CURRICULUM VITAE

Personal

Name:	Xianzhong Meng
Home Address:	6164 South Kalispell Street, Aurora, CO 80016
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Institution:	Department of Surgery, University of Colorado Denver
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Education and Degrees

M.D. Equivalent	Harbin Medical University, Harbin, China	1978 (4 years)
Master of Medical Sciences	Harbin Medical University, Harbin, China	1981 (3 years)
Doctor of Medical Sciences (Ph.D.)	Harbin Medical University, Harbin, China	1985 (4 years)

Professional Experiences

Professor with Tenure — 05/2006 - present
Division of Cardiothoracic Surgery, Department of Surgery
University of Colorado Denver
Denver, Colorado

Director, Cardiothoracic Inflammation Research — 01/2005 - present
Department of Surgery
University of Colorado Denver
Denver, Colorado

Associate Professor with Tenure — 07/2002 – 04/2006
Division of Cardiothoracic Surgery, Department of Surgery
University of Colorado Health Sciences Center
Denver, Colorado

Associate Professor — 03/1999 – 06/2002
Division of Cardiothoracic Surgery, Department of Surgery
University of Colorado Health Sciences Center
Denver, Colorado

Assistant Professor — 07/1993 - 02/1999
Division of Cardiothoracic Surgery, Department of Surgery
University of Colorado Health Sciences Center
Denver, Colorado

Research Associate — 08/1990 - 06/1993
Division of Cardiothoracic Surgery, Department of Surgery
University of Colorado Health Sciences Center
Denver, Colorado

Postdoctoral Research Fellow — 08/1987 - 07/1990
Department of Biochemistry
The Cleveland Clinic Foundation

Cleveland, Ohio

Assistant Professor 01/1986 - 07/1987
Department of Pathology
Institute of Keshan Disease
Harbin Medical University
Harbin, China

Professional Societies

Member, American Physiological Society
Member, Shock Society
Member, American Heart Association
Member, International Society for Heart Research
Member, Society for Critical Care Medicine

Other Professional Activities

Ad hoc member
NIH Surgery Special Emphasis Panel October 2018

Ad hoc member
NIHLB Special Emphasis Panel March 2018

Ad hoc member
NIH Surgery Special Emphasis Panel March 2018

Ad hoc member
NIH SAT Study Section September 2017

Ad hoc member
NIH SAT Study Section February 2017

Standing member
Awards and Honors Committee
The Shock Society June 2016 - current

Standing member
VA Scientific Merit Review Board March 2016 – November 2017

Ad hoc member
NIH SAT Study Section February 2016

Ad hoc member
VA Surgery Grant Review Panel November 2015

Ad hoc member
VA Surgery Grant Review Panel May 2015

Standing member
NIH SAT Study Section July 2011 - June 2015

Member
Program Project Review Committee
Department of Life Sciences
The Natural Sciences Foundation of China July 2014, July 2015

Member
Immunology Project Review Committee
Department of Life Sciences
The Natural Sciences Foundation of China — July 2014, July 2015

Member
Program Project Review Committee
Department of Health Sciences
The Natural Sciences Foundation of China — July 2012

Member
Cardiovascular Project Review Committee
Department of Health Sciences
The Natural Sciences Foundation of China — July 2012

Member
AHA Basic Cell Study Section — June 2009 - May 2011

Ad hoc member
NIH Special Emphasis Penal ZRG1 CVRS — August 2011

Ad hoc member
NIH MIM Study Section — June 2011

Ad hoc member
NIH Special Emphasis Penal ZRG1 F15P — June 2011

Ad hoc member
NIH SAT Study Section — February 2010 - June 2011

University Service

Member — 2002 - present
Surgery Promotion/Tenure Committee
Department of Surgery
University of Colorado Denver

Member — 1998 - present
Surgical Research Committee
Department of Surgery
University of Colorado Health Sciences Center

Member — 2002 - 2009
Ethnic Minority Affairs Committee
University of Colorado Denver

Member — 2002 - 2009
Environmental Health & Safety Committee
University of Colorado Denver

Awards

The World Health Organization Fellowship — 1987
Young Investigator Award, Harbin Medical University, China — 1986
Biomedical Research Award, Heilongjiang, China — 1982

Research Interests

Cellular and molecular mechanisms of calcific aortic valve disease
Aging and cardiovascular inflammatory response
Inflammatory mechanism of organ injury
Pro-inflammatory signaling in post-injury myocardial adaptation

Extramural Research Funding

VA I01 BX005163
Principal Investigator
Title: Downregulation of Inflamm-aging for Protection against Organ Damage in Sepsis
Funding Period: Pending (April 2022-March 2026)

NIH R01 HL121776
Principal Investigator
Title: Suppression of AVIC Inflammosteogenesis for Prevention of CAVD Progression
Funding Period: July 2015-June 2024

NIH R01 GM129641
Principal Investigator
Title: Mechanisms of Cardiac Dysfunction in Sepsis
Funding Period: September 2018-August 2022

NIH R01 HL106582
Principal Investigator
Title: Role of Inflammatory Response in Aortic Valve Lesions
Funding Period: December 2010-November 2021

NIH R01 AG039545
Principal Investigator
Title: Mechanism of Inflammatory Response of Aging Heart to Surgical Ischemia
Funding Period: September 2011-May 2017

NIH P50 GM49222
Co-Investigator-Project I (PI: Eugene Moore)
Funding Period: September 2011-August 2016

Fellowship (Slimani)
Sponsor
International Institute of Education
Funding period: November 2013-October 2014

Fellowship (Slimani)
Sponsor
International Institute of Education
Funding period: October 2012-September 2013

AHA 11GRNT7900016
Co-Investigator (PI: David Fullerton)
Title: The Role of Ox-LDL in Aortic Valve Calcification
Funding Period: July 2011–June 2013

Fellowship (Al-Emeerat)
Sponsor
International Institute of Education
Funding period: February 2012-January 2013

Fellowship (Al-Emeerat)
Sponsor
International Institute of Education
Funding period: February 2011-January 2012

NIH R01 HL079051
Principal Investigator
Title: TLR4 and Cardiac Inflammatory Response to I/R
Funding Period: May 2005-April 2011

NIH P50 GM49222
Co-Investigator-Cell Culture/Image Core (PI: Anirban Banerjee)
Funding Period: April 2005-March 2011

AHA 0850148Z
Co-Investigator (PI: David Fullerton)
Title: The Role of BMP-2 in Aortic Valve Calcification
Funding Period: January 2008-December 2010

Bayer Healthcare Research Grant
Principal Investigator
Title: Aprotinin Controls Crosstalk between Pro-inflammatory Receptors in HCAEC
Funding Period: August 2005-July 2007

NIH Trauma Center Grant (PI: Alden H. Harken)-GM49222-09
Principal Investigator-Project V
Title: Therapeutic Control of Tissue Inflammatory Response
Funding Period: April 2001-March 2005

NIH Trauma Center Grant (PI: Alden H. Harken)-GM49222-09
Co-Investigator-Project VII (PI: Alden H. Harken)
Title: Myocardial Response to Injury
Funding Period: April 2001-March 2005

NIH Trauma Center Grant (PI: Alden H. Harken)-GM49222-06
Co-Investigator
Title: Trauma Primes Cells.
Funding Period: April 1998-March 2001

NIH Trauma Center Grant (PI: Alden H. Harken)-GM49222-06
Principal Investigator-Project V
Title: Novel Role of HSP72 in Regulation of Macrophage TNF-α Production
Funding Period: April 1998-March 2001

NIH Trauma Center Grant (PI: Alden H. Harken)-GM49222-06
Co-Investigator-Project VII (PI: Alden H. Harken)
Title: Adaptive/Maladaptive Post-injury Cardiac Priming
Funding Period: April 1998-March 2001

NIH Trauma Center Grant (PI: Alden H. Harken)-GM49222-06
Co-Investigator-Project VIII (PI: Anirban Banerjee)
Title: Role of protein kinase C Isoforms in Adaptation and Inflammation
Funding Period: April 1998-March 2001

Institutional Research Funding

Academic Enrichment Fund, UCD
Principal Investigator
Title: Interstitial cell innate immunity fuels heart valve disease
Funding Period: July 2018-June 2019

Academic Enrichment Fund, UCD
Principal Investigator
Title: ADAMTS5 deficiency in human aortic valves elevates the pro-osteogenic activity: a critical role of the matrilin2-TLR-NFATc1 axis
Funding Period: July 2016-June 2017

Academic Enrichment Fund, UCD
Principal Investigator
Title: Neurotrophin 3 as a novel pro-osteogenic factor in aortic valve interstitial cells.
Funding Period: July 2014-June 2015

Academic Enrichment Fund, UCD
Principal Investigator
Title: IL-37 suppresses TLR4-induced inflamm-ostoegenic responses in aortic valve interstitial cells via modulation of NF-kappaB activity
Funding Period: July 2013-June 2014

Department Chair Research Fund, Department of Surgery, UCD
Principal Investigator
Title: Signaling Mechanisms of Aortic Valve Calcification
Funding Period: September 2012-August 2013

Academic Enrichment Fund, UCD
Principal Investigator
Title: Myocardial Tissue TLR4 in Cardiac Inflammatory Response to Surgical Ischemia
Funding Period: July 2010-June 2011

Dean's Bridge Fund, UCD
Principal Investigator
Title: The Inflammatory Response to Surgical Ischemia in Aging Heart
Funding Period: May 2010-April 2011

Department Chair Research Fund, Department of Surgery, UCD
Principal Investigator
Title: Proinflammatory Mechanisms of Aortic Valve Calcification
Funding Period: June 2010-May 2011

Department Matching Fund to Bayer Healthcare Research Grant
Principal Investigator
Title: Aprotinin Controls Crosstalk between Pro-inflammatory Receptors in HCAEC
Funding Period: August 2005-July 2007

Academic Enrichment Fund, UCHSC
Principal Investigator
Title: Cardiac TLR4: Role in Immunoresponse to I/R Injury
Funding Period: July 2005-June 2006

Academic Enrichment Fund, UCHSC
Principal Investigator
Title: Heat Shock Protein 70 in Myocardial Ischemia and Reperfusion Injury
Funding Period: July 2003-June 2004

Academic Enrichment Fund, UCHSC
Principal Investigator
Title: The Role of TNF Receptors in Myocardial Inflammation and Dysfunction
Funding Period: July 2001-June 2002

Academic Enrichment Fund, UCHSC
Principal Investigator
Title: Liposomal Delivery of Recombinant Proteins into Cells and Organs
Funding Period: July 1998-June 1999

Academic Enrichment Fund, UCHSC
Principal Investigator
Title: PKC Mediates Sympathetic Signal Transduction Leading to Myocardial Protection
Funding Period: July 1996-June 1997

Peer-reviewed Publication

1. Luo Z, The E, Zhang P, Zhai Y, Yao Q, Ao L, Zeng Q, Fullerton DA, **Meng X**. Monocytes Augment Inflammatory Responses in Human Aortic Valve Interstitial Cells via β_2-Integrin/ICAM-1-Mediated Signaling. Am J Physiol Cell Physiol, under revision
2. Zhang P, The E, Luo Z, Zhai Y, Yao Q, Ao L, Fullerton DA, Xu D, **Meng X**. Pro-inflammatory mediators released by activated monocytes promote aortic valve fibrocalcific activity. Mol Med, under revision
3. Jarrett MJ, Yao Q, Osterholt MK, Weyant MJ, Reece TB, **Meng X**, Fullerton DA. The interaction of TLR4 and beta-catenin pathway in AVIC fibrogenic response. Ann Thorac Surg, under revision
4. Gergen AK, Madsen HJ, Li A, Cheng L, **Meng X**, Fullerton DA, Pratap A, Weyant MJ. Simvastatin inhibits histologic changes associated with gastroduodenal reflux in a murine model. Digest Dis Sci, in press
5. Gergen AK, Li A, Kohtz PD, Jarrett MJ, **Meng X,** Fullerton DA, Weyant MJ. Toll-like receptor 4 mediates reflux-induced inflammation in a murine reflux model. Semin Thorac Cardiovasc Surg, in press
6. Ikeno Y, Ghinea CV, Cheng L, **Meng X,** Weyant MJ, Cleveland JC, Fullerton DA, Reece TB. Direct and indirect activation of the ATP-sensitive potassium channel to induce spinal cord metabolic tolerance to ischemia-reperfusion injury**.** J Thorac Cardiovasc Surg, in press
7. Li J, Zeng Q, Xiong Z, Xian G, Liu Z, Zhan Q, Lai W, Ao L, **Meng X,** Ren H, Xu D. Trimethylamine-N-oxide induces osteogenic responses in human aortic valve interstitial cells in vitro and aggravates aortic valve lesions in mice. Cardiovac Res, in press

8. Gergen AK, Jarrett MJ, Li A, Cheng L, Tilva KR, Madsen HJ, **Meng X,** Fullerton DA, Weyant MJ. Expression of adhesion molecules in a gastroduodenal reflux murine model. Ann Thorac Surg, in press
9. Venardos N, Gergen AK, Jarrett MJ, Weyant MJ, Reece TB, **Meng X,** Fullerton DA. Warfarin induces calcification of the aortic valve via ERK1/2 and β-catenin signaling. Ann Thorac Surg, in press
10. Deng X, **Meng X**, Fullerton DA, Stone M, Jaggers J. Complement up-regulates Runx-2 to induce pro-fibrogenic change in human aortic valve interstitial cells. Ann Thorac Surg, in press.
11. Ikeno Y, Ghincea CV, Roda GF, Cheng L, Aftab M, **Meng X,** Weyant MJ, Cleveland JC, Fullerton DA, Reece TB. Optimizing nicorandil for spinal cord protection in a murine model of complex aortic intervention. Semin Thorac Cardiovasc Surg, in press.
12. Zhao P, Yao Q, Zhang P, The E, Zhai Y, Ao L, Jarret MJ, Dinarello DA, Fullerton DA, **Meng X.** Single-cell RNA-seq reveals novel proinflammatory EndMT in human coronary artery-on-a-chip under atheroprone flow. Science Advances 7(34):eabg1694, 2021.
13. Jarrett MJ, Houk AK, McCuistion PE, Weyant MJ, Reece TB, **Meng X**, Fullerton DA. Wnt signaling mediates pro-fibrogenic activity in human aortic valve interstitial cells. Ann Thorac Surg 112:519-525, 2021.
14. Ikeno Y, Ghincea CV, Roda GF, Cheng L, **Meng X**, Weyant MJ, Cleveland JC, Fullerton DA, Aftab M, Reece TB. Reactive oxygen species mediate nicorandil-induced metabolic tolerance to spinal cord injury. Ann Thorac Surg 112:38-44, 2021.
15. Gergen AK, Kohtz PD, Halpern AL, White AM, **Meng X,** Fullerton DA, Weyant MJ. Statins inhibit Toll-like receptor 4-mediated growth of human esophageal adenocarcinoma cells. J Surg Res 260:436-447, 2021.
16. Jarrett MJ, Yao Q, Venardos N, Weyant MJ, Reece TB, **Meng X**, Fullerton DA. Simvastatin downregulates osteogenic response in cultured human aortic valve interstitial cells. J Thorac Cardiovasc Surg 161:e261-e271, 2021.
17. Gergen AK, Jarrett MJ, Li A, White AM, **Meng X,** Fullerton DA, Weyant MJ. Secretory phospholipase A2 inhibition attenuates adhesive properties of esophageal Barrett's cells. J Surg Res 259:562-568, 2021.
18. Halpern AL, Kohtz PD, White AM, Houk AK, Rehring JF, Hanson L, McCarter MD, Joshi M, **Meng X**, Fullerton DA, Weyant MJ. Secretory phospholipase A2 IIa mediates expression of growth factor receptors in esophageal adenocarcinoma. Dig Dis Sci 66:784-795, 2021.
19. Zhang P, The E, Nedumaran B, Ao L, Jarrett MJ, Xu D, Fullerton DA, **Meng X**. Monocytes enhance the inflammatory response to TLR2 stimulation in aortic valve interstitial cells through paracrine up-regulation of TLR2 level. Int J Biol Sci 16:3062-3074, 2020.
20. Gergen AK, Kohtz PD, Halpern AL, LI A, **Meng X,** Reece TB, Fullerton DA, Weyant MJ. Activation of Toll-like receptor 2 promotes proliferation of human lung adenocarcinoma cells. Anticancer Res 40:5361-5369, 2020.
21. Yao Q, The E, Ao L, Zhai Y, Osterholt MK, Fullerton DA, **Meng X.** TLR4 stimulation promotes human AVIC fibrogenic activity through upregulation of neurotrophin 3 production. Int J Mol Sci 21:1276, 2020. (open access)
22. Zhou P, Li Q, Su S, Dong W, Zong S, Ma Q, Yang X, Zuo D, Zheng S, **Meng X**, Xu D, Zeng Q. Interleukin 37 suppresses M1 macrophage polarization through inhibition of the Notch1 and nuclear factor kappa B pathways. Front Cell Dev Biol 8:56, 2020. (open access)

23. The E, Yao Q, Zhang P, Zhai Y, Ao L, Fullerton DA, **Meng X.** Mechanistic roles of matrilin-2 and Klotho in modulating the inflammatory activity of human aortic valve cells. Cells 9:385, 2020. (open access)
24. Song R, Zhai Y, Ao L, Fullerton DA, **Meng X.** MicroRNA-204 deficiency in human aortic valves elevates valvular osteogenic activity. Int J Mol Sci 21:76, 2019. (open access)
25. Halpern AL, Kohtz PD, **Meng X**, Rove J, Fullerton DA, Weyant MJ. Inhibition of secretory phospholipase A2 IIa attenuates prostaglandin E2 induced invasiveness in lung adenocarcinoma. Mol Cell Biochem 456:145-156, 2019.
26. Eisenmesser EZ, Gottschlich A, Redzic JS, Paukovich N, Azam T, Zhang L, Zhao R, Kieft J, The E, **Meng X**, Dinarello CA. The interleukin-37 monomer is the active form for reducing innate immunity. Proc Nat Acad Sci USA 116:5514-5522, 2019**.**
27. Yamanaka K, Eldeiry M, Aftab M, Ryan TJ, Roda G, **Meng X**, Weyant MJ, Cleveland JC Jr, Fullerton DA, Reece TB. Pretreatment with diazoxide attenuates spinal cord ischemia-reperfusion injury through STAT3 pathway. Ann Thorac Surg 107:733-739, 2019.
28. Deng XS, **Meng X**, Li F, Venardos N, Fullerton D, Jaggers J. MMP-12-Induced Pro-osteogenic Responses in Human Aortic Valve Interstitial Cells. J Surg Res 235:44-51, 2019.
29. Liu Z, Li J, Liu H, Tang Y, Zhan Q, Lai W, Ao L, **Meng X**, Ren H, Xu D, Zeng Q. The intestinal microbiota associated with cardiac valve calcification differs from that of coronary artery disease. Atherosclerosis 284:121-128, 2019.
30. Lee DJ, Cavasin MA, Rocker AJ, Soranno DE, **Meng X**, Shandas R, Park D. An injectable sulfonated reversible thermal gel for therapeutic angiogenesis to protect cardiac function after a myocardial infarction. J Biol Engineering 13:6, 2019 (open access).
31. Yamanaka K, Eldeiry M, Aftab M, Ryan TJ, **Meng X,** Weyant MJ, Fullerton DA, Reece TB. Synergetic induction of NGF with diazoxide and erythropoietin attenuates spinal cord ischemic injury. J Surg Res 233:124-131, 2019.
32. Kohtz PD, Halpern AL, Hazel KD, Eldeiry MA, Yamanaka K, Kalatardi, S, Sjoberg AJ, Ao L, **Meng X,** Reece TB, Fullerton DA, Weyant MJ. Toll-like receptor-4 is a mediator of proliferation in esophageal adenocarcinoma. Ann Thorac Surg 107:233-241, 2019.
33. Yamanaka K, Eldeiry M, Aftab M, Ryan TJ, Mares J, **Meng X,** Weyant MJ, Cleveland JC Jr, Fullerton DA, Reece TB. Synergistic reduction of apoptosis with Diazoxide and erythropoietin in spinal cord ischemic injury. Ann Thorac Surg 106:1751-1758, 2018.
34. Venardos N, Deng X, Yao Q, Weyant MJ, Reece TB, **Meng X**, Fullerton DA. Simvastatin reduces the TLR4-induced inflammatory responses in human aortic valve interstitial cells. J Surg Res 230:101-109, 2018.
35. Wang S, Ge W, Harns C, **Meng X**, Zhang Y, Ren J. Ablation of Toll-like receptor 4 attenuates aging-induced myocardial remodeling and contractile dysfunction through NCoRI-HDAC1-mediated regulation of autophagy. J Mol Cell Cardiol 119:40-50, 2018.
36. Yamanaka K, Eldeiry M, Aftab M, Mares J, Ryan TJ, **Meng X,** Weyant MJ, Cleveland JC Jr, Fullerton DA, Reece TB. Optimized induction of beta common receptor enhances the neuroprotective function of erythropoietin in spinal cord ischemic injury. J Thorac Cardiovasc Surg 155:2505-2516, 2018.
37. Li F, Song R, Ao L, Reece TB, Cleveland JC, Dong N, Fullerton DA, **Meng X**. ADAMTS5 deficiency in calcified aortic valves is associated with elevated pro-osteogenic activity in valvular interstitial cells. Arterioscler Thromb Vasc Biol 37:1339-1351, 2017.

38. Deng X, **Meng X**, Venardos N, Song R, Yamanaka K, Fullerton DA, Jaggers J. Autophagy negatively regulates pro-osteogenic activity in human aortic valve interstitial cells. J Surg Res 218:285-291, 2017.
39. Li F, Yao Q, Ao L, Cleveland JC, Dong N, Fullerton DA, **Meng X**. Klotho suppresses high phosphate-induced osteogenic responses in human aortic valve interstitial cells through inhibition of Sox9. J Mol Med 95:739-751, 2017.
40. Song R, Fullerton DA, Ao L, Zhao K, **Meng X.** An epigenetic regulatory loop controls pro-osteogenic activation by TGF-β1 or bone morphogenetic protein 2 in human aortic valve interstitial cells. J Biol Chem 292:8657-8666, 2017.
41. Yao Q, Song R, Ao L, Cleveland JC, Fullerton DA, **Meng X**. Neurotrophin 3 up-regulates proliferation and collagen production in human aortic valve interstitial cells: a potential role in aortic valve sclerosis. Am J Physiol Cell Physiol 312:C697-C706, 2017.
42. Zhan Q, Zeng Q, Song R, Zhai Y, Xu D, Fullerton DA, Dinarello CA, **Meng X**. IL-37 suppresses MyD88-mediated inflammatory responses in human aortic valve interstitial cells. Mol Med 23:83-91, 2017.
43. Cheng H, Yao Q, Song R, Zhai Y, Wang W, Fullerton DA, **Meng X**. LysoPC activates the Akt pathway to up-regulate ECM protein production in human aortic valve cells. J Surg Res 213:243-250, 2017.
44. Song R, Fullerton DA, Ao L, Zhao K, Reece TB, Cleveland JC, **Meng X**. Altered microRNA expression is responsible for the pro-osteogenic phenotype of interstitial cells in calcified human aortic valves. J AHA 6:e005364, 2017. (open access)
45. Hui H, Zhai Y, Ao L, Cleveland JC, Liu H, Fullerton DA, **Meng X**. Klotho suppresses the inflammatory responses and ameliorates cardiac dysfunction in aging endotoxemic mice. Oncotarget 8:15663-15676, 2017. (open access)
46. Zhan Q, Song R, Li F, Ao L, Zeng Q, Xu D, Fullerton DA, **Meng X**. Double-stranded RNA up-regulates the expression of inflammatory mediators in human aortic valve cells through the TLR3-TRIF-non-canonical NF-κB pathway. Am J Physiol Cell Physiol 312:C407-C417, 2017.
47. Li J, Zhai Y, Ao L, Hui H, Fullerton DA, Dinarello CA, **Meng X**. Interleukin-37 suppresses the inflammatory response to protect cardiac function in old endotoxemic mice. Cytokine 95:55-63, 2017.
48. Zeng Q, Song R, Fullerton DA, Ao L, Zhai Y, Li S, Ballak DB, Cleveland JC Jr, Reece TB, McKinsey TA, Xu D, Dinarello CA, **Meng X**. Interleukin-37 suppresses the osteogenic responses of human aortic valve interstitial cells *in vitro* and alleviates valve lesions in mice. Proc Nat Acad Sci USA 114:1631-1636, 2017.
49. Kelher MR, McLaughlin NJ, Banerjee A, Elzi DJ, Gamboni F, Khan SY, **Meng X**, Mitra S, Silliman CC. LysoPCs induce Hck- and PKCδ-mediated activation of PKCγ causing p47phox phosphorylation and membrane translocation in neutrophils. J Leukoc Biol 101:261-273, 2017.
50. Ao L, Zhai Y, Jin C, Cleveland JC, Fullerton DA, **Meng X**. Attenuated recovery of contractile function in aging hearts following global ischemia/reperfusion: Role of extracellular HSP27 and TLR4. Mol Med 22:863-872, 2016.
51. Deng X, **Meng X**, Song R, Fullerton DA, Jaggers J. Rapamycin suppresses the osteogenic response in aortic valve interstitial cells via the Stat3 pathway. Ann Thorac Surg 102:1229-1238, 2016**.**
52. Howell KW, Cleveland JC, **Meng X**, Ao L, Su X, Schwartz RS, Fullerton DA. Interleukin 6 production during cardiac surgery correlates with increasing age. J Surg Res 201:76-81, 2016.

53. Li P, **Meng X**, Bian H, Burns N, Zhao KS, Song R. Activation of sirtuin 1/3 improves vascular hyporeactivity in severe hemorrhagic shock by alleviation of mitochondrial damage. Oncotarget 6:36998-37011, 2015

54. Li J, Ao L, Zhai Y, Cleveland JC, Fullerton DA, **Meng X**. Gender disparity in the role of TLR2 in post-ischemic myocardial inflammation and injury. Int J Clin Exp Med 8:10537-10547, 2015.

55. Yao Q, Song R, Ao L, Zhan Q, Cleveland JC, Yu X, Fullerton DA, **Meng X.** Over-expression of neurotrophin 3 in human aortic valves affected by calcific disease induces the osteogenic responses via the Trk-Akt pathway. BBA Mol Basis Dis 1852:1940-1949, 2015.

56. Venardos N, Nadlonek NA, Weyant MJ, Reece, TB, **Meng X**, Fullerton DA. Matrix Gla protein regulates calcification of the aortic valve. J Surg Res 199:1-6, 2015.

57. Zhai Y, Ao L, Cleveland JC Jr, Zeng Q, Reece TB**,** Fullerton DA, **Meng X**. Toll-like receptor 4 mediates the inflammatory responses and matrix protein remodeling in remote non-ischemic myocardium in a mouse model of myocardial ischemia and reperfusion. PloS One 10(3):e0121853, 2015. (open access)

58. Foley LS, Fullerton DA, Bennett DT, Freeman KA, Mares J, Bell MT, Cleveland JC Jr, Weyant MJ, **Meng X,** Puskas F, Reece TB. Spinal cord ischemia-reperfusion injury induces erythropoietin receptor expression. Ann Thorac Surg 100:41-46, 2015.

59. White MP, Theodoris CV, Liu L, Collins WJ, Blue KW, Lee JH, **Meng X,** Robbins RC, Ivey KN, Srivastava D. NOTCH1 regulates matrix gla protein and calcification gene networks in human valve endothelium. J Mol Cell Cardiol 84:13-23, 2015.

60. Mares J, Foley LS, Bell M, Bennett D, Freeman K, **Meng X**, Weyant M, Cleveland JC, Fullerton DA, Puskas F, Reece TB. Erythropoietin activates pCREB pathway and attenuates delayed paraplegia following spinal cord ischemia and reperfusion injury. J Thorac Cardiovasc Surg 149:920-924, 2015.

61. Song R, Fullerton DA, Ao L, Zheng D, Zhao K, **Meng X.** BMP-2 and TGF-β1 mediate biglycan-induced pro-osteogenic reprogramming in aortic valve interstitial cells. J Mol Med 93:403-412, 2015.

62. Bell MT, Puskas F, Bennett DT, Cleveland JC Jr, Herson PS, Mares JM, **Meng X,** Weyant MJ, Fullerton DA, Reece TB. Clinical indicators of paraplegia underplay universal spinal cord neuronal injury from transient aortic occlusion. Brain Res 1618:55-60, 2015.

63. Zhan Q, Song R, Zeng Q, Yao Q, Ao L, Xu D, Fullerton DA, **Meng X.** Activation of TLR3 induces an osteogenic response in human aortic valve interstitial cells through the NF-κB and ERK1/2 pathways. Int J Biol Sci 11:482-493, 2015.

64. Freeman KA, Mares J, Foley LS, Weyant MJ, Cleveland JC Jr, Bell MT, **Meng X**, Fullerton DA, Puskas F, Reece TB. Alpha-2 agonist attenuates ischemic injury in spinal cord neurons. J Surg Res 195:21-28, 2015.

65. Deng X, **Meng X,** Zeng Q, Fullerton DA, Mitchell MB, Jaggers J. Adult aortic valve interstitial cells have greater responses to Toll-like receptor 4 stimulation. Ann Thorac Surg 99:62-71, 2015.

66. Freeman KA, Fullerton DA, Foley LS, Bell MT, Cleveland JC Jr, Weyant MJ, Mares J, **Meng X**, Puskas F, Reece TB. Spinal cord protection via alpha-2 agonist-mediated increase in glial cell-line-derived neurotrophic factor. J Thorac Cardiovasc Surg 149:578-586, 2015.

67. Bennett DT, Reece TB, Foley LS, Sjoberg A, **Meng X**, Fullerton DA, Weyant MJ. C-terminal tensin-like protein mediates invasion of human lung cancer cells and is regulated by signal transducer and activator of transcription 3. J Thorac Cardiovasc Surg 149-369-375, 2015.

68. Slimani H, Zhai Y, Yousif NG, Ao L, Zeng Q, Fullerton DA, **Meng X**. Enhanced monocyte chemoattractant protein-1 production in aging mice exaggerates cardiac depression during endotoxemia. Crit Care 18(5):527, 2014. (open access)
69. Wang D, Zeng Q, Song R, Ao L, Fullerton DA, **Meng X.** Ligation of ICAM-1 on human aortic valve interstitial cells induces the osteogenic response: a critical role of the Notch1–NF-κB pathway in BMP-2 expression. BBA Mol Cell Res 1843:2744-2753, 2014.
70. Bennett DT, Deng XS, Yu JA, Bell MT, Mauchley DC, **Meng X**, Reece TB, Fullerton DA, Weyant MJ. Cancer Stem Cell Phenotype Is Supported by Secretory Phospholipase A_2 in Human Lung Cancer Cells. Ann Thorac Surg 98:439-446, 2014.
71. Zeng Q, Song R, Ao L, Xu D, Venardos N, Fullerton DA, **Meng X.** Augmented osteogenic responses in human aortic valve cells exposed to oxLDL and TLR4 agonist: a mechanistic role of Notch1 and NF-κB interaction. PloS One 9(5):e95400, 2014. (open access)
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Invited Lecture

Promotion of inflammation resolution: a novel target for improving cardiac function in old subjects with sepsis. The 15th Congress of Chinese Society of Critical Care Medicine, December 2021

Mechano-inflammatory Mechanisms of Atherogenesis. Surgery Biology Conference, Department of Surgery, University of Colorado Denver, October 2021

Inflammatory responses and cardiac dysfunction in sepsis. The 14th Congress of Chinese Society of Critical Care Medicine, May 2020

Inflammatory cardiac dysfunction: the impact of aging. Surgery Biology Conference, Department of Surgery, University of Colorado Denver, October 2019

Aging weakens inflammation resolution in sepsis and endotoxemia. The 13th Congress of Chinese Society of Critical Care Medicine, Zhuhai, China, May 2019

Myofibroblasts in the pathobiology of calcific aortic valve disease. Department of Medicine, Southern Medical University, Guangzhou, China, December 2018

Calcific aortic valve disease: inflammatory mechanisms. Cardiovascular Seminar Series, University Kentucky, October 2018

Interstitial cell innate immunity contribute to calcific aortic valve disease progression through elevation of valvular fibrogenic activity. The 8th Heart Valve Biology & Tissue Engineering Meeting, London, United Kingdom, September 2018

Inflamm-aging and organ injury in sepsis. The 12th Congress of Chinese Society of Critical Care Medicine, Hangzhou, China, May 2018

Cardiovascular calcification in chronic kidney disease: mechanistic role of phosphate and Klotho. Surgery Biology Conference, Department of Surgery, University of Colorado Denver, April 2018

Calcific aortic valve disease: molecular inflammatory mechanisms. Department of Medicine, Southern Medical University, Guangzhou, China, January 2018

The inflammatory mechanism of calcific aortic valve disease. Shantou University Medical School, Shantou, China, December 2017

The aging heart: exaggerated inflammatory response to ischemic injury. Shantou University Medical School, Shantou, China, December 2017

Aging-related hyper-inflammation and cardiac dysfunction during sepsis and endotoxemia. The 11th Congress of Chinese Society of Critical Care Medicine, Xi'an, China, May 2017

Toll-like receptors and their endogenous activators in heart valve calcification. Jiangsu University, Zhengjiang, China, May 2017

The pro-inflammatory mechanism of calcific aortic valve disease. Research Conference, Department of Surgery, University of Colorado Denver, January 2017

Role of danger-associated molecular patterns in calcific aortic valve diseased. Grand Rounds, Department of Cardiovascular Surgery, the 3rd Military Medical University, Chongqing, China, 2015

Effect of aging on myocardial inflammatory response to ischemia/reperfusion. The 3rd Yangtze River International Congress of Cardiology, Chongqing, China, 2015

Danger-associated molecular patterns in heart valve calcification. The Second Conference on Vascular Calcification. Beijing University, Beijing, China, 2014

Toll-like receptors in aging heart inflammatory response to ischemia/reperfusion injury. Graduate school lecture, Shantou University, Shantou, China, 2014

Toll-like receptors in post-injury inflammation in aging heart. Grand Rounds, Department of Surgery, Michigan State University, East Lansing, Michigan, 2014

Roles of TLRs in mediating myocardial inflammatory response to ischemia/reperfusion. Research Conference, Department of Surgery, University of Colorado Denver, 2014

Potential role of DAMPs in calcific aortic valve disease. The 16th South China International Congress of Cardiology. Guangzhou, China, 2014

Innate immunity and post-injury inflammation in aging heart: TLR4 as a potential target for modulation. Annual Conference on Shock 2013

Inflammation as an orchestrator in calcific aortic valve disease: suppression of the inflammosteogenic response for prevention of the disease progression. The 15th South China International Congress of Cardiology. Guangzhou, China, 2013

Inflammatory mechanism of aortic valve calcification. Harbin Medical University, Harbin, China, 2013

Inflammation as an orchestrator in calcific aortic valve disease. Virginia Polytechnic Institute, Blacksburg, Virginia, 2012

Augmented myocardial inflammatory response to ischemia and reperfusion in aging heart: Toll-like receptor 4 as a target for modulation. The 14th South China International Congress of Cardiology, Guangzhou, China, 2012

Aortic valve calcification: Role of Toll-like receptor 4 and Notch 1 in the induction of bone morphogenetic protein-2. The 13th South China International Congress of Cardiology, Guangzhou, China, 2011

Aortic valve osteogenic responses: the interplay of Toll-like receptor 4 and Notch1 in the induction of bone morphogenic protein-2. Zing Cardiovascular Conference, Cancun, Mexico, 2010

Extracellular heat shock proteins in the mechanisms of post-ischemic myocardial injury. The Feinstein Institute for Medical Research, Long Island, New York, 2010

Extracellular HSC70 as a novel mediator of myocardial inflammatory response to ischemia and reperfusion. Peptides Conference, Seoul, South Korea, 2009

Post-transcriptional regulation of ICAM-1 expression by P38 MAPK pathway in human microvascular endothelial cells: The role of HSP27. The Seventh World Congress on Trauma, Shock, Inflammation and Sepsis (TSIS). Munich, Germany, 2007

Tissue inflammatory response to injury. Nanjing University, Nanjing, China, 2005

Cardiac innate immunoresponse to ischemia. University of Louisville, Louisville, Kentucky, 2004

Cardiac tolerance: a crossword puzzle. The Twenty-Sixth Annual Conference on Shock, Phoenix, Arizona, 2003

Toll-like receptor 4 regulates myocardial functional resistance to ischemia/reperfusion. The XXIV Annual Meeting of International Society for Heart Research American Section, Madison, Wisconsin, 2002

TNF-α in myocardial depression and protection. The twenty-third Annual Conference on Shock, Snowbird, Utah, 2000

Stress-induced myocardial adaptation: role of HSP72 in the regulation of myocardial TNF-α production. The III International Congress of Pathophysiology, Lahti, Finland, 1998

Stress-induced myocardial adaptation: signal transduction and cardiac gene expression. The VI Annual Meeting of International Society for Heart Research Chinese Section, Beijing, China, 1997

Stress-induced myocardial protection against ischemia/reperfusion injury. Qiqihar General Hospital, Qiqihar Medical College, Qiqihar, China, 1997

Heat shock protein 70 in myocardial adaptation to stress. Harbin Medical University, Harbin, China, 1994

Keshan disease: an endemic cardiomyopathy in China. The Royal Society of Medicine Annual Conference, Pediatric Section, London, England, 1986

Presentation at National and International Scientific Meeting

1. Interleukin-38 down-regulates NLRP3 inflammasomes to suppress aortic valve calcification. American Heart Association Scientific Sessions, November 2021
2. Suppression of inflammatory activity in vascular endothelial cells reduces EndMT induced by oscillatory shear stress. American Heart Association Scientific Sessions, November 2021
3. Monocytes enhance inflammatory responses to soluble matrilin-2 in human aortic valve interstitial cells via the interaction of β_2-integrin with ICAM-1. American Heart Association Scientific Sessions, November 2021
4. Soluble Klotho suppresses human AVIC fibrocalcification induced by FGF23. American Heart Association Scientific Sessions, November 2020
5. The cathepsin D-M6PR-ERK1/2 pathway mediates cellular senescence and osteogenic activities in human aortic valve interstitial cells. American Heart Association Scientific Sessions, November 2020
6. Shear stress-induced endothelial inflammatory response and EndMT promote adverse remodeling in a microengineered coronary-artery-on-a-chip. American Heart Association Scientific Sessions, November 2020
7. Activated monocytes elevates the activity of fibrocalcification in human aortic valve interstitial cells via paracrine interaction. American Heart Association Scientific Sessions, November 2019
8. Cathepsin D mediates the osteogenic and fibrogenic responses to soluble matrilin-2 in human AVICs through the ERK1/2 pathway. American Heart Association Scientific Sessions, November 2019
9. Intracellular IL-37 in aortic valve cells suppresses the inflammatory responses to soluble extracellular matrix proteins through targeting the nucleus. American Heart Association Scientific Sessions, November 2019

10. Klotho improves the recovery of cardiac function in aging endotoxemic mice through promoting myocardial inflammation resolution associated with FGF23 recession. Annual Conference on Shock 2019
11. Innate immune response to damage-associated molecular patterns in human aortic valve cells has a novel role in the mechanism of calcific aortic valve disease. Keystone Symposium-Innate Immune Responses: Roles in Immunology and Beyond. 2019
12. Aging-related Klotho deficiency in human aortic valve interstitial cells exaggerates the inflammatory response through down-regulation of autophagy activity. American Heart Association Scientific Sessions, 2018
13. Monocytes up-regulate TLR2 levels and enhance inflammatory responses in aortic valve interstitial cells through paracrine effect. American Heart Association Scientific Sessions, 2018
14. Intracellular IL-37 suppresses the inflammatory response to soluble extracellular matrix proteins in human AVICs through interaction with the IKK/NF-κB complex. American Heart Association Scientific Sessions, 2018
15. Aging-related myofibroblastic transition in aortic valve interstitial cells elevates valvular osteogenic response to oxidized low density lipoprotein. American Heart Association Scientific Sessions, 2018
16. Improvement of cardiac recovery from endotoxemic dysfunction in old mice by IL-37 is associated with preservation of myocardial Klotho levels. Annual Conference on Shock 2018
17. Klotho suppresses the PKR-mediated inflammatory response to soluble matrilin-2 in human aortic valve interstitial cells. American Heart Association Scientific Sessions: Vascular Discovery, 2018
18. Neurotrophin 3 plays a critical role in TLR4-mediated fibrogenic response in human aortic valve interstitial cells. American Heart Association Scientific Sessions: Vascular Discovery, 2018
19. Modulation of the osteogenic response in human aortic valve cells by IL-37 through IL-18Rα-dependent inhibition of ERK/1/2. American Heart Association Scientific Sessions 2017
20. TGF-β1 and BMP-2 in the inflammation-related aortic valve calcification: mechanism of action. 2017 FASEB Conference on TGF- Superfamily: Signaling in Development and Disease
21. Elevated myocardial TLR2 levels in aging mice augment cardiac dysfunction and mortality during sepsis. The 46th Critical Care Congress, 2017
22. Oxidized low-density lipoprotein elevates the pro-osteogenic activity in human aortic valve interstitial cells via innate immune receptors. American Heart Association Scientific Sessions 2016
23. ADAMTS5 deficiency in human aortic valves elevates the pro-osteogenic activity through matrilin-2-mediated cellular phenotypic transition. American Heart Association Scientific Sessions 2016
24. Klotho deficiency exaggerates endotoxemic cardiac dysfunction in aging mice. The 8th Congress of the International Federation of Shock Societies, Tokyo, Japan 2016
25. Potential role of Toll-like receptors in calcific aortic valve disease: elevation of osteogenic activity of valvular cells by DAMPs. International Congress of Immunology 2016
26. Klotho suppresses the inflammatory response and ameliorates cardiac dysfunction in aging endotoxemic mice. Annual Conference on Shock 2016
27. Aging exaggerates cardiac dysfunction and mortality during sepsis through a TLR2-dependent mechanism: the therapeutic potential of IL-37. Annual Conference on Shock 2016

28. Extracellular HSP27 and TLR4 exaggerate functional injury in aging hearts following ischemia. The XXII World Congress of International Society for Heart Research, Buenos Aires, Argentina, 2016
29. The pro-osteogenic phenotype of interstitial cells of calcified human aortic valves is due to altered expression of MiR-486 and -204. American Heart Association Scientific Sessions 2015
30. The augmented inflammatory response in the remote non-ischemic areas of aging hearts following ischemia and reperfusion: the role of TLR2. Annual Conference on Shock 2015
31. Extracellular HSP27 and TLR4 attenuate functional recovery in aging mouse hearts following ischemia. The 20th World Congress on Heart Disease, Florence, Italy, 2015
32. Neurotrophin 3 mediates the fibrogenic response to pro-inflammatory stimulation in human aortic valve interstitial cells. ATVB Scientific Sessions 2015
33. MicroRNA-486 regulates fibroblast-to-myofibroblast transition in human aortic valve interstitial cells. ATVB Scientific Sessions 2015
34. Up-regulated expression of neurotrophin 3 in the interstitial cells of stenotic aortic valves may promote valvular fibrosis. American Heart Association Scientific Sessions 2014
35. Epigenetic up-regulation of α-smooth muscle actin expression and cell aggregation in human aortic valve interstitial cells promotes calcific nodule formation. American Heart Association Scientific Sessions 2014
36. IL-37 suppresses the enhanced inflammatory responses and cardiac contractile depression in aging endotoxemic mice. Annual Conference on Shock 2014
37. Potential role of danger-associated molecular patterns in aortic valve calcification. The 6th International Conference on Osteoimmunology, Kos, Greece, 2014
38. MicroRNA-204 and -486 regulate the expression of osteogenic transcription factors in human aortic valve cells: evidence for epigenetic modulation of valvular cell osteogenic reprogramming. American Heart Association Scientific Sessions 2013
39. Neurotrophin 3 induces the expression of TGF-β1 and BMP-2 in human aortic valve interstitial cells via Trk receptors. American Heart Association Scientific Sessions 2013
40. TLR4 mediates the inflammatory response of remote non-ischemic myocardium and contributes to heart failure in a mouse model of myocardial infarction. Annual Conference on Shock 2013
41. Exaggerated cardiac contractile depression in aging endotoxemic mice is associated with enhanced inflammatory responses. Annual Conference on Shock 2013
42. Extracellular soluble biglycan induces osteogenic phenotypic changes in human aortic valve interstitial cells via Smad-dependent and –independent pathways. American Heart Association Scientific Sessions 2012
43. A novle role of intercelluar adhesion molecule-1 signaling via Notch1 in mediating bone morphogennetic protein-2 expression in human aortic valve interstitial cells. American Heart Association Scientific Sessions 2012
44. Therapeutic potential of interleukine-37 for supression of aortic valve inflammatory and osteogenic responses. American Heart Association Scientific Sessions 2012
45. Aging augments myocardial inflammatory response to ischemia and reperfusion: an obligatory role of TLR4. Annual Conference on Shock 2012
46. Role of innate immunoreceptors in calcific aortic valve disease. The 4th International Conference on Osteoimmunology, Corfu, Greece, 2012

47. Soluble biglycan induces the osteogenic response in human aortic valve interstitial cells via TLR2 and mediates the pro-osteogenic effect of oxLDL. American Heart Association ATVB Conference 2012
48. Cross-talk between the Toll-like receptor 4 and Notch1 pathways augments the inflammatory response to endotoxin in the interstitial cells of stenotic human aortic valves. American Heart Association Scientific Sessions 2011
49. Oxidized low density lipoprotein synergizes with Toll-like receptor 4 agonist to induce the inflammatory and osteogenic responses in human aortic valve interstitial cells. American Heart Association Scientific Sessions 2011
50. Expression of human interleukine-37 protects mouse heart against ischemic injury through suppression of monocyte chemoattractant protein-1-mediated mononuclear cell accumulation. American Heart Association Scientific Sessions 2011
51. Myocardial tissue TLR4-mediated MCP-1 production contributes to the mechanisms of myocardial injury following cold ischemia and reperfusion. Annual Conference on Shock 2011
52. IL-37 suppresses TLR2/4-induced ICAM-1 expression in endothelial cells via regulation of NF-B activation. Annual Conference on Shock 2011
53. Ghrelin reduces myocardial injury following global hypothermic ischemia/reperfusion via suppression of the myocardial inflammatory response. Academic Surgical Congress 2011
54. A TLR4-MCP-1-macrophage IL-18 cascade plays a major role in myocardial injury and cardiac dysfunction after permanent ischemia. Academic Surgical Congress 2011
55. Aging augments myocardial inflammatory responses to ischemia in murine hearts: TLR4–regulated mononuclear cell accumulation plays a critical role in myocardial injury and heart failure after permanent ischemia. The World Congress of the International Society for Heart Research 2010
56. TLR4–regulated mononuclear cell accumulation plays a critical role in myocardial injury and heart failure after permanent ischemia. The World Congress of the International Society for Heart Research 2010
57. HSP27 deficiency exacerbates TLR4-induced inflammatory responses in human aortic valve interstitial cells. Zing Cardiovascular conference 2010
58. Human myocardium releases HSP27 following global ischemia: the pro-inflammatory effect of extracellular HSP27 in coronary vascular endothelial cells through TLR2 and TLR4. Annual Conference on Shock 2010
59. Type 1 diabetes enhances TLR-2-mediated inflammatory responses in human coronary artery endothelial sells. Annual Conference on Shock 2010
60. TLR4-dependent myocardial chemokine response to ischemia/reperfusion: Role of extracellular HSC70. Annual Conference on Shock 2009
61. Extracellular heat shock cognate protein 70 induces cardiac functional tolerance to endotoxin: Differential effect on myocardial TNF-α and ICAM-1 levels. Annual Conference on Shock 2009
62. Cardiac TLR4 as a determinant of neutrophil infiltration after global myocardial ischemia: Up-regulation of chemokine expression in response to extracellular HSC70. American Heart Association Scientific Sessions 2008
63. Central role of TLR4 in BMP-2 expression in human coronary artery endothelial cells induced by oxLDL and LPS. American Heart Association Scientific Sessions 2008

64. Heat shock cognate protein 70 induces myocardial inflammatory response through mechanisms dependent and independent of Toll-like receptor 4. Annual Conference on Shock 2008
65. The 70 kDa heat shock cognate protein plays a novel role in myocardial chemokine expression and cardiac dysfunction following ischemia and reperfusion injury. Presented at the American Heart Association Scientific Sessions, Orlando, Florida, 2007
66. Proinflammatory cytokines link TLR4 signaling to post-ischemic cardiac dysfunction. Presented at the XIX World Congress of the International Society for Heart Research, Bologna, Italy, 2007
67. The mechanism of augmented cytokine response to ischemia in the aging heart. Presented at the XIX World Congress of the International Society for Heart Research, Bologna, Italy, 2007
68. Aprotinin attenuates the inflammatory response in human coronary endothelial cells induced by distinct mechanisms. Presented at the XIX World Congress of the International Society for Heart Research, Bologna, Italy, 2007
69. The role of the P38 MAPK/HSP27 pathway in regulation of TNF-induced chemokine expression in human microvascular endothelial cells. Presented at the 30th Annual Conference on Shock, Baltimore, Maryland, 2007
70. Aprotinin breaks the synergism of ROS and thrombin in the induction of MCP-1 in human coronary endothelial cells. Presented at the 30th Annual Conference on Shock, Baltimore, Maryland, 2007
71. Dual effects of ROS on TLR4 in human coronary artery endothelial cells. Presented at the Seventh World Congress on Trauma, Shock, Inflammation and Sepsis (TSIS). Munich, Germany, 2007
72. The interaction of myocardial depression factors in endotoxemia: role of TNF in TLR4-mediated expression of IL-1 and ICAM-1. Shock 25(Suppl 1):6, 2006. Presented at the 29th Annual Conference on Shock, Broomfield, Colorado, 2006
73. TLR4 signaling modulates myocardial inflammatory response to oxidant stress. J Mol Cell Cardio 40:888, 2006. Presented at the 28th Annual Meeting of International Society for Heart Research, Toronto, Canada, 2006
74. A novel role for TLR4 in post-ischemic cardiac inflammatory response: reactive oxygen species as potential TLR4 activator. Presented at the 2nd Annual Meeting of American Heart Association Scientific Concuil, Keystone, Colorado, 2005
75. TLR4 signaling modulates tissue and cellular inflammatory response to ROS. Shock 24(Suppl 3):56, 2005. Presented at the Twenty-Eighth Annual Conference on Shock, Marco Island, Florida, 2005
76. Regulation of post-ischemic cardiac inflammatory response by TLR4: heat shock cognate protein 70 as a potential mediator. Presented at the Twenty-Seventh Annual Conference on Shock, Halifax, Nova Scotia, 2004
77. Toll-like receptor 4 mediates oxidant-induced inflammatory response in macrophages. Presented at the Twenty-Seventh Annual Conference on Shock, Halifax, Nova Scotia, 2004
78. Pre-induction of cardiac inflammatory response via TLR4 improves post-ischemic functional recovery. Presented at the XXV Annual Meeting of International Society for Heart Research American Section, Mystic, Connecticut, 2003
79. Activation of Toll-like receptor 4 by lipopolysaccharide confers acute cardioprotection against post-ischemic dysfunction. Presented at the Twenty-Sixth Annual Conference on Shock, Phoenix, Arizona, 2003

80. Selective expression of HO-1 by tissue Mϕ in response to inflammation: the role of TLR4 and proinflammatory cytokines. Shock 17 (suppl):27, 2002. Presented at the Twenty-Fifth Annual Conference on Shock, Big Sky, Montana, 2002

81. Differential regulation of myocardial ICAM-1 expression by TLR4 and TNF-α in endotoxemia. Shock 17 (suppl):20, 2002. Presented at the Twenty-Fifth Annual Conference on Shock, Big Sky, Montana, 2002

82. The role of TNF-α in hsp70-mediated myocardial adaptation to ischemia. J Mol Cell Cardiol 33 (suppl):A76, 2001. Presented at XVI World Congress of International Society for Heart Research, Winnipeg, Canada, 2001

83. P55 TNF-α receptor mediates hemorrhage-induced lung neutrophil accumulation independent of ICAM-1. Shock 15 (suppl):61, 2001. Presented at the Twenty-Fourth Annual Conference on Shock, Marco Island, Florida, 2001

84. Induction of apoptosis in mouse type II alveolar epithelial cells by LPS does not require TNF-α. Shock 15 (suppl):84, 2001. Presented at the Twenty-Fourth Annual Conference on Shock, Marco Island, Florida, 2001

85. A dominant role of p55 TNF-α receptor in endotoxemic myocardial dysfunction. Shock 13 (suppl):26, 2000. Presented at the Twenty-Third Annual Conference on Shock, Snowbird, Utah, 2000

86. TNF-RI is required for heat stress induction of cytoprotective HSP70 in M□. Shock 13 (suppl):61, 2000. Presented at the Twenty-Third Annual Conference on Shock, Snowbird, Utah, 2000

87. Heat shock protein 72 suppresses TNFα production by inhibition of NFκB intranuclear translocation. Shock 11 (suppl):42, 1999. Presented at the Twenty-Second Annual Conference on Shock, Philadelphia, Pennsylvania, 1999

88. The role of HSP72 in the regulation of myocardial TNF-α production. J Mol Cell Cardiol 31 (5):A31, 1999. Presented at XXI Annual Meeting of International Society for Heart Research American Section, San Diego, California, 1999

89. Mechanism of myocardial tolerance to LPS-induced contractile dysfunction: Heat shock protein 72-mediated downregulation of cardiac TNF production. Shock 9 (suppl):18, 1998. Presented at the Twenty-first Annual Conference on Shock, San Antonio, Texas, 1998

90. Intranuclear translocation of PKCβ1 may transduce the signal for the expression of genes associated with delayed cardioprotection. Presented at Keystone Symposia on Molecular and Cellular Biology (Temporal and Spatial Determinants of Specificity in Signal Transduction), Keystone, Colorado, 1997

91. Stimulus specific spatial redistribution of PKC isoforms encodes stress-induced cardioadaptation. Presented at Keystone Symposia on Molecular and Cellular Biology (Temporal and Spatial Determinants of Specificity in Signal Transduction), Keystone, Colorado, 1997

92. LPS induces delayed cardioprotection in the rat independent of cardiac depression. J Mol Cell Cardiol 29 (6):A199, 1997. Presented at XIX Annual Meeting of International Society for Heart Research American Section, Vancouver, Canada, 1997

93. Stimulus specific translocation of PKC isoforms to distinct membrane compartments in intact myocardium. Circulation 96 (suppl):I-738, 1997. Presented at 70th American Heart Association Scientific Sessions, Orlando, Florida, 1997

94. Heat shock protein 72 suppresses TNF-α production in Mϕ through immobilization of NF-κB: a potential mechanism for hyperthermia-induced cardiac resistance to LPS. Circulation 96 (suppl):I-

615, 1997. Presented at 70th American Heart Association Scientific Sessions, Orlando, Florida, 1997

95. Adenosine decreases myocardial TNF-α production following ischemia-reperfusion injury: anti-inflammatory link to preconditioning. Circulation 96 (suppl):I-679, 1997. Presented at 70th American Heart Association Scientific Sessions, Orlando, Florida, 1997
96. Differential expression of myosin heavy chain and actin isogenes in rat hearts cross-resistant to ischemia and endotoxin. J Mol Cell Cardiol 28 (6):A189, 1996. Presented at XIIX Annual Meeting of International Society for Heart Research American Section, Chicago, Illinois, 1996
97. Sympathetic signal transduction induces delayed cardioprotection. J Mol Cell Cardiol 28 (6):A189, 1996. Presented at XIIX Annual Meeting of International Society for Heart Research American Section, Chicago, Illinois, 1996
98. Preconditioning against ischemic acidosis may involve PKCδ. J Mol Cell Cardiol 28 (6):A188, 1996. Presented at XIIX Annual Meeting of International Society for Heart Research American Section, Chicago, Illinois, 1996.
99. Sympathetic signal transduction induces two distinct phases of cardioprotection by activation of PKC. Circulation 94 (suppl):I-184, 1996. Presented at 69th American Heart Association Scientific Sessions, New Orleans, Louisiana, 1996
100. Lipopolysaccharide induces a cardiac cross-resistant state in rats which is associated with the heat shock response. J Cell Biochem Suppl 19B:220, 1995. Presented at Keystone Symposium on Molecular Cardiology, Taos, New Mexico 1995
101. Endotoxemic stress induces bFGF expression and reduces infarct size in rat hearts. Circulation 90 (suppl):I-522, 1994. Presented at 67th American Heart Association Scientific Sessions, Dallas, Texas, 1994
102. Endotoxin induces in vivo myocyte HSP70 gene expression and protection from cardiac ischemic injury. J Cell Biochem Suppl. 17D:195, 1993. Presented at Keystone Symposium on Molecular Cardiology, Taos, New Mexico 1993
103. Norepinephrine induces late cardiac protection preceded by protooncogene and heat shock protein gene expression. Circulation 88 (suppl):I-663, 1993. Presented at 66th American Heart Association Scientific Sessions, Atlanta, Georgia, 1993