Coronary Syndrome. *JACC: Basic Transl Sci*. 2017 (2): 122-131 PMID: PMC5460768

29. Lin BL, Song T, **Sadayappan S**. Myofilaments: Movers and Rulers of the Sarcomere. *Compr Physiol*. 2017 Mar 16;7(2):675-692.
30. Lynch TL 4th, Ismahil MA, Jegga AG, Zilliox MJ, Troidl C, Prabhu SD, Sadayappan S. Cardiac inflammation in genetic dilated cardiomyopathy caused by MYBPC3 mutation. *J Mol Cell Cardiol*. 2017 102:83-93. PMCID: PMC5316303.
31. Kraker J, Viswanathan SK, Knöll R and **Sadayappan S**. Recent Advances in the Molecular Genetics of Familial Hypertrophic Cardiomyopathy in South Asian Descendants. *Front Physiol*, 2016;7:499 PMCID: PMC5083855.
32. Barefield DY, Lynch IV TL, Jagadeesan A, Sanagala T and **Sadayappan S**. High-Throughput diagnostic assay for a highly prevalent cardiomyopathy-associated MYBPC3 variant. *J Mol Biomark Diagn* 2016, 7:6 PMCID: PMC5160998.
33. Lipps C, Nguyen JH, Pyttel L, Lynch TL 4th, Liebetrau C, Aleshcheva G, Voss S, Dörr O, Nef HM, Möllmann H, Hamm CW, **Sadayappan S*** and Troidl C*. N-terminal fragment of cardiac myosin binding protein-C triggers pro-inflammatory responses in vitro. *J Mol Cell Cardiol*. 2016; 99:47-56. *Equal contributions.

From Loyola University Chicago since Sep 2009:

34. Hoffman MP, Taylor EN, Aninwene GE 2nd, **Sadayappan S**, Gilbert RJ. Assessing the multiscale architecture of muscular tissue with Q-space magnetic resonance imaging: *Microsc Res Tech*. 2018 Feb;81(2):162-170. PMID: 27696640
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From Dr. Sadayappan's postdoctoral projects:

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From Dr. Sadayappan's PhD projects:

104. **Sakthivel S**,* Waldmüller S,* Saadi AV, Selignow C, Rakesh PG, Golubenko M, Joseph PK, Padmakumar R, Richard P, Schwartz K, Tharakan JM, Rajamanickam C and Vosberg HP. Novel deletions in *MYH7* and *MYBPC3* identified in Indian families with familial hypertrophic cardiomyopathy. *J Mol Cell Cardiol*. 2003; 35(6):623-636 PMID: 12788380 *Share first authorship equally.
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2. LIST OF GRANTS AND CONTRACTS

i. Ongoing research support:

NIH-NHLBI (PI: Sadayappan) 01/01/2016 – 12/31/2020 2.5 calendar months
R01HL130356

Title: Molecular mechanism of hypertrophic cardiomyopathy in populations of South Asian descendants
The proposed studies will determine the molecular mechanism underlying the pathogenicity of this mutation using a mouse model in vivo.

NIH-NHLBI (PI: Sadayappan) 04/01/2016 – 3/31/2021 2.5 calendar months
R01HL105826

Title: Cardiac myosin binding protein-C: Structure and Function (renewal)
The proposed studies will determine the specific role(s) of the amino terminal-region of cardiac myosin binding protein-C in regulating sarcomere structure and function at the cardiac sarcomeric and whole-heart levels

NIH-NIAMSD (PI: Craig) 07/01/2015 – 06/30/2020 0.60 calendar months
R01AR067279

Title: Skeletal myosin-binding protein C (MyBP-C): molecular structure and function

The objective of the proposal is to elucidate both the molecular structure and function of skeletal isoforms of myosin binding protein-C.

Role: Co-investigator

RO1/R56HL139680 (PI: Gilbert) 10/01/2018 – 09/31/2019 0.60 calendar months
NIH-NHLBI

Title: Myoarchitectural basis of contractility and heart failure

To develop a multi-scale formulation of ischemia-related LV wall dysfunction that links post-translational modifications of MYBPC3, changes of sarcomere morphology and orientation, pathological LV myoarchitecture and mechanical performance.

Role: Co-Investigator

R01 HL143490 (PI: Wang) 06/01/2019 – 05/31/2014 0.60 calendar months
NIH-NIAID

Title: IGF-2R is a new therapeutic target for cardiac ischemia-reperfusion injury

To define IGF2R as therapeutics to attenuate the damage induced by ischemia-reperfusion injury.

Role: Co-Investigator

Shark Tank, (PI: Sadayappan) 09/01/2017 – 08/31/2019 0.12 calendar months
Heart, Lung and Vascular Institute, University of Cincinnati

Title: Asianostics for cardiomyopathy

To establish, validate and license a proto-type diagnostic kit

Leducq Foundation (PI: Doevendans and Kranias) 01/01/2019 – 12/31/2023 0.00 calendar months

Title: Cure PhosphoLambaN induced Cardiomyopathy (CURE-PLaN)

To develop novel treatments for PLN mutation carriers prone to or suffering from HF, and to expand the utility of these therapeutic strategies to the overall population of HF patients.

Role: Consultant

AHA (PI: Sadayappan) 01/01/2019 – 12/31/2021 0.12 calendar months
19UFEL34380251, 2019 Institutional Undergraduate Student

Title: American Heart Association - Summer Undergraduate Research Fellowship (AHA-SURF)

To increase the number of undergraduates involved in cardiovascular research by establishing a cardiovascular and stroke-focused undergraduate fellowship program.

MyoKardia (PI: Sadayappan) 05/01/2019 – 04/31/2020 0.60 calendar months

Title: Hypertrophic cardiomyopathy in populations of South Asian descendants

We will determine the pathophysiological consequences of D389V polymorphic variant.

Industrial Funding (PI: Sadayappan) 06/01/2016 – 12/31/2019 0.60 calendar months
Amgen

Title: Developing therapies for heart failure with preserved ejection fraction (HFpEF)

To determine if altered cMyBP-C would improve cardiac function in HFpEF *in vitro* and *in vivo*.

Industrial Funding (PI: Sadayappan) 12/01/2017 – 06/30/2019 0.60 calendar months
MERCK

Title: Myosin binding protein-C as a target for improving cardiac contractility in heart failure

To determine the therapeutic role of cMyBP-C in heart failure using *in vitro* approaches.

AHA Transformation Sadayappan (PI) 07/01/2019 – 06/30/2022 0.60 calendar months

19TPA34830084

Title: Molecular mechanisms of cardiac arrhythmias in patients with compound mutations
To elucidate the impact of double variants on Ca²⁺-cycling in human iPSC cardiomyocytes, human cardiac organoids and sarcoplasmic reticulum calcium cycling in vitro and 2) determine comorbidity of double variants in the pathogenesis of diastolic dysfunction, HCM, arrhythmias and sudden cardiac death using humanized knock-in mouse models

Funding support for graduate students and postdoctoral fellows

AHA (PI: McNamara) 07/01/2017 – 06/30/2019 0.60 calendar months

17POST33630095, Postdoctoral Training Fellowship

Title: Cross-bridging the gap: Using the N-terminus of cMyBP-C to restore cardiac function
To define the ability of the cMyBP-C to improve the structure and function of the heart *in vivo*

Role: Sponsor

AHA (PI: Viswanathan) 07/01/2017 – 06/30/2019 0.60 calendar months

17POST33630157, Postdoctoral Training Fellowship

Title: Unfolded protein response and ER-stress in hypertrophic cardiomyopathy
To define whether activation of the PERK pathway is necessary to cause HCM.

Role: Sponsor

AHA (PI: Kumar) 07/01/2017 – 06/30/2019 0.60 calendar months

17PRE33630192, Predoctoral Training Fellowship

Title: Role(s) of myosin binding protein-C phosphorylation in cardiac arrhythmias
To determine the role of cMyBP-C phosphorylation on calcium homeostasis

Role: Co-sponsor

AHA (PI: Taejeong Song) 07/01/2019 – 06/30/2021 0.60 calendar months

19POST34380448, 2019 AHA Postdoctoral Fellowship

Title: Molecular mechanism of hypertrophic cardiomyopathy in populations of South Asian descendants
To define the molecular mechanisms and pathways whereby the MYBPC3 gene variants cause the cardiomyopathy.

Role: Sponsor

Amgen (PI: Rohit Singh) 03/01/2019 – 02/28/2022 0.60 calendar months

Postdoctoral Fellowship

Title: Mechanism of heart failure with preserved ejection fraction (HFpEF)

This proposal will aid in our understanding of cMyBP-C's regulation of cardiac function and the molecular mechanism(s) underlying the development of HFpEF.

Role: Sponsor

i. pending research support: None

ii. completed research supports:

Industrial Funding (PI: Sadayappan) 01/01/2016 – 10/31/2018 0.60 calendar months

AstraZeneca

Title: Hypertrophic cardiomyopathy in South Asian patients carrying the MYBPC3 gene 25 bp variant
To define the pathophysiological role of MYBPC3^{Δ25bp} to cause decreased contractile function in iPSC-derived cardiomyocytes *in vitro*

NIH NHLBI	(PIs: Molkentin and Kranias)	7/01/2017 – 08/30/2018	0.00 calendar months
T32HL125204-03S1, Training Fellowship			
<u>Title:</u> Understanding cardiovascular disease mechanism – Hypertrophic Cardiomyopathy			
<u>PI:</u> Jennifer Schwanekamp, Postdoctoral Fellow			
To determine the disease mechanism of MYBPC3 gene mutations			
<u>Role:</u> Mentor			
AHA	(PI: Sadayappan)	05/01/2017 – 04/30/2018	1.20 calendar months
17CCRG33671128, Catalyst award			
<u>Title:</u> A novel polymorphic MYBPC3 variant causes hypertrophic cardiomyopathy in US-South Asian descendants			
The proposal studies will determine genotype-phenotype correlation in the presence of a novel polymorphic MYBPC3 variant, D389V, that is exclusively present in South Asian population.			
NIH-NHLBI	(PI: Sadayappan)	08/01/2012 – 07/31/2017	9.00 calendar months
K02HL114749			
<u>Title:</u> Proteomic approaches to validate novel cardiac biomarkers for myocardial infarction.			
This Independent Scientist Award aims to confirm the efficacy of cardiac myosin binding protein-C as an early circulatory biomarker for myocardial infarction.			
AHA	(PI: Sadayappan)	12/01/2015 – 11/30/2016	1.20 calendar months
15CVGPS27020012, Genome-Phenome Study			
<u>Title:</u> A polymorphic MYBPC3 variant as a major risk factor of cardiomyopathy in South Asian descendants.			
The proposal studies will determine genotype-phenotype correlation in the presence of a polymorphic MYBPC3 ^{Δ25bp} variant that is exclusively present in 4% of South Asian descendants.			
AHA	(PI: Lynch)	01/01/2015 – 12/31/2016	0.00 calendar months
15PRE22430028, Predoctoral Training Fellowship			
<u>Title:</u> The role of cardiac myocyte death and inflammation in the progression of sarcomere protein mutated cardiomyopathies.			
The objective of this proposal is to define the prevalent mode and mechanisms of myocyte death generating cardiac inflammation.			
<u>Role:</u> Sponsor			
AHA	(PI: Sadayappan)	07/01/2014 – 06/30/2016	1.2 calendar months
14GRNT20490025, Grant-in-Aid			
<u>Title:</u> Diagnostic and prognostic value of cardiac myosin binding protein-C in post-MI.			
To examine whether cardiac myosin binding protein-C can be used as a diagnostic and prognostic marker of ischemia and myocardial infarction.			
AHA	(PI: Govindan)	01/01/2013 – 12/31/2014	0.00 calendar months
13POST14720024, Postdoctoral Fellowship			
<u>Title:</u> cMyBP-C and its new role in the diagnostics of ischemia-reperfusion injury			
<u>Role:</u> Sponsor			
AHA	(PI: Kuster)	07/01/2013 – 06/31/2015	0.00 calendar months
13POST17220009, Postdoctoral Fellowship			
<u>Title:</u> Pathophysiology of hypertrophic cardiomyopathy associated MYBPC3 mutations			
<u>Role:</u> Sponsor			

AHA	(PI: Barefield)	07/01/2011 – 06/30/2013	0.00 calendar months
11PRE7240022, Pre-doctoral Training Fellowship			
<u>Title:</u> Haploinsufficiency of cardiac myosin binding protein-C in heart failure			
<u>Role:</u> Sponsor			
AHA	(PI: Sadayappan)	01/01/2007 – 12/31/2011	12.0 calendar months
0830311N, National Scientist Development Grant			
<u>Title:</u> Phosphorylation and function of cardiac myosin binding protein-C.			
<u>Role:</u> Principal Investigator			
AHA	(PI: Sadayappan)	07/01/2004 – 06/31/2006	12.0 calendar months
0425413B, Postdoctoral Training Fellowship			
<u>Title:</u> Phosphorylation and function of cardiac myosin binding protein-C.			
<u>Role:</u> Principal Investigator			
DAAD	(PI: Sadayappan)	(05/25/1997 – 12/31/1997)	12.0 calendar months
Indo-German Exchange Program			
<u>Title:</u> Genetic analysis of β -myosin heavy chain and myosin binding protein-C genes in Indian patients with familial hypertrophic cardiomyopathy.			

D. SERVICE

1. Internal Service (Department, college and university committees)

University Committees at Loyola University Chicago

Jan 2016 – Aug 2016 :	Chair	Department Faculty Search Committee
Jul 2015 – Aug 2016 :	Promotion Committee on Academic Rank and Tenure	
Jun 2014 – Jan 2016 :	Member	Department Faculty Search Committee
Jan 2013 – Aug 2016 :	Member	Institutional Biosafety Committee
Jan 2012 – Aug 2016 :	Member	Graduate program interview committee
Aug 2011 – Jun 2014 :	Coordinator	Departmental Seminar Series
Dec 2011 – Jun 2013 :	Director	Adult cardiomyocytes core facility
Jan 2011 – Mar 2012 :	Member	Department Faculty Search Committee
Nov 2009 – Aug 2016 :	Associate Member, Graduate Faculty in the Graduate School	2. External Service

University Committees at University of Cincinnati

Feb 2019 – Present :	Co-chair	Search Committee, Division Director, Cardiology
Jan 2019 – Dec 2021 :	Member	Conflict of Interest Committee, University of Cincinnati
Nov 2018 – Present :	Member	Department Faculty Search Committee, College of Eng
Apr 2018 – Present :	Member	Administrative Performance Review Committee, CoM
		Dr. Shuk-Mei Ho, Department of Environmental Health
Apr 2018 – Present :	Member	Finance and Executive Committee, Internal Medicine
Oct 2016 – Present :	Member	Research Governance Committee, Internal Medicine
Mar 2017 – Present :	Member	Mentoring committee, Tenure-track faculties
Oct 2016 – Present :	Member	HLVI Executive Leadership committee
Oct 2016 – Present :	Member	HLVI Seminar Series
Oct 2016 – Present :	Member	Department Faculty Search Committee, Internal Medicine
Oct 2017 – Present :	Member	College of Medicine Core Management, Planning and Sustainability (CoMPAS) committee
Oct 2016 – Present :	Member	Doctoral Qualifying Exam Committee, College of Medicine
Apr 2017 – Dec 2017 :	Member	Department Faculty Search Committee, Mol Gen

2. External Service

(a) Community Service

- Founder and advisor for the non-profit organization, Red Saree, Inc., focused on South Asians living in the United States with the aim of promoting their lifestyle choices and facilitating healthcare awareness and prevention programs on cardiovascular diseases.
- Heart Mini ½ marathon and raised \$2125.00 to the AHA, Cincinnati, OH on Mar 18, 2018.
- Organized the first UCRI-HLVI industrial seminar on “Cardiovascular Connection” to provide social interactions with pharmaceutical industry at University of Cincinnati, Cincinnati, OH on Sep 08, 2017.
- Member of the planning committee, 2017 DOIM Research symposium, Department of Internal Medicine, University of Cincinnati, Cincinnati, OH on June 07, 2017.
- Organized the first UC-Children’s network research meeting, University of Cincinnati, Cincinnati, OH on June 07, 2017.
- Heart Mini ½ marathon and raised \$2106.00 to the AHA, Cincinnati, OH on Mar 12, 2017.
- Organizer, Satellite workshop entitled “Titin and its binding partners myosin binding protein-C and Obscurin in health and disease”, June 22, 2016, Maywood, IL.
- Co-chair of the symposium entitled “Physiological and pathological aspects of hypertrophic cardiomyopathy” at the Experimental Biology on Mar 28 - April 1, 2016 in San Diego, CA.
- Ran the Chicago Marathon to raise funds for the local AHA and, as a result, generated \$2620 and created awareness of heart disease in the local community.
- Organizer, Satellite Meeting entitled “Myosin binding protein-C: past, present and future”, June 06, 2014, Maywood.
- Co-chair of the feature-topic symposium entitled “thin and thick filament regulation of cardiac sarcomere” at the Experimental Biology on April 26-20, 2014 in San Diego, CA.
- Co-editor, mini-review series for Pflügers Archiv European Journal of Physiology on cardiac myosin binding protein-C 2013-2014
- Organizer and Chair of the 2013 American Heart Association Chicago Research Network Symposium, September 20, 2013 at Loyola University Chicago, Maywood, IL.

(b) Professional Service

(i) Society membership

Nov 2018 – Present : Member, South Asian Heart Association
Apr 2018 – Present : Member, Association of Scientists of Indian Origin in American
Apr 2013 – Present : Elected Member, Central Society for Clinical and Translational Research
Jan 2012 – Present : Member, American Physiological Society
Mar 2004 – Present : Member, International Society for Heart Research
Nov 2003 – Present : Member, Biophysical Society
Dec 2003 – Present : Professional Member, American Heart Association

(ii) Refereeing (list journals)

Circulation Research, Journal of Biological Chemistry, PLoSone, Journal of Molecular and Cellular Cardiology, Journal of Molecular Biology, Journal of Physiology, American Journal of Physiology, Pflügers Archiv - European Journal of Physiology, FASEB Journal.

(iii) Editorial duties

Journal of Thrombosis and Thrombolysis, Journal of Molecular and Cellular Cardiology, Frontiers in Cardiac Muscle Physiology, American Journal of Cardiovascular Disease, Pflügers Archiv, BioMed

Research International and PLOS ONE.

(iv) External Thesis Examiner

2013 – Present : Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, India
2011 – Present : Gandhigram Rural Institute-Deemed University, India
2011 – Present : Bharathiyar University, Coimbatore, India
2010 – Present : University of Madras, Chennai, India

(v) Other reviewing activities (external grant or university reviews)

Feb 2018 : Reviewer, University of Cincinnati Office of the Vice President for Research Collaborative Research Advancement Grant proposals
Mar 2017 : Reviewer, Near Horizons Clinical Research Grant proposals University of Cincinnati
Jul 2016 – Jun 2022 : Member, Myocardial Ischemia and Metabolism (MIM), NHLBI-NIH
Fall 2015 – Present : AHA, Basic Cell - Cardiac Biology: Regulation (BSci 1)
Jul 2015 : Adhoc Reviewer (IAM), Myocardial Ischemia and Metabolism, NHLBI-NIH
Feb 2015 : Adhoc Reviewer, Myocardial Ischemia and Metabolism (MIM), NHLBI-NIH
Oct 2014 – Oct 2015 : AHA, Basic Cell - Cardiac Biology: Regulation (BSci 7)
Oct 2014 : European Research Council, Frontier Research Grants
Feb 2014 : Project grants for the NHMRC, Australia
Oct 2010 – Oct 2013 : AHA, Basic Cell - Proteins & Crystallography (PC 1)
Oct 2012 : Early Career Reviewer, Myocardial Ischemia and Metabolism, NHLBI-NIH
Aug 2010 : Reviewer, Training Grant for Guy's and St Thomas Charity, London, UK
May 2009 : Reviewer, Pilot Grant Program, University of Utah, Salt Lake City, UT

(vi) Positions and activities in professional organizations

Jul 2019 – Jun 2020 : Co-Chair AHA BCVS Scientific Sessions (summer meetings)
May 2017 – Apr 2020 : Secretary and Treasurer, Cardiac Muscle Society
Jul 2017 – Jun 2020 : Co-chair Program committee, BCVS, AHA
Jul 2016 – Jun 2018 : Chair Early Career Committee, BCVS, AHA
Jul 2016 – Jun 2018 : Member Leadership committee, BCVS, AHA
Jul 2016 – Jun 2018 : Liaison Program committee, BCVS, AHA
Jul 2015 – Jun 2018 : Chair Fellow Nominating Committee, APS
Jul 2014 – Jun 2016 : Vice Chair Early Career Committee, BCVS, AHA
Oct 2013 – May 2017 : Member Early Career Committee, ISHR
Jul 2012 – Jun 2014 : Member Early Career Committee, BCVS, AHA
Feb 2012 – Apr 2014 : Member Fellow Nominating Committee, APS

(c) Invited addresses at conferences, universities, or institutes

(a) Intra and inter-departmental seminar at

@ University of Cincinnati (UC) from Aug 2016 - Present:

Jan 18, 2018 Guest Lecture Undergraduate in Medical Sciences, UC
Jan 09, 2018 Speaker Cardiology Grand Rounds, Internal Medicine, UC
Mar 14, 2017 Speaker Cardiology Grand Rounds, Internal Medicine, UC
Sep 09, 2017 Speaker Shark Tank Competition (Winner), HLVI, UC
Oct 17, 2017 Guest Speaker T32 retreat, Cincinnati Children's and UC
Oct 04, 2016 Speaker Molecular Genetics, Biochemistry & Microbiology, UC
Nov 8, 2016 Speaker Cardiology Grand Rounds, Internal Medicine, UC
Nov 29, 2016 Speaker Cardiology Grand Rounds, Internal Medicine, UC

Nov 28, 2016 Speaker Grand Rounds, Heart Institute, Cincinnati Children's

@ Loyola University Chicago from Sep 2009 to Aug 2016:

Apr 15, 2016	Speaker	South Asian Medical Student Association, Loyola University Chicago
Dec 02, 2015	Speaker	" <i>Social Media in Science</i> ", Graduate Program
Oct 05, 2011	Speaker	Department of Cell and Molecular Physiology
Mar 01, 2011	Speaker	Department of Neuroscience, Lake Shore Campus
Mar 23, 2010	Speaker	Department of Neuroscience, Lake Shore Campus
Aug 25, 2010	Speaker	Department of Molecular Pharmacology and Therapeutics
Sep 10, 2010	Speaker	Department of Microbiology and Immunology
Oct 6, 2010	Speaker	Graduate Program of Biochemistry and Molecular Biology
Dec 07, 2010	Speaker	Institute of Signal Transduction
Oct 4, 2009	Speaker	IPBS students at the Cancer Research Center

Active Participation in the St. Albert's Day celebration at Loyola University Chicago:

Oct 2015 – Reviewer with Amy Luke, PhD, for the poster presentation
Oct 2014 – Reviewer with Jawed Fareed, PhD, for the poster presentation
Oct 2013 – Oral presentation, Suresh Govindan, PhD, Postdoc (awarded best oral presentation)
Oct 2013 – Moderator with Dr. Katherine Knight, Graduate Student's Oral Presentation
Oct 2013 – Reviewer with Elizabeth R. Mueller, MD, for the poster presentation
Oct 2012 – Oral presentation, David Barefield, Graduate student (awarded best oral presentation)
Oct 2012 – Oral presentation, Diederik W. D. Kuster, PhD, Postdoc Fellow
Oct 2012 – Reviewer with Patrick Stiff, MD, for the poster presentation
Oct 2011 – Oral presentation, Suresh Govindan, PhD, Postdoc Fellow

(b) Invited seminars and talks

2020 – Speaker, Texas Heart Institute, Houston, TX
2019 – Moderator, AHA Scientific Sessions, Philadelphia, PA
2019 – Moderator, Southeast Lipid Conference, Cincinnati, OH
2019 – Distinguished Guest Lecturer, Retreat, Tufts Medical Center, Boston, MA
2019 – Panelist, Early Career Session, ISHR World Congress, Beijing, China
2019 – Speaker, World Congress, ISHR World Congress, Beijing, China
2019 – Speaker, Florida State University, Tallahassee, FL
2019 – Speaker, Centre for Translational Medicine, Thomas Jefferson University, Philadelphia, PA
2019 – Speaker, Institute of Cardiovascular Sciences, University of Manitoba, Winnipeg, MB, Canada
2018 – Speaker, Lillehei Heart Institute, University of Minnesota, Minneapolis, MN
2018 – Speaker, Early Career Session, AHA BCVS, San Antonio, TX
2018 – Speaker, The Architecture of Contraction, AHA BCVS, San Antonio, TX
2018 – Speaker, European Section, ISHR, Amsterdam, The Netherlands
2018 – Speaker, AstraZeneca, Mölndal, Gothenburg, Sweden
2018 – Speaker, Vascular Biology, Medical College of Georgia at Augusta University, GA
2018 – Speaker, Research institute Trainee Association, Nationwide Children's, Columbus, OH
2018 – Speaker, The Discovery Seminar Series, Nationwide Children's, Columbus, OH
2018 – Speaker, Cell Biology and Anatomy, University of South Carolina, Columbia, SC
2018 – Speaker, Division of Cardiology, Johns Hopkins University, Baltimore, MD
2018 – Speaker, Amgen, Thousand Oaks, CA
2018 – Speaker, Recent advances in Cardiovascular Sciences, Madurai, India
2018 – Speaker, Fatima College, Madurai, India
2018 – Speaker, Molecular Cardiology, Northwestern University Center, Chicago, IL
2017 – Molecular Physiology & Biophysics, University of Vermont, Burlington, VT
2017 – Speaker, International Forum of Pharmacogenetics and Biomedicine, Guangzhou, China

2017 – Speaker, Cardiothoracic Surgery, Sun Yat-sen Memorial Hospital, Guangzhou, China
 2017 – Speaker, Cardiovascular Surgery, Xijing Hospital, Xi'an, China
 2017 – Speaker, Translational Medicine, Qingdao University, Qingdao, China
 2017 – Speaker, Early Career Panel, AHA Scientific Sessions, Anaheim, CA
 2017 – Session Moderator, Early Career Panel, AHA Scientific Sessions, Anaheim, CA
 2017 – Cardiology, University of Colorado, Denver, CO
 2017 – Speaker, Davis Heart and Lung Research Institute, The Ohio State University, Columbus, OH
 2017 – Speaker, Cardiovascular Diseases and Sciences, LSU Health Sciences Center, Shreveport, LA
 2017 – Speaker, Merck, San Francisco, CA
 2017 – Moderator, BCVS Scientific Sessions, Portland, OR
 2017 – Speaker, Welcome address, BCVS Scientific Sessions, Portland, OR
 2017 – Speaker, Centre Cardiovascular Biology and Disease, InStem, Bangalore, India
 2017 – Speaker, Department of Biotechnology, Madurai Kamaraj University, India
 2017 – Speaker, Diabetes and Obesity Center, University of Louisville, Louisville, KY
 2017 – Speaker, Dept of Physiology, Wayne State University, Detroit, MI
 2016 – Speaker, Grand Rounds, Cardiovascular Medicine, Medical College of Wisconsin, WI
 2016 – Speaker, Grand Rounds, The Heart Institute, Cincinnati Children's, Cincinnati, OH
 2016 – Speaker, Department of Molecular Genetics, University of Cincinnati, Cincinnati, OH
 2016 – Speaker, Grand Rounds, Cardiovascular Division, University of Cincinnati, Cincinnati, OH
 2016 – Poster Moderator, Ohio Physiological Society, 31st Annual Meeting, OSU, Columbus, OH
 2016 – Session Moderator, Early Career Panel, AHA Scientific Sessions, New Orleans, LA
 2016 – Speaker and moderator, Cardiomyopathy, AHA Scientific Sessions, New Orleans, LA
 2016 – Speaker, AHA BCVS, Phoenix, AZ
 2016 – Speaker, Graduate program, University of Chicago, Chicago, IL
 2016 – Speaker, Symposium on Titin, MYBPC3 and Obscurin, Loyola University Chicago, Maywood, IL
 2016 – Speaker, Cardiac Regulatory Mechanism, Gordon Research Conference, New London, NH
 2016 – Oral abstract presentation, ISHR World Congress, Buenos Aires, Argentina
 2016 – Speaker, Hypertrophic Cardiomyopathy Session, Experimental Biology, San Diego, CA
 2016 – Speaker, Department of Physiology, Temple University, Philadelphia, PA
 2016 – Speaker, College of Science, Illinois Institute of Technology, Chicago, IL
 2016 – Speaker, Cardiovascular Laboratory, University of Chicago, Chicago, IL
 2016 – Speaker, The University of Alabama at Birmingham, Birmingham, AL
 2016 – Speaker, Indian Section of ISHR, Madras, India
 2016 – Session moderator, Indian Section of ISHR, Madras, India
 2016 – Speaker, School of Biological Sciences, Madurai Kamaraj University, Madurai, India
 2016 – Speaker, Vellalar College for Women, Thindal, Erode, India
 2016 – Speaker, The American College, Madurai, India
 2015 – Speaker, Department of Biomedical Laboratory Sciences, St Louis University, St Louis, MO
 2015 – Speaker, Division of Clinical Pharmacology, Vanderbilt University, Nashville, TN
 2015 – Session Moderator, Early Career Panel, AHA Scientific Sessions, Orlando, FL
 2015 – Speaker, Cardio Metabolic Centre, Karolinska Institutet, Stockholm, Sweden
 2015 – Institute for Cardiovascular Research, VU University, The Netherlands
 2015 – Moderator (Genetics of Cardiac Development and Disease), AHA BCVS, New Orleans, LA
 2015 – Speaker, Amgen, Thousand Oaks, CA
 2015 – Speaker, University of Kansas Medical Center, Kansas City, KS
 2015 – Speaker, Rutgers New Jersey Medical School, Newark, NJ
 2015 – Speaker, Barshop Institute for Aging, UTHSCSA, San Antonio, TX
 2015 – Speaker, The University of Alabama at Birmingham, Birmingham, AL
 2015 – Speaker, Case Western Reserve University, Cleveland, OH
 2015 – Speaker, AstraZeneca, Mölndal, Gothenburg, Sweden
 2015 – Speaker, School of Medicine, University of Wisconsin, Madison, WI

2015 – Speaker, Aurora St. Luke's Medical Center, Milwaukee, WI 53215
 2014 – Speaker, Bristol-Myers Squibb, Wallingford, CT 06492
 2014 – Speaker, Cardiovascular Research Center, Mount Sinai, New York, NY
 2014 – Poster Moderator, Ventricular Function/Mechanics, AHA Scientific Sessions, Chicago, IL
 2014 – Session Moderator, Early Career Panel, AHA Scientific Sessions, Chicago, IL
 2014 – Speaker, Merck, Cardiometabolic Disease, Kenilworth, NJ
 2014 – Guest Speaker, Department of Biotechnology, Indian Institute of Technology, Chennai, India
 2014 – Guest Speaker, Department of Biochemistry, University of Madras, Chennai, India
 2014 – Guest Speaker, Department of Botany, PSGR Krishnammal College, Coimbatore India
 2014 – Guest Speaker, Department of Biotechnology, Sri Kaliswari College, Sivakasi, India
 2014 – Speaker, Human Heart Forum, Heron Island, Australia
 2014 – Speaker, Bosch Institute, Annual meeting, University of Sydney, Sydney, Australia
 2014 – Speaker, ECI, Myofilament Meeting, Madison, WI
 2014 – Moderator, One-day satellite meeting on MYBPC, Loyola University Chicago, Maywood, IL
 2014 – Organizer, One-day satellite meeting on MYBPC, Loyola University Chicago, Maywood, IL
 2014 – Moderator, Heart Failure, ISHR North-American Section meeting, Miami, FL
 2014 – Moderator, ECI Career Paths, ISHR North-American Section meeting, Miami, FL
 2014 – Speaker, Experimental Biology Meeting 2014, San Diego, CA
 2013 – Poster Moderator, Ventricular Function/Mechanics, AHA Scientific Sessions, Dallas, TX
 2013 – Session Moderator, Ventricular Function/Mechanics, AHA Scientific Sessions, Dallas, TX
 2013 – Speaker, Challenges of the New PI; AHA Scientific Sessions, Dallas, TX
 2013 – Speaker, Universität of Gießen, Germany
 2013 – Speaker, University Medical Center Hamburg, Germany
 2013 – Heart Center, Nationwide Children's Hospital, Columbus, OH
 2013 – Department of Physiology and Cell Biology, Ohio State University, Columbus, OH
 2013 – Feinberg Cardiovascular Research Institute, Northwestern University, Chicago, IL
 2013 – Resuscitation Institute, Rosalind Franklin University, North Chicago, IL
 2013 – Cardiovascular Research, UIC, College of Medicine, Chicago, IL
 2013 – Chicago Mass Spec Discussion Group, College of Pharmacy, UIC, Chicago, IL
 2013 – Integrative Medical Sciences, Northeast Ohio Medical University, Rootstown, OH
 2013 – Sanford School of Medicine, University of South Dakota, Vermillion, SD
 2013 – Cardiovascular Research Center, Temple University, Philadelphia, PA
 2012 – Anatomy and Cell Biology, University of Iowa, Iowa, IA 52242
 2012 – Cardiovascular Physiology, Washington State University, Pullman WA 99164
 2012 – Cardiology Division, Texas A&M HSC College of Medicine, Temple, TX
 2012 – University of Houston, Texas Medical Center, Houston, TX
 2012 – Speaker, symposium on cMyBP-C, Biophysical meeting, 2012, San Diego, CA
 2012 – Moderator, Negotiating faculty positions, Biophysical meeting, 2012, San Diego, CA
 2012 – Speaker, American Heart Association, Midwest Affiliation, Chicago, IL
 2011 – Molecular Physiology & Biophysics, University of Vermont, Burlington, VT
 2011 – Institute for Cardiovascular Research, VU University, The Netherlands
 2011 – Feinberg Cardiovascular Research Institute, Northwestern University, Chicago, IL
 2010 – Co-chair, American Heart Association Scientific Sessions, Chicago, IL
 2010 – Cardiovascular Division, King's College of London, University of London, London, UK
 2010 – Speaker, 20th World Congress, International Society for Heart Research, Kyoto, Japan
 2010 – Speaker, 2nd Myofilament Meeting, Madison, WI
 2009 – Department of Cell and Molecular Physiology, Loyola University Chicago, Chicago, IL
 2009 – Department of Surgery and Physiology, University of Michigan, Ann Arbor, MI
 2009 – Cardiovascular Research Institute, Texas A&M, Temple, TX
 2009 – Veterinary Medicine, University of Missouri-Columbia, Columbia, MO
 2009 – Division of Cardiovascular Medicine, University of Louisville, Louisville, KY

2009 – Division of Cardiovascular Medicine, Vanderbilt University, Nashville, TN
2009 – Co-chair, American Heart Association Scientific Sessions, Orlando, FL
2008 – Speaker, 1st Myofilament Meeting, Madison, WI
2008 – Department of Physiology and Biophysics, University of Illinois Chicago, Chicago, IL
2008 – Speaker, ISHR Annual Meeting-North American Section, Cincinnati, OH
2008 – Co-chair, American Heart Association Scientific Sessions, New Orleans, LA
2005 – Department of Medicine, Northwestern University, Chicago, IL