WAYNE STATE UNIVERSITY
SCHOOL OF MEDICINE
DEPARTMENT OF PHYSIOLOGY

April 30, 2019

Dear Member of the Selection Committee,

It is a pleasure to nominate Dr. Jian-Ping Jin for the 2020 Lawrence M. Weiner Award. Dr. Jin is currently the Chair of the Department of Physiology at Wayne State University School of Medicine in Detroit, Michigan where he has worked for the past nine years and was awarded a major research endowment in 2015. Dr. Jin was elected to the Academy of Scholars of Wayne State University in 2016 as a Lifetime Member. As a tenured professor with complete training in clinical medicine, an MSc in immunology, and a PhD in molecular and cellular biology from the University of Iowa, he teaches regularly at undergraduate, graduate, and professional levels and has lectured at many U.S. and international venues. He has previously served on the faculty of two major universities: Case Western in Cleveland, and Northwestern in Chicago.

Dr. Jin is an internationally recognized researcher with expertise in protein structure-function relationship, mechanoregulation of cell functions, muscle contractility, myopathies, heart failure, molecular engineering, and biotechnologies. Dr. Jin has published more than 170 research papers, review articles, and book chapters. He was the sole editor of two troponin books; one in basic science research and the other in clinical diagnosis, published in 2013 and 2014. His research has been continuously funded since the establishment of his own laboratory in 1993. Currently, he is the Principal investigator of three active NIH R01 grants and Principal Investigator/Program Director of an NIH T32 predoctoral training grant that has recently been renewed for five more years (2019-2023). During the past five years, Dr. Jin has served as the mentor for four PhD trainees, one MSc trainee, five postdoctoral fellows, and ten undergraduate trainees. He has co-authored 37 peer-reviewed articles and 13 book chapters and reviews in the past five years.

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http://physiology.med.wayne.edu/

Physiology, he is on the advisory board of the Mott Center, the Cardiovascular Research Institute, the Physicians Practice Group, and is Director of the Detroit Cardiovascular Grant. He is an ad hoc reviewer for 30 journals and is on the editorial board of five journals; he is Editor-in-Chief of *Archives of Biochemistry and Biophysics.*

Clearly, Dr. Jin is a valued member of our medical school faculty. I support this nomination for the 2020 Lawrence M. Weiner Award with the highest enthusiasm.

Sincerely yours,

James A. Rillema

James A. Rillema, PhD.
Professor of Physiology

CURRICULUM VITAE
(Updated on April 15, 2019)

1. PERSONAL INFORMATION

Name:	**Jian-Ping (J.-P.) Jin, B.M. (M.D.), M.Sc., Ph.D.**
Present Position:	William D. Traitel Professor and Chairman Department of Physiology Wayne State University School of Medicine
Work Address:	540 E. Canfield, Room 5374 Detroit, MI 48201, USA
Home Address:	611 S Wells St., Apt. 3003 Chicago, IL 60607, USA
Citizenship:	Canadian, US Permanent Resident
Telephone Number:	(313)577-1520
Fax Number:	(313)577-5494
E-mail Address:	jjin@med.wayne.edu

2. EDUCATION

07/1983	The Fourth Military Medical Univ., Xi'an, China	B.M. (M.D.)
07/1986	The Fourth Military Medical Univ., Xi'an, China	M.Sc. (Immunology)
	Advisers: Prof. M.-X. Wang & Prof. N.-Z. Zhang	
12/1989	University of Iowa, Iowa City, USA	Ph.D. (Biology)
	Adviser: Prof. Jim Lin	

3. GRADUATE MEDICAL EDUCATION

08/1983-07/1986	Tangdu Hospital, Xi'an, China	Residency (Internal Medicine-Cardiology)

4. POSTDOCTORAL RESEARCH TRAINING

01/1990-04/1991	University of Texas at Austin, TX, USA	Fellowship in Biochemistry
	Mentor: Prof. Kuan Wang	
05/1991-04/1993	University of Alberta, AB, Canada	Fellowship in Protein Structure-Function Relationships
	Mentor: Prof. Larry Smillie	

5. FACULTY APPOINTMENTS

08/1984-07/1986	Instructor	Tangdu Hospital, Xi'an, China, Department of Medicine
05/1993-06/1996	Assistant Professor (Tenure Track)	University of Calgary, AB, Canada, Department of Biochemistry and Molecular Biology
05/1993-06/1996	Member	University of Calgary, AB, Canada, Smooth Muscle Research Group
07/1996-06/2002	Assistant Professor (Tenure Track)	Case Western Reserve Univ., Ohio, Department of Physiology and Biophysics
07/1996-12/1998	Adjunct Assist. Prof.	University of Calgary, AB, Canada, Department of Biochemistry and Molecular Biology

07/2002-04/2004	Associate Professor (with Tenure)	Case Western Reserve Univ., Ohio, Department of Physiology and Biophysics
05/2004-08/2007	Associate Professor (with Tenure)	Northwestern University, Illinois Department of Medicine
05/2004-06/2010	Adjunct Assoc. Prof.	Case Western Reserve Univ., Ohio, Department of Physiology and Biophysics
05/2004-05/2009	Preceptor	Northwestern University, Illinois Interdepartmental Biological Sciences Graduate Program
07/2005-05/2009	Member	Northwestern University, Illinois, Center for Genetic Medicine
09/2007-05/2009	Professor (with Tenure)	Northwestern University, Illinois Department of Medicine
06/2009-present	Professor (with Tenure)	Wayne State University, Michigan Department of Physiology
07/2010-present	Adjunct Professor	Case Western Reserve Univ., Ohio, Department of Physiology and Biophysics
01/2015-present	Adjunct Professor	Department of Obstetrics and Gynecology, Wayne State University School of Medicine
10/2015-present	Member	Karmanos Cancer Institute, Wayne State University

6. HOSPITAL APPOINTMENT

04/2004-05/2009	Member of Professional Staff	Evanston Northwestern Healthcare, Illinois (Northshore University HealthSystem)

7. SIGNIFICANT ADMINISTRATIVE APPOINTMENTS

01/1985-07/1986	Director	Tangdu Hospital, Xi'an, China, Department of Medicine Hybridoma Facility
05/1993-06/1996	Director	Univ. of Calgary Smooth Muscle Research Group Tissue Culture/Hybridoma Facility
01/2004-05/2009	Section Chief	Evanston Northwestern Healthcare, Evanston, Illinois, Section of Molecular Cardiology
06/2009-present	Department Chair	Wayne State University, Detroit, Michigan Department of Physiology
06/2009-present	Member	Advisory Board, Wayne State University School of Medicine Cardiovascular Research Institute
07/2009-present	Member	Advisory Board, Wayne State University School of Medicine C.S. Mott Center for Human Growth and Development
08/2010-07/2011	Member	Board of Directors, Wayne State University Physician Practice Group
01/2013-present	Director	Detroit Cardiovascular Training Program (NIH T32)

8. MAJOR COMMITTEE SERVICES

09/1993-03/1994	Research Group Faculty Recruiting Committee, University of Calgary
07/1994-06/1996	Supervisory Committee, Embryonic Stem Cell Gene Targeting Mutagenesis Facility, University of Calgary
07/1997-06/1998	Graduate Student Affairs Committee, Department of Physiology and Biophysics, Case Western Reserve University
07/1998-061999	Seminar Committee (Co-chair), Department of Physiology and Biophysics, Case Western Reserve University
07/1998-06/2001	Faculty Appointment, Promotion and Tenure Committee, Department of Physiology and Biophysics, Case Western Reserve University
07/2002-12/2003	Institutional Radiation Safety Committee, Case Western Reserve

	University
01/2003-12/2003	Equipment Committee (Co-Chair), Department of Physiology and Biophysics, Case Western Reserve University
09/2004-08/2006	Advisory Committee, Northwestern University Biotechnology Laboratory
10/2006-05/2009	Evanston Northwestern Healthcare Faculty Practice Associates Research and Education Committee
09/2009-12/2009	Steering Committee, Wayne State University – Henry Ford Health System Joint Research Building Planning
07/2010-06/2011	Chair of the Group of Basic Science Chairs, Wayne State University School of Medicine
01/2011-12/2013	Research Center and Institute Review Committee (CIAC-II), Wayne State University
09/2011-02/2012	Chair, Research Strategic Planning Subcommittee for Animal Resources, Wayne State University School of Medicine
05/2012-present	Medical Student Promotion Committee, Wayne State University School of Medicine
09/2013-12/2013	Wayne State University School of Medicine – Henry Ford Health System Affiliation Committee
01/2016-05/2016	Wayne State University Review Advisory Panel for the review of the Department of Biological Sciences
06/2009-present	Member and Chair of Departmental Promotion & Tenure, Budget, and Faculty Salary Committees, Department of Physiology, Wayne State University School of Medicine

9. NOTABLE AWARDS, HONORS, DISTINCTIONS

07/1982-08/1982	University of Sidney, Australia, International Exchange Medical Studentship
07/1983	First Place Academic Merit Award of the Fourth Military Medical University Graduating Class (the highest honor given to 1 of my class of 447 medical and dental graduates)
12/1987	American Society for Cell Biology Graduate Student Travel Award
07/1988	Fourth International Congress of Cell Biology Travel Scholarship
12/1988	American Society for Cell Biology Graduate Student Travel Award
12/1989	American Society for Cell Biology Graduate Student Travel Award
05/1991-04/1993	Alberta Heritage Foundation Medical Research Fellowship
05/1993-04/1998	Medical Research Council of Canada Research Development Scholarship
05/1993-04/1998	The Heart and Stroke Foundation of Canada Research Scholarship
01/1996	Honorary Professor of Medicine, Southern Medical University, Guangzhou, China (uncompensated)
01/1998	Honorary Professor of Medicine, Tangdu Hospital, Xi'an, China (uncompensated)
04/2008-07/2015	Visiting Professor of Biological Sciences, Northwestern Polytechnical University, Xi'an, China (uncompensated)
2009	Visiting Professor, Xi'an Jiaotong University, China (uncompensated)
11/2017	Visiting Professor, Qingdao University, Qingdao, China (uncompensated)
2015-present	William D. Traitel Endowed Chair in Physiology, Wayne State University
2016-present	Elected Lifetime Member of the Academy of Scholars, Wayne State University

10. PROFESSIONAL SOCIETY MEMBERSHIPS

1987-2015	American Society for Cell Biology
1993-1998	Canadian Society of Biochemistry and Molecular Biology
1994-present	Biophysical Society
2009-present	American Physiological Society

11. PROFESSIONAL AND SCIENTIFIC SERVICE

1999-present	Member of Editorial Board, *Archives of Biochemistry and Biophysics*
2006	Guest Editor of Highlight Issue in Contractile Proteins for *Archives of Biochemistry and Biophysics*
2006-2010	Chartered Member of NIH/NIAMS Arthritis and Musculoskeletal and Skin Diseases Special Grants Review Committee (AMS)
2008-2010	Member of Editorial Board, *Cell Health and Cytoskeleton*
2011-present	Editor-in-Chief, *Archives of Biochemistry and Biophysics*
2011-present	Associate Editor, *Frontiers in Physiology: Striated Muscle Physiology*
2016-present	Consulting Editor, *Journal of Molecular and Cellular Cardiology*
2013-present	Chartered Member of NIH/CSR Cardiac Contractility, Hypertrophy and Failure Study Section (CCHF)

Ad Hoc Reviewer for the following Journals:

American Journal of Physiology:Cell Physiology
American Journal of Physiology:Heart and Circulatory Physiology
Antioxidants & Redox Signaling
Arteriosclerosis, Thrombosis and Vascular Biology
BBA - Molecular Basis of Disease
Biochemistry
Biochemistry and Cell Biology
Biochemistry and Molecular Biology International
Biologics: Target and Therapy
BMC Developmental Biology
Circulation Research
Development
Development Genes and Evolution
Developmental Dynamics
Diabetes
FEBS Journal
Frontiers in Physiology
Gene
Genomics
Journal of Biological Chemistry
Journal of Cell Physiology
Journal of Cell Science
Journal of Molecular and Cellular Cardiology
Journal of Physiology (London)
Molecular Medicine
PLOS One
Protein Sciences
Physiological Genomics
The Scientific World
Trends in Cardiovascular Medicine

Ad Hoc Reviewer for the Following Granting Agencies:

BBSRC, United Kingdom
Heart and Stroke Foundation of Canada
Medical Research Council of Canada
National Institutes of Health (NIAMS and NHLBI) Regular Study Sections and Special Emphasis Groups (for funding mechanisms including R01, R03, R21, P01, P30, F series, K series, T32, and LRP)

National Medical Research Council of Singapore
Natural Sciences and Engineering Research Council of Canada
National Natural Science Foundation of China
National Science Foundation, USA
The U.S. Civilian Research and Development Foundation
The Wellcome Trust, UK
Research Grants Council of Hong Kong, PRC

12. TEACHING

Director of Regular University Courses:

1994-1996 MDSC717: Gene Cloning and Recombinant DNA Technology, Univ. of Calgary
1997-2003 Phol460/Biol460: Introduction to Molecular Biology, Case Western Reserve Univ.
1998-1999 Phol498: Physiology & Biophysics Seminar, Case Western Reserve Univ.
2012-present PSL6300: Biotechnology: Techniques and Applications, Wayne State University
2013-present PSL6310: Biotechnology Laboratory Elections

Instructor of Regular University/Medical School Courses:

1984-1986 EKG Diagnosis, Tangdu Hospital
1994-1995 BCEM528: Independent Study in Biochemistry, University of Calgary
1997 Health Careers Enhancement for Minorities, Case Western Reserve University
1997 Phol 532: Molecular Organization of the Cell, Case Western Reserve University
2000-2003 Medical Curriculum Physiology, Case Western Reserve University
2000-2002 Phol 518: Integrated Approaches to Cardiovascular Research, Case Western Reserve University
2004 Core Lecture in Cardiology, Evanston Northwestern Healthcare
2007 BioSci 398/BioSci 399 Undergraduate Research, Northwestern University
2009-present Cardiovascular Physiology PSL7600, Wayne State University
2009/2011 Medical Curriculum Physiology, Wayne State University School of Medicine
2010-2012 HON4998: Honors Senior Thesis, Wayne State University
2010-present PSL5010: Undergraduate Research in Physiology, Wayne State University
2011-present Cell and Molecular Physiology PSL7640, Wayne State University
2014-present Interdisciplinary Molecular and Cellular Biology, IBS7015, Wayne State University
2017-present PSL7010/7011: Graduate Physiology, Wayne State University

Coordinator of Lecture Series:

2004-2009 Cardiovascular Research Seminar/Grand Rounds, Evanston Northwestern Healthcare

Thesis Adviser for Graduate Students:

01/1995-02/1997	W.H. Raharjo	M.Sc. 1997, University of Calgary
05/1995-05/1997	J. Wang	M.Sc. 1997, University of Calgary
07/1995-07/1997	O. Ogut	M.Sc. 1997, University of Calgary
01/1996-05/1998	A. Chen	Ph.D. 1998, Southern Medical University, China
08/1997-12/2000	O. Ogut	Ph.D. 2000, Case Western Reserve University
09/1998-12/2002	B. Biesiadecki	Ph.D. 2002, Case Western Reserve University
08/1998-12/2001	X. Wang	Ph.D. 2001, Xijing Hospital Research Institute, Xi'an, China
08/2005-12/2008	H. Feng	Ph.D. Student, Xijing Hospital Research Institute, China

06/2008-09/2010	B. Wei	Ph.D. Student, Institute of Biophysics, Chinese Academy of Science
11/2008-06/2011	W. Jiang	Ph.D. Student, Tangdu Hospital, Xi'an, China
01/2013-12/2014	C. Amarasinghe	M.Sc. Student, Wayne State University
09/2013-08/2015	J.J. Sheng	Ph.D. Student, Fourth Military Medical University
01/2013-12/2016	R. Liu	Ph.D. Student, Wayne State University
05/2014-08/2016	L. Gunther	Ph.D. Student, Wayne State University (co-adviser)
01/2017-02/2018	H. Zhang	Ph.D. Student, Qingdu Dental Hospital, Xi'an, China
08/2018-present	T. Cao	Ph.D. Student, Wayne State University
01/2019-present	V. Estrada	M.Sc. Student, Wayne State University

Supervisor for Rotation Graduate Students

09/1995-11/1995	A. Sanger	M.Sc. Student, University of Calgary
07/1996-06/1997	D. Wu	M.Sc. Student, University of Calgary
10/1997-04/1998	D. Hwang	Ph.D. Student, Case Western Reserve University
10/1998-04/1999	S. Joseph	Ph.D. Student, Case Western Reserve University
07/2000-09/2000	O. Lashin	Ph.D. Student, Case Western Reserve University
07/2001-08/2001	A. Wiedmann	Ph.D. Student, Case Western Reserve University
10/2001-02/2002	T. Williams	M.Sc. Student, Case Western Reserve University
05/2003-11/2003	Y. Tsutsui	Ph.D. Student, Case Western Reserve University
09/2003-11/2003	M. Breckenridge	Ph.D. Student, Case Western Reserve University
02/2006-02/2007	D. Patel	Ph.D. Student, University of North Texas
06/2007-09/2007	D. Vanorny	Ph.D. Student, Northwestern University
06/2009-08/2009	C. Ladipo	Ph.D. Student, Wayne State University
08/2010-10/2010	A. Dixit	M.D./Ph.D. Student, Wayne State University
06/2011-07/2011	J. Llaniguez	M.D./Ph.D. Student, Wayne State University
10/2012-12/2012	R. Liu	Ph.D. Student, Wayne State University
09/2014-01/2015	A. Anzell	Ph.D. Student, Wayne State University
10/2015-05/2016	G. Ginter	M.Sc. Student, Wayne State University
10/2017-12/2017	B. Roy	Ph.D. Student, Wayne State University
10/2017-12/2017	S. Kanwal	M.Sc. Student, Wayne State University
10/2017-05/2018	N. DiLoreto	M.Sc. Student, Wayne State University
01/2018-07/2018	T. Cao	M.Sc. Student (OPT), Case Western Reserve Univ.
07/2018-12/2018	V. Estrada	M.Sc. Student, Wayne State University

Member of Graduate Student Advisory Committees

1995	Ph.D. Thesis Examination Committee for M. Scarabello, University of Calgary
1995	Ph.D. Thesis Examination Committee for J. Dennis, University of Calgary
1995-1997	M.Sc. Supervisory Committee for E. Raharjo, University of Calgary
1995-1996	Ph.D. Supervisory Committee for B. Abell, University of Calgary
1997-1999	Ph.D. Advisory Committee for K. Kivilo, Case Western Reserve University
1997-1999	Ph.D. Advisory Committee for D. Zakhary, Case Western Reserve University
1997-2003	Ph.D. Advisory Committee for A. Rhee, Case Western Reserve University
1999-2001	Ph.D. Advisory Committee for S.R. Dashti, Case Western Reserve University
1999-2003	Ph.D. Advisory Committee for C.I. Ruse, Case Western Reserve University
1999-2003	Ph.D. Advisory Committee (Chair) for M. Ruse, Case Western Reserve Univ.
2000-2004	Ph.D. Advisory Committee for P. Karagiannis, Case Western Reserve University
2003-2004	Ph.D. Advisory Committee for G. Huang, Case Western Reserve University
2003-2004	Ph.D. Advisory Committee for M. Rico-Salas, Case Western Reserve University
2003-2004	Ph.D. Advisory Committee for E. Morgan, Case Western Reserve University
2009	Ph.D. Advisory Committee for L. Chen, Wayne State University
2009-2011	Ph.D. Advisory Committee for V. Murray, Wayne State University

2009-2011	Ph.D. Advisory Committee for S. Zhou, Wayne State University
2012-2013	M.Sc. Supervisory Committee for A. Manly, Wayne State University
2012-2014	Ph.D. Advisory Committee for N. Sleiman, Wayne State University
2013-2016	Ph.D. Advisory Committee for L. Gunther, Wayne State University
2012-present	Ph.D. Advisory Committee for I. Jang, Wayne State University
2016-2017	Ph.D. Advisory Committee for J. Holcomb, Wayne State University
2017-2018	Ph.D. Advisory Committee for M. Fountain, Wayne State University

Supervisor for Postgraduate Research Trainees

08/1993-07/1994	D.-C. Tang	Postdoctoral Fellow
02/1994-12/1994	J. Zhang	Postdoctoral Fellow
01/1995-02/1996	J. Gao	Postdoctoral Fellow
07/1995-07/1996	R. Nigam	Postdoctoral Fellow
01/2000-07/2002	Z. Yu	Postdoctoral Fellow
01/2003-06/2004	B. Biesiadecki	Postdoctoral Fellow
06/2003-05/2004	J. Barbato	Postdoctoral Fellow
08/2003-08/2005	X. Wang	Postdoctoral Fellow
11/2004-09/2005	K. Wu	Visiting Research Scholar
12/2004-06/2009	Z. Zhang	Postdoctoral Fellow
07/2005-01/2006	Z. Yu	Visiting Research Scholar
08/2005-08/2007	K. Parai	Postdoctoral Fellow
09/2005-12/2006	S. Mottl	Medical Resident Research Elective
03/2007-11/2009	E.-M. Jeong	Postdoctoral Fellow
09/2008-05/2010	K. Bueltmann	Medical Resident Research Elective
10/2010-09/2011	A. Qian	Visiting Research Scholar
01/2012-09/2012	M.-S. Woo	Postdoctoral Fellow
12/2008-04/2011	H. Feng	Postdoctoral Fellow
11/2011-11/2013	S. Kern	Postdoctoral Fellow
05/2013-08/2015	B. Wei	Postdoctoral Fellow
07/2016-08/2017	L. Liu	Postdoctoral Fellow
11/2016-04/2018	A. Mondal	Postdoctoral Fellow
10/2016-present	O. Plazyo	Postdoctoral Fellow
04/2018-present	K. Oki	Research Associate

Supervisor for Undergraduate Research Students

09/1994-05/1995	O. Ogut	Project Research Student
05/1994-08/1994	E. Beaubien	Summer Research Student
05/1994-08/1994	J. Wang	Summer Research Student
05/1995-08/1995	J. Hwang	Summer Research Student
09/1995-06/1996	S. Kwong	Project Research Student
05/1998-07/1998	J. Chan	Summer Research Student
11/1998-03/2000	R. Samanez	Project Research Student
03/2000-09/2001	S. Yannaras	Project Research Student
05/2000-08/2000	W. Schneider	Summer Research Student
06/2001-08/2001	B. Elder	Summer Research Student
06/2003-08/2003	K. Schneider	Summer Research Student
06/2003-08/2003	M. Breckenridge	Summer Research Student
06/2006-08/2006	A. LeBlanc	Summer Research Student
06/2007-09/2007	M. Shenava	Summer Research Student
06/2009-07/2009	M. Harrison	Summer Research Student
03/2010-07/2010	T. Kwiechien	Summer Research Student
08/2010-05/2011	F. Hussein	Project Research Student
08/2011-08/2013	G. Cady	Project Research Student

01/2012-04/2012	H. Hong	Project Research Student
01/2012-04/2012	H. Jagoda	Project Research Student
01/2012-04/2012	A. Mathiarasu	Project Research Student
03/2012-06/2012	K. Moy	IMSD Research Student
01/2014-03/2016	A. Manivannan	Project Research Student
05/2015-09/2016	A. Messner	Project Research Student
05/2015-present	S. Wong	Project Research Student
01/2016-02/2017	T. Heilig	Project Research Student
05/2016-04/2017	M. Kolar	Project Research Student
05/2016-04.2017	R. Laith	Project Research Student
05/2017-12/2018	U. Thongam	Project Research Student
09/2017-present	E. Pittman	Project Research Student
06/2018-09/2018	B. Garibbay	Summer Research Student
09/2018-present	A. Rogers	Project Research Student

Research Mentor for Junior Faculty:

2009-2014 P. Hines, Assistant Professor of Pediatrics, Wayne State University (4 years of 75% time protection by a supplement to my R01 grant)

2018-present T.-B. Hsieh, Women's Reproductive Health Research (WRHR) Fellow, Wayne State University (5 years of 75% time research training)

Volunteer Science Teaching in Community:

1997-2001 Animal biology demonstrations in local elementary school classes

2005 Judging regional middle school science fair

13. RESEARCH GRANTS/CONTRACTS (in past five years)

Research Grants (with total direct cost)

Active Grants:

PI: J.-P. Jin NIH/NHLBI
R01 HL127691-03 2016-2020 $1,000,000
Regulation of Troponin I in Cardiac Adaptation & Failure

PI: J.-P. Jin NIH/NHLBI
R01-HL138007-02 2018-2022 $1,000,000
Modification of Troponin T to Improve Cardiac Function in Heart Failure

PI: J.-P. Jin NIH/NHLBI
R01-HL138007-01A1S1 2018-2019 $30,000
Modification of Troponin T to Improve Cardiac Function in Heart Failure
(To commercialize the research supported by the parent grant)

PI: J.-P. Jin NIH/NHLBI
T32 HL120822-06 2014-2024 6 PhD slots
Detroit Cardiovascular Training Program

M-PI: J.-P. JIN/J. XU NIH/NHLBI
R01 HL133162-03 2018-2020 $1,059,746
Rabbit Model for Cystic Fibrosis

M-PI: J. STELZER/S. CAMPBELL/J.-P. JIN/K. CAMPBELL NIH/NHLBI
R01 HL146676-01 (**1%, pending NOA**) 2019-2024 $200,560 (JIN Subcontract amount)
Computer Modeling of Myosin Binding Protein C and Its Effects on Cardiac Contraction

Completed in Past 10 Years:

PI: J.-P. Jin	NASA		
	Research Grant NNA04Ck26G	2002-2008	$354,000
	Adaptation of myocardial proteins in microgravity		
PI: J.-P. Jin	NIH/NICHD		
	R21 HD-044824	2003-2008	$300,000
	Myofilament protein isoforms in neuromuscular reflex		
PI: J.-P. Jin	Berlin Cardiovascular Research Fund		
	Research Grant	2005-2009	$50,000
	Troponin in Cardiac Muscle Contractility		
PI: J. Storhoff	NIH		
	Subcontract to R43 AI073995-01 (**Co-I: J.-P. Jin**)	2007-2009	$65,624
	A Novel Diagnostic Test for *Clostridium difficile* Associated Diarrhea		
PI: J.-P. Jin	Midwest Eye Bank		
	Research Grant	2009-2010	$15,000
	Regulation and function of calponin in cornea wound healing		
PI: J.-P. Jin	NIH/NHLBI		
	R01 HL-078773	2005-2012	$900,000
	Troponin structure-function in cardiomyopathy		
PI: J.-P. Jin	NIH/NHLBI		
	R01 HL086720	2007-2013	$1,000,000
	Regulation and function of calponin		
PI: J.-P. Jin	Wayne State University		
	Group Incubator Grant	2010-2014	$720,000
	Cardiovascular Adaptation and Disease Prevention: Development of a Multidisciplinary Translational Research Group		
PI: J.-P. Jin	NIH/NHLBI		
	R01 HL098945	2010-2016	$1,000,000
	Proteolytic Regulation of Troponin T & Cardiac Function		
PI: J.-P. Jin	NIH/NHLBI		
	R01 HL098945-S1	2011-2016	$345,000
	(Research Mentoring of Junior Faculty Dr. P. Hines)		
PI: J.-P. Jin	Industrial Technology Research Institute, Taiwan		
	Service Contract	2012-2016	$23,000
	New Methods for the Diagnosis of Acute Myocardial Infarction		
PI: J.-P. Jin	NIH/NIAMS		
	R01 AR048816	2002-2017	$2,183,250
	Role of troponin T isoforms in Amish nemaline myopathy		
Multi-PI: J.-P. Jin/Elena A. Usacheva,	NIH/NIAID	2015-2017	$250,000
	R21 AI116659-01		
	Detection of Host Response in *Clostridium Difficile* Infection		

Pending Proposals:

PI: J.-P. Jin	NIH/NHLBI	
	R01 HL148302-01A1	12/2019-11/2023
	Calponin 2 in Calcific Aortic Valve Disease	
M-PI: J.-P. Jin/R.J. Wessells	NIH/NHLBI	
	R01 HL	12/2019-11/2023
	Role of A Glu-rich Segment of Troponin T in Myocyte Energetic Efficiency	
PI: J.-P. Jin	NIH/NIAMS	
	R01 AR	04/2020-03/2025
	Pathogenesis and Pathophysiology of *TNNT1* Myopathies	

Sponsor of Successful Student/Fellow Training Grants

2001	American Heart Association Summer Studentship to S. Yannaras
2003	American Heart Association Summer Studentship to A. Su (declined)
2003-2005	American Heart Association Postdoctoral Fellowship to B. Biesiadecki (Co-sponsor)
2005-2007	American Heart Association Postdoctoral Fellowship to Z. Zhang
2006-2008	NIH F32 HL086216 Postdoctoral Fellowship to K. Parai

Approved Patents:

1. US Patent 8,008,021: N-terminal truncation of cardiac troponin subunits and their roles in cardiovascular disease **(Inventor: Jin)**
2. US Patent 8,048,636: Methods of screening for modulators of h2-calponin activity **(Inventor: Jin)**
3. US Patent 8,334,105: Methods for Treating Cardiac Disease by Modifying an N-Terminal Domain of Troponin I **(Inventor: Jin)**
4. US Patent 8,906,635: High immunogenic structure in *C. difficile* toxin B detection and vaccination **(Inventor: Jin and Peterson)**

Submitted US Patent Applications:

1. US Patent Application #16,009,904: Methods and compositions relating to diagnosis and treatment of cardiac disorders **(Inventor: Jin)**
2. US Previsional Patent Application #62/713,677: Methods and compositions relating to anti-biotin antibodies **(Inventor: Jin)**

14. SCHOLARLY BIBLIOGRAPHY

A list of my published work is publicly available in the NCBI digital database (**h-index = 40**): https://www.ncbi.nlm.nih.gov/myncbi/browse/collection/40805841/?sort=&direction=

Peer Reviewed Original Research Articles:

1. **Jin, J.-P.**, Shi, Y.-B., Zhang, H.-Y. and Wang, M.-X. (1983) The levels of serum IgG against Herpes Simplex virus type 1 in different age-groups in Xi'an, China. ***J. 4th Mil. Med. Univ.*** 4:186-190.
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168. Oki, K., Wei, B., Feng, H.-Z., **Jin, J.-P.** The loss of slow skeletal muscle isoform of troponin T in spindle intrafusal fibers explains the pathophysiology of Amish nemaline myopathy. Submitted to ***J. Physiol.*** **(London).**
169. Feng, H.-Z., **Jin, J.-P.** Transgenic Expression of Carbonic Anhydrase III in Cardiac Muscle Demonstrates A Mechanism to Tolerate Acidosis. Submitted to ***Am. J. Physiol. Cell Physiol.***

Books Edited

1. *Troponin: Regulator of Muscle Contraction.* **J.-P. Jin,** Ed., Nova Science Publishers, 2013
2. *Troponin: Informative Diagnostic Marker.* **J.-P. Jin,** Ed., Nova Science Publishers, 2014

Reviews, Book Chapters and Edited Journal Special Issues

1. **Jin, J.-P.** (1985) Cardiac myosin heavy and light chains in the diagnosis of acute myocardial infarction. ***J. 4th Mil. Med. Univ.*** 6:355-359.
2. **Jin, J.-P.** (1985) Serum myoglobin in the immunological diagnosis of acute myocardial infarction. ***New Med.*** 16:550-551.
3. **Jin, J.-P.** (1999) Recent progress in molecular cardiology. In: *Cardiovascular Diseases.* N. Zhang and R. Du, eds. PLA Medical Press (China), pp42-59.
4. **Jin, J.-P.** (2000) Titin-thin filament interaction and potential role in muscle function. ***Adv Exp Med Biol.*** 481:319-33; discussion 334-5.
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6. **Jin, J.-P.** (2006) ***Archives of Biochemistry and Biophysics*** Vol. 456(2):99-232. Special Issue in Contractile Proteins (15 original research articles).
7. **Jin, J.-P.**, Zhang, Z., and Bautista, J.A. (2008) Isoform diversity, regulation and functional adaptations of troponin and calponin. ***Crit. Rev. in Eukar Gene Expr.*** 18:93-124.
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18. Liu R., and **Jin J.-P.** (2014) Calponin: A mechanical tension-modulated regulator of cytoskeleton and cell motility. ***Curr Top Biochem Res*** 6(Suppl):1-15. Invited review.
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20. Sheng J.-J. **Jin, J.-P.** (2015) Troponin I: Isoform Genes, Regulation, and Protein Structure-Function Relationships. ***Gene*** 576:385-94, Invited review (the Gene Wiki Project).
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25. Mondal, A., **Jin, J.-P.** (2016) Protein Structure-Function Relationship at Work: Learning from Myopathy Mutations of the Slow Skeletal Muscle Isoform of Troponin T. ***Frontiers in Striated Muscle Physiology.*** 7:449.
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29. Mondal, A., **Jin, J.-P.** (2019) Cardiac Muscle. ***Physiology Source Book***, in revision.

Abstracts/Conference Presentations of Which Full Papers Are to Be Published

Qian, A. and **Jin J.-P.** (2012) A potent effect of h2-calponin on blocking cytokinesis. *Biophys. J.* 102:abstract issue.

Feng, H.-Z., Wieczorek, D., **Jin, J.-P.** (2013) Additive compensatory effects of cardiac troponin I and cardiac troponin T N-terminal truncations on the disease phenotypes of a familial hypertrophic cardiomyopathy mutation (E180G) of α-tropomyosin. *Biophys. J.* 104:abstract issue.

Feng, H.-Z., **Jin, J.-P.** (2014) Deletion of the N-terminal extension of cardiac troponin I augments Frank-Starling response of mouse heart. *Biophys. J.* 106:abstract issue.

Wei, B., **Jin, J.-P.** (2015) Role of H2 calponin in myoblast differentiation, fusion and myogenesis. *Biophys. J.* 108:abstract issue.

Gunther, L., Feng, H.-Z., **Jin, J.-P.** and Sakamoto, T. (2016) The N-terminal variable region of cardiac troponin T regulates the kinetics of myosin ATPase cycle. *Biophys. J.* 110:abstract issue.

Heilig, T., **Jin, J.-P.** (2017) Identification and characterization of a repressed troponin I-like epitope structure in the C-terminal region of troponin T. *Biophys. J.* 112:abstract issue.

DiLoreto, N., Manivannan, A., Hossain, M.M., **Jin, J.-P.** (2018) A Novel Kinase Activity of Calponin. *Biophys. J.* 114:abstract issue.

Mondal, A., **Jin, J.-P.** (2018) Myogenic differentiation of iPSC homologous of a nemaline

myopathy-causing nonsense mutation in *TNNT1* gene. *Biophys. J.* 114:abstract issue.

Feng, H.-Z., Akhter, S., Wang, H., **Jin, J.-P.** (2018) Effect of a unique polymorphism in tropomyosin-binding site 1 of toad slow skeletal muscle troponin T on cardiac function. *Biophys. J.* 114:abstract issue.

Wang, H., Hossain, M.M., **Jin, J.-P.** (2018) PKC Phosphorylation and Mu-Calpain Truncation of the C-terminal End Segment of SM22alpha Regulates Its F-actin Binding and Mechanical Tension Modulated Degradation. *Biophys. J.* 114:abstract issue.

Wong, S., Feng, H.-Z., **Jin, J.-P.** (2018) Bioengineering and Characterization of Troponin Peptides for Use as Therapeutic Reagents to Modulate Muscle Contractility. *Biophys. J.* 114:abstract issue.

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Cao, T., Damschroder, D., Feng, H.-Z., Wessells, R.J., **Jin, J.-P.** (2019) The Long Glu-Rich Segments of Troponin T in Flight Muscles of Birds and Insects. *Biophys. J.* 116:abstract issue, in press.

Feng, H.-Z., **Jin, J.-P.** (2019) Cytotoxicity of truncated slow skeletal muscle troponin T in *TNNT1* myopathies. *Biophys. J.* 116:abstract issue, in press.

Plazyo O., Chen, X., Campbell, K., Lincoln, J., **Jin, J.-P.** (2019) Calponin 2 mediates activation and myofibroblast-like differentiation of human aortic valve interstitial cells in calcific aortic valve disease. *Biophys. J.* 116:abstract issue, in press.

15. INVITED PRESENTATIONS (past five years, excluding local institutional talks)

03/2014 University of Florida. Title: Troponin: Regulator of Muscle Contraction.

05/2014 University of South Dakota. Title: Troponin Regulation and Cardiac Adaptation and Function.

06/2014 University of Washington. Title: Troponin Regulation in Cardiac Adaptation and Heart failure.

06/2014 2014 Myofilament Meeting. Title: Proteolytic regulation and function of cardiac troponin I.

07/2014 Advanced Research: Physiology 2014 Conference, Singapore. Symposium Chair and Speaker. Title: Regulation of Cardiac Muscle Contractility and Heart Failure.

08/2014 Medical University of South Carolina. Title: Myofilament and Cytoskeleton Proteins: Learning from protein evolution and structure-function relationships for clinical applications.

08/2014 Translational Genomic Medicine in Plain Communities. Cleveland, Ohio. Title: Chicken Breast Disease: A lethal myopathy caused by a troponin mutation.

09/2014 European Muscle Conference, Salzburg, Austria. Title: Effects of the N-terminal regulatory regions of cardiac troponin I and cardiac troponin T on diastolic and systolic functions of the heart.

10/2014 International Symposium on Infection and Immunity, Xi'an China. Title: Application of ELISA and monoclonal antibodies in studies of proteins structure-function relationships.

10/2014 Department of Aerospace Medicine, Fourth Military Medical University, Xi'an, China. Title: Troponin Regulation and Adaptation in Heart Failure

10/2014 Xijing Hospital, Xi'an, China. Title: Role of Calponin in Mechanoregulation and Function of Cytoskeleton.

03/2015 University of South Carolina. Title: Troponin Regulation in Cardiac Function & Failure.

06/2015 International Society of Heart Research Annual Meeting. Title: Regulation & Function of Troponin in Cardiac Adaptation & Heart Failure.

07/2015 Translational Medicine in Plain Populations. Title: *TNNT1* Myopathy: Pathophysiology for the Development of Treatment.

09/2015 9th Oriental Congress of Cardiology / 17th National conference of Chinese Society of Cardiology, Shanghai, China. Title: Restrictive Cleavage of Troponin Subunits in Cardiac Adaptation and Failure.

09/2015 Changhai Hospital, Shanghai, China. Modification of Troponin Structure and Function in Heart Failure.

09/2015 Chongqing Medical University, Chongqing, China. Title: Restrictive Cleavage of Troponin Subunits in Cardiac Adaptation and Failure.

10/2015 Conferences in Life Sciences, Northwestern Polytechnical University, Xi'an, China. Title: Muscle, Heart and Cell adaptations to Mechanical Signals.

11/2015 Loyola University Medical Center. Title: Role of Calponin in Mechanoregulation and Function of Cytoskeleton.

01/2016 Protein Purification & Recovery Symposium, San Diego, California. Title: The Use of Affinity Tags to Overcome Obstacles in Recombinant Protein Expression and Purification.

03/2016 Florida Atlantic University. Title: Modifications of troponin that selectively correct diastolic or systolic function of the heart.

03/2016 University of Arizona. Title: Posttranslational modifications of troponin in cardiac adaptation and failure.

03/2016 Clontech, Mountain View, California. Title: cHEEtAH Affinity Tag to Facilitate Expression and Purification of Recombinant Proteins.

04/2016 SFB 974 Mini-Workshop: Current Aspects on Oxidative Stress and Aging, Düsseldorf, Germany. Title: Regulation and function of troponin in cardiac adaptation and failure.

06/2016 Xijing Hospital, Xi'an, China. Mechanoregulation and function of calponin.

06/2016 The Forth International Biomedical Forum of West China, Shihezi, Xinjiang, China. Title: Myocardial adaptation in heart failure

06/2016 Xinjiang Medical University, Urumqi, Xinjiang, China. Title: Modification of troponin in cardiac function and failure

06/2016 Changhai Hospital, Shanghai, China. Calponin regulation of macrophage function in the pathogenesis of arterial atherosclerosis.

08/2016 Louisiana State University Health Science Center Shreveport: Title: Troponin regulation in cardiac adaptation and failure.

09/2016 NIH/NIDDK. Title: Skeletal muscle function and adaptation in metabolic disorders.

01/2017 WSU Academy of Scholars. Title: Protein Structure-Function Relationship at Work: Molecular Evolution, Pathophysiological Adaptation and Therapeutic Application.

03/2017 2017 BoAo Forum for Biomedical Sciences, BoAo, Hainan, China. Title: Troponin regulation in cardiac adaptation and failure.

03/2017 Zhujiang Hospital, Guangzhou, China. Title: Troponin regulation in cardiac adaptation and failure.

03/2017 Cornell University Qatar, Doha, Qatar. Title: Troponin regulation in cardiac adaptation and failure.

03/2017 Center for Cardiovascular Sciences, Albany Medical College. Title: Troponin regulation in cardiac adaptation and failure.

05/2017 Clinic for Special Children, Strasberg, PA. Title: *TNNT1* Nemaline Myopathies.

06/2017 36th Annual Meeting of the North American Section of International Society for Heart Research. Title: Regulation of Troponin in Heat Failure.

10/2017 Northwestern Polytechnical University, Xi'an, China. Title: Mechanoregulation of Cell motility.

11/2017 Qingdao University, China. A Mencius Lecture: Troponin Regulation and Function in Cardiac Function and Heart Failure.

11/2017 Cardiovascular Research Center, University of Michigan. Title: Troponin Regulation and Function in Muscle Contractility and Heart Failure.

05/2018 2018 Myofilament Meeting (Speaker and Session Chair). Title: Early response of Z-line proteins in sensing diastolic dysfunction of the heart.

07/2018 6th Annual Translational Medicine in Plain Populations Conference. Title: Pathogenesis of *TNNT1* myopathies and approaches to the development of treatment.

09/2018 University of Toledo College of Medicine. Medical Grand Rounds, Title: Deletion of Calponin 2 Attenuates Calcific Aortic Valve Disease: A novel molecular target for treatment.

12/2018 Northwestern Polytechnical University, Xi'an, China. Title: Deletion of Calponin 2 Attenuates Cardiovascular diseases: A novel therapeutic target.

04/2019 University of Porto, Portugal. Title: Evolution and Adaption of Myofilament Proteins in Health and Diseases.

10/2019 University of Iowa, Department of Anatomy and Cell Biology. Title: Adaptation and Modification of Troponin in Cardiomyopathies and Heart Failure.