BIOGRAPHICAL SKETCH

NAME	POSITION TITLE
Peipei Ping, PhD. FAHA	**Professor and Director**
eRA Commons; PING22	

EDUCATION /TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE	YEAR(S)	FIELD OF STUDY
Zhejiang University, P.R.China	B.S.	1980-85	Biomedical Engineering
University of Arizona	Ph.D.	1985-90	Cardiovascular Physiology
University of North Carolina at Chapel Hill	Fellow	1991-92	Molecular Physiology
University of California at San Diego	Fellow	1992-94	Molecular Cardiology

A. POSITIONS AND HONORS:

1995	Assistant Adjunct Professor. Department of Medicine/Division of Cardiology, UCSD.
1996-2000	Assistant Professor. Department of Physiology/Division of Cardiology, Univ. of Louisville.
2000-2002	Associate Professor. Department of Physiology/Division of Cardiology, Univ. of Louisville.
2002-current	Professor. Department of Physiology and Medicine, Division of Cardiology, UCLA.
2004-current	Director, NHLBI Program Project on Myocardial Ischemia Injury and Protection.
	Director, Proteomic Core Laboratory at CVRL, UCLA.

Honors and Awards: Fellow of American Heart Association (FAHA, 1999); **Provost's Award** for Exemplary Advising (University of Louisville) 2001. **University Scholar** (University of Louisville) 2000. **Young Investigator Award** (AHA) 1998. **Melvin L. Marcus Young Investigator Award Finalist** (AHA) 1995. **Young Investigator Award Finalist** (ISHR) 1995. **Young Investigator Travel Award** (AFCR) 1994. **Young Investigator Award** (AHA) 1993. **Henry Christian Memorial Award** (AFCR) 1993. **Trainee Investigator Award** (AAP, ASCI, AFCR) 1993. **Caroline tum Suden Professional Opportunity Award** (APS) 1992. **Excellence in Research Award** (AHA) 1990.

Professional Service: Fellow of American Physiological Society, Cardiovascular Section (2001-current). Fellow of American Heart Association (FAHA), Basic Science Council (1999-current). Group Leader, Myocardial Ischemia/Basic Science Council AHA (2002). Founding Council Member of Human Proteome Organization (HUPO, 2001). Secretary General of USHUPO (2004-2005); Secretary General of International HUPO (2007-2008); Member of HUPO Executive Committee (2002-current). Co-chair; HUPO Cardiovascular Initiative. Chair of HUPO Award Committee (2003-2007). Chair of HUPO Publication Committee (2005-current). Co-Chair of Scientific Program Committee (HUPO 2004, 2006, 2009). Member of Sarnoff Cardiology Scientific Committee; Chair of NHLBI working group on "Role of Mitochondria in Cardiovascular Diseases".

Editorial Board Service: Circulation Research (1999-2004), American Journal of Physiology Heart and Circulatory Physiology (Editorial Board: 1999-current; Consulting Editor: 2001-2005; Associate Editor: 2004-2005), Circulation (2001-current); Journal of Molecular and Cellular Cardiology (2000-current). Journal of Proteome Research (2007-2009); Proteomics (2007-2009); Clinical Proteomics (2007-2009).

Study Section Service: NIDDK SEP on Collaborative Interdisciplinary Team Science (chairperson), 2009; NIH MIM (ad hoc Member, Regular Member and Chairperson), 2003-2007; NHLBI SEPs, 2005; EPA Board Member of Scientific Review Council, 2005; NIH NIA CMAD, 2003-2004; NHLBI Clinical Proteomics Working Group (2003); American Heart Association (Mid-American Consortium) 1999-2002; American Heart Association (National Center), CVA; 2000-2002. NIH NHLBI CVA, 2001-2005; NIA PPG Committee, 2002-2005 (Ad hoc); NIA SEP 2003 (Ad hoc); NCRR SEP, 2003 (Ad hoc); NIH NHLBI PPG Committee, 2000-2005 (Ad hoc); NIH NIDA PPG (Ad hoc); NIH NHLBI CVA, 2000 (Ad hoc).

B. SELECTED PEER-REVIEWED PUBLICATIONS (FROM TOTAL OF 100):

1. Hammond HK, Roth DA, McKirnan MD, **Ping P**. Regional myocardial down regulation of Giα2 and β-AR for chronic episodic myocardial ischemia. ***J Clin Invest*** 1993;92:2644-2652.
2. **Ping P**, Gelzer R, Roth DA, Kiel D, Insel PA, Hammond HK. Reduced β-adrenergic receptor activation decreases G-protein expression and β-ARK activity in porcine heart. ***J Clin Invest*** 1995;95:1271-1280.
3. Giordano F, **Ping P**, Mckirnan D, Nozaki S, DeMaria A, Dillmann W, Mathieu-Costello O, Hammond HK. Intracoronary gene transfer of fibroblast growth factor-5 increases blood flow and contractile function in an ischemic region of the heart. ***Nature Medicine*** 1996;2(5):534-539.

4. **Ping P,** Zhang J, Qiu Y, Tang XL, Cao X, Bolli R. Ischemic preconditioning induces selective translocation of PKC isoform ε and η in the heart of conscious rabbits. ***Circ Res*** 1997;81:404-414.
5. **Ping P,** Gao M, Post S, Insel PA, Tang R, Hammond HK. Increased expression of adenylylcyclase type VI proportionately increases β-adrenergic receptor-stimulated cAMP in neonatal rat cardiac myocytes. ***Proc Natl Acad Sci USA*** 1998;95:1038-1043.
6. **Ping P**, Qiu Y, Zhang J, Tang XL, Manchikalapudi S, Bolli R. Direct evidence for an essential role of PKC in the development of late preconditioning in rabbits. ***J Clin Invest*** 1998;101:2182-2198.
7. **Ping P,** Zhang J, Zheng YT, Li R, Dawn B, Takano H, Balafanova Z, Bolli R. Demonstration of PKCε-dependent activation of Src and Lck tyrosine kinases in preconditioning. ***Circ Res.*** 1999;85:542-50.
8. **Ping P,** Takano H, Zhang J, Tang XL, Qiu Y, Li R, Banerjee S, Dawn B, Bolli R. Isoform-selective activation of PKC by nitric oxide in the heart of conscious rabbits. ***Circ Res.*** 1999;84:587-604.
9. **Ping P,** Zhang J, Cao X, Kong K, Tang XL, Li R, Auchampach J, Black R, Bolli R. PKC-dependent activation of p44/p42 MAPKs during ischemia/reperfusion. ***Am J Physiol*** 1999;276:H1468-H1481.
10. **Ping P,** Murphy E. Role of p38 mitogen-activated protein kinases in preconditioning: A detrimental factor or a protective kinase? ***Circ Res.*** 2000;86:921-922.
11. Doble BW, **Ping P,** Kardami E. The epsilon subtype of protein kinase C is required for cardiomyocyte connexin-43 phosphorylation. ***Circ Res.*** 2000;86:293-301.
12. **Ping P**, Zhang J, Pierce W, Bolli R. Functional proteomic analysis of PKCε signaling complexes in the normal heart and during cardioprotection. ***Circ Res.*** 2001;88:59-62.
13. Vondriska TM, Zhang J, Song C, Tang XL, Cao X, Baines CP, Pass JM, Bolli R, **Ping P**. PKCε-Src modules direct signal transduction in nitric oxide-induced cardioprotection. ***Circ Res.*** 2001;88:1306-13.
14. Pass J, Wead W, Zhang J, Li R, Bolli R, **Ping P**. Activation of PKCε induces dichotomous cardiac phenotypes and modulates PKCε-RACK interactions. ***Am J Physiol*** 2001;280: H946-H955.
15. **Ping P**, Song C, Zhang J, Guo Y, Cao X, Li R, Vondriska TM, Pass JM, Tang XL, Pierce WM, Bolli R. Formation of PKCε-Lck signaling modules confers cardioprotection. ***J Clin Invest.*** 2002;109:499-507.
16. Balafanova Z, Bolli R, Pass JM, Wang O, Zhang J, Gao J, Bhatnagar A, **Ping P**. Nitric oxide donors induce nitration of PKCε and enhance PKCε-RACK2 interactions. ***J Biol Chem.*** 2002;277:15021-27.
17. Baines CP, Zhang J, Wang GW, Zheng YT, Xiu JX, Cardwell EM, Bolli R, **Ping P**. Mitochondrial PKCε and MAPK form signaling modules. ***Circ Res.*** 2002;90:390-397.
18. Edmondson RD, Vondriska TM, Biederman KJ, Zhang J, Jones RC, Pisano MR, **Ping P.** PKCε complexes include metabolic- and translation-related proteins. ***Mol Cell Proteomics.*** 2002;1:421-433.
19. **Ping P**. A new chapter in cardiac PKC signaling studies: Searching for isoform specific molecular targets. ***Am J Physiol.*** 2003;285:C19-21.
20. **Ping P,** Zhang J, Vondriska TM, Wang GW, Tang XL Bolli R. Cardioprotection involves activation of NF-κB via PKC-dependent tyrosine and serine phosphorylation of IκBα. ***AJP.*** 2003;285:H1753-1758.
21. Baines CP, Song CX, Zheng YT, Wang GW, Zhang J, Guo Y, Bolli R, Cardwell EM, **Ping P**. PKCε interacts with and inhibits the mitochondrial permeability transition in heart. ***Circ Res.*** 2003; 92:873-80.
22. Weiss JN, Korge P, Honda HM, **Ping P**. Role of the mitochondrial permeability transition in myocardial disease. ***Circ Res.*** 2003; 93:292-301.
23. **Ping P**. Identification of signaling complexes by functional proteomics. ***Circ Res.*** 2003; 93:595-603.
24. Gomes AV, Zong C, Edmondson RD, Berhane BT, Wang GW, LE S, Young G,.Loo J, **Ping P**. The murine cardiac 26S proteasome. ***Ann NY Acad Sci*** 2005; 1047:197-207.
25. **Ping P.** *et al.* A functional annotation of subproteomes in plasma. ***Proteomics.*** 2005; 5:3506-3519.
26. Gomes AV, Zong C, Edmondson RD, Li X, Stefani E, Zhang J, Jones RC, Thyparambil S, **Ping P**. Mapping the murine cardiac 26S proteasome complexes. ***Circ Res.*** 2006; 99(4):362-371.
27. Zong C, Gomes AV, Drews O, Li X, Young GW, Berhane B, French SW, Bardag-Gorce F, **Ping P.** Regulation of Murine Cardiac 20S Proteasomes. ***Circ Res.*** 2006; 99(4):372-380.
28. Taylor CF, Paton NW, Lilley KS, Binz PA, Julian RK Jr, Jones AR, Zhu W, Apweiler R, Aebersold R, Deutsch EW, Dunn MJ, Heck AJ, Leitner A, Macht M, Mann M, Martens L, Neubert TA, Patterson SD, **Ping P**, Seymour SL, Souda P, Tsugita A, Vandekerckhove J, Vondriska TM, Whitelegge JP, Wilkins MR, Xenarios I, Yates JR 3rd, Hermjakob H. The minimum information about a proteomics experiment (MIAPE). ***Nat Biotechnology.*** 2007; 25(8):887-893.
29. Drews O, Wildgruber R, Zong C, Sukop U, Nissum M, Weber G, Gomes AV, **Ping P**. Mammalian proteasome subpopulations with distinct molecular compositions and proteolytic activities. ***Mol Cell Proteomics.*** 2007; 6(11):2021-2031.

30. Zhang J, Li X, Mueller M, Wang YJ, Zong C, Deng N, Vondriska TM, Liem DA, Yang YJ, Korge P, Honda H, Weiss JN, Apweiler R, **Ping P**. "Systematic Characterization of the Murine Mitochondrial Proteome Using Functionally Validated Cardiac Mitochondria". ***Proteomics*** 2008; 8(8):1564-1575.
31. Zhang J, Liem DA, Mueller M, Wang YJ, Zong C, Deng D, Vondriska TM, Korge P, Drews O, MacLellan WR, Honda H, Weiss JN, Apweiler R, **Ping P**. Altered Proteome Biology of Cardiac Mitochondria Under Stress Conditions. ***J Proteome Res.*** 2008;7(6):2204-14.
32. Lu HJ, Zong C, Wang YJ, Young GW, Deng N, Souda P, Whitelegge J, Li X, Drews O, **Ping P**. Revealing the Dynamics of 20S Proteasome Phosphoproteome: a Combined CID and ETD Approach. ***Mol Cell Proteomics.*** 2008; 7:2073-897.
33. Zong C*, Wang Y*, Lu H, Young GW, Deng N, Gomes AV, Drews O, **Ping P.** Two Dimensional Electrophoresis-Based Characterization of Post-Translational Modifications of Mammalian 20S Proteasome Complexes. ***Proteomics.*** 2008; 8:5025-37.
34. Gomes AV, Young GW, Wang YJ, Zong C, Eghbali M, Drews O, Lu H, Stefani E, **Ping P**. Contrasting proteome biology and functional heterogeneity of the 20S proteasome complexes in mammalian tissues. ***Mol Cell Proteomics.*** 2009; Feb;8(2):302-15
35. **Ping P**. Getting to the Heart of Proteomics. ***New Eng J Med,*** 2009; 360(5): 532-534.

C. RESEARCH SUPPORT:

1. PKCε and Src Protein Tyrosine Kinase Signaling in Preconditioning.
Principal Investigator: Peipei Ping, Ph.D.
Type: NIH R01 HL63901
Period: 02/01/05-01/31/10
The long-term objective of this project is to elucidate the signaling mechanisms underlying the early and late phases of ischemia and NO donor mediated preconditioning.

2. Signaling Mechanisms in Pharmacological Preconditioning.
Principal Investigator: Peipei Ping, Ph.D.
Type: NIH R01 HL65431
Period: 01/01/05-12/31/08
The long-term objective is to explore the signaling mechanisms of Src tyrosine kinases in pharmacological preconditioning.

3. Role of Mitochondria in Cardiac Protection.
Principal Investigator: Peipei Ping, Ph.D.
Type: NIH R01 HL80691
Period: 07/01/06-06/30/11
The objective is to identify and characterize multi-protein complexes in the cardiac mitochondria using an integrated nano-proteomic approach.

4. Ischemic Injury and Protection.
Principal Investigator: Peipei Ping, Ph.D.
Type: NIH P01 HL080111
Period: 04/01/05-31/03/10

The long-term objective of this Program Project is to understand the proteomic basis of ischemia biology and to fully characterize the dynamic signaling sub-proteomes responsible for ischemic injury or cardioprotection.