

## CURRICULUM VITAE

*NAME:* Steven Robert Houser

*DATE OF BIRTH:* March 29, 1951

*PRESENT POSITION:* Vera J. Goodfriend Endowed Chair in  
Cardiovascular Research  
Director, Cardiovascular Research Group  
Chair, Department of Physiology

*BUSINESS ADDRESS:* Temple University School of Medicine  
Medical Education Research Building, Room 1041  
3500 North Broad Street  
Philadelphia, PA 19140

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Fort Washington, PA 19034

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*Email* [srhouser@temple.edu](mailto:srhouser@temple.edu)

*MARRIED:* Beth A. Bailey, Ph.D.

*CHILDREN:* Elise Bailey Houser (9-1-93)  
Emily Ann Houser (6-17-95)

*EDUCATION:* Eastern College  
B.A.: Biology/Chemistry  
1969-1973

Temple University School of Medicine  
Ph.D.: Physiology

1973-1977

*POSITIONS HELD:*

Research Fellow  
Division of Cardiology  
Temple University School of Medicine  
1977-1979

Assistant Professor of Physiology  
Temple University School of Medicine  
1979-1984

Associate Professor of Physiology  
Temple University School of Medicine  
1985-1991

Visiting Scientist  
Cardiovascular Research Institute  
University of California at San Francisco  
1993-1994

Professor of Physiology  
Temple University School of Medicine  
1991-present

Director of Graduate Studies  
Department of Physiology  
Temple University School of Medicine  
1988-1998

Associate Chair for Research  
Department of Physiology  
Temple University School of Medicine  
1997-2002

Co-Director  
Cardiovascular Research Group  
Temple University School of Medicine  
1998-2003

Director  
Cardiovascular Research Center  
Temple University School of Medicine  
2003-

Senior Associate Dean of Research  
Temple University School of Medicine  
2003-2007, 2013-present

Chairperson, Department of Physiology  
Temple University School of Medicine  
2006-

*SERVICE:*

**NIH**

1985	RFA, "Molecular Mechanisms of Cardiac Hypertrophy,"
1987	Ad hoc reviewer, Cardiovascular Study Section, NIH
1988-1992	Cardiovascular A Study Section, (permanent member)
1993,97	Cardiovascular B Study Section, Ad hoc
1994,96	Cardiovascular A Study Section, Ad hoc
1994	SCOR: Heart Failure, Reviewer
1995-2001	Cardiovascular A Study Section, Ad hoc
2002-2003	Cardiovascular A Study Section, (permanent member)
2003-2006	CCHF Study Section (Member and Chairperson)
2006,2007	K99 Special Emphasis Panel
2006	ESTA Study Section (NIH;NHLBI)
2008	NIH T32 review
2008	NHLBI PPG review
2009	ESTA Study Section (NIH/NHLBI)
2009-2012	K08 Study Section (NIH/NHLBI, Chair of the committee)

## AMERICAN HEART ASSOCIATION

1985-1991	American Heart Association, Southeastern PA Affiliate, Peer Review Committee
1988-1991	Chairman; Peer Review Committee, AHA Southeastern PA Affiliate
1988-1993	Member of Research Committee, AHA Southeastern PA Affiliate
1991-1993	Chairman; Research Committee, AHA Southeastern PA Affiliate
1991-1993	Member of Executive Committee, AHA Southeastern PA Affiliate
1992	Vice President, AHA Southeastern PA Affiliate
1993	President-elect, AHA Southeastern PA Affiliate
1992-1997	Board of Directors, AHA Southeastern PA Affiliate
1994-1999	Executive Board of Directors
1994	President, AHA Southeastern PA Affiliate
1995-2000	National AHA Peer Review Committee
1999-2002	Mid-Atlantic AHA peer review Committee
2003-present	AHA (National) Research Committee
2003-2005	Marcus Award Committee (Chairperson)
2004-2006	Strategic Planning Committee (Chairperson)
2006-2009	Leadership Committee (National AHA)
2006-	Advocacy Committee (National AHA)

2007-	Committee on Scientific Programs (National AHA)
2007-2008	Vice Chair, Council on Basic Cardiovascular Science
2008-2010	Chair, Council on Basic Cardiovascular Science
2010-2012	Chair BCVS Nominating Committee
2010-2012	Member Council Operations Committee
2012-	Chair, Strategic planning Committee
2013-	Research Committee (Chair)
2015-2016	President - elect American Heart Association
2016-2017	President of American Heart Association

**PHILADELPHIA PHYSIOLOGICAL SOCIETY**

1985-Present	Philadelphia Physiological Society (PPS) Council Member
1986-1988	Secretary, PPS
1988	Vice President, PPS
1989-1991	President, PPS
1994-2000	Advisory Board

**CARDIAC MUSCLE SOCIETY**

1987-present	Member
2005-2009	Secretary/Treasurer
2009-2013	President

**HEART FAILURE SOCIETY OF AMERICA**

2000-present	Member
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2005-2007 Member, organizing committee  
2010-2012 Chair, organizing committee  
2010-present Executive Council

**INSTITUTIONAL:**

1985-1993 Graduate Studies Committee  
1986-1992 M.D./Ph.D. Program Committee  
1993-96 Medical Faculty Senate Personnel Committee  
1994 Chair, LCME Subcommittee on Basic Science  
1998-2002 M.D./Ph.D. Program Committee  
2004- Director, Cardiovascular Research Center  
2003-2007 Senior Associate Dean of Research  
2010- Senior Associate Dean of Research

**DEPARTMENTAL:**

1980-Present Graduate Committee  
1986-97 Director of Graduate Education  
1985-2006 Appointment and Promotions Committee  
1990-2006 Professors Committee  
2006- Chairperson, Department of Physiology

**MANUSCRIPT REVIEW:**

American Journal of Physiology (Editorial Board, 1990-2000)  
Cardiovascular Research  
Circulation Research (Editorial Board, 1995-present)  
Journal of Molecular and Cellular Cardiology (Editorial Board, 2000-present)

Life Sciences  
Science  
Journal of Clinical Investigation  
Journal of Biological Chemistry  
Circulation  
Journal of Physiology  
Journal of Cardiac Failure (Editorial Board, 2002-present)  
Journal of Cardiac Failure (Associate Editor, 2010-present)  
Circulation Research (Editorial Board, 200-present)

**FELLOWSHIPS AND NATIONAL LISTINGS:**

1974-1976	Temple University Fellowship
1977-1979	Cardiovascular Fellowship; NIH
1980-1982	Special Investigator, AHA

**INVITED SPEAKER:**

Over 200 presentations have been made during the past 30 years. A full list will be furnished upon request. The titles and locations of recent presentations I have been invited to make are listed below.

*Regulation of Calcium Transients in Diseased Myocardium; New York University School of Medicine, 2004*

*Mechanisms of Depressed Contractility in Human Heart Failure; New York Academy of Science, 2004*

*Calcium Regulation in the Failing Human Heart; AHA National Meeting, 2005*

*Should We Repair or Replace Failing Cardiac Myocytes? University of Iowa, 2006*

*T-type Ca<sup>2+</sup> channels and cardiac regeneration, AHA invited speaker, 2006*

*Calcium Influx Mediated Myocyte Death and Regeneration, Boston University 2007*

*Calcium Influx, Myocyte Death and Cardiac Regeneration, Stanford University 2007*

*New myocyte formation in the adult heart: AHA National Meeting 2008*

*T-type Ca<sup>2+</sup> channels and new myocyte formation: Heart Failure Society of America 2008*

*Repairing the damaged heart: AHA National Meeting 2009*

*Cell Turnover in the normal heart: Heart Failure Society of America 2009*

*Cardiac regeneration in the injured heart. Univ. of South Carolina 2010*

*Cardiac remodeling in cardiovascular disease. UAB 2011*

*Ca<sup>2+</sup> mediated cardiac response to stress. Harvard (BWH) 2012*

*Microdomain Ca<sup>2+</sup> to initiate cardiac hypertrophy: AHA 2012*

*TRPC channels as activators of Pathological Hypertrophy. GRC 2013*

*Cortical Bone Stem Cells for Cardiac Repair. Stanford 2014*

**GRANT SUPPORT as PI:**

1979	American Heart Association, Southeastern PA Chapter <i>Sodium Pump in Normal and Failing Cat Hearts</i> Principal Investigator \$7,500
1979-1982	National Institute of Health <i>Role of Sodium Potassium Pump in Heart Failure</i> Co-Investigator \$151,000
1980-1982	American Heart Association, Southeastern PA Chapter Special Investigator Award <i>Electrophysiological Status of the Na-K Pump In Heart Failure</i> \$33,000
1983-1984	American Heart Association, Southeastern PA Chapter <i>Electrophysiology of Isolated Myocytes</i> \$13,000



1983-1984	Berlex Laboratories, Inc. <i>Effects of Isoproterenol on Isolated Feline Myocytes</i> \$7,000
1984-1985	National Institute of Health <i>Spontaneous Contractile Waves in Rat Myocytes</i> \$100,000
1984-1985	American Heart Association, Southeastern PA Chapter <i>Electrophysiology of Hypertrophied Cardiac Myocytes</i> \$13,100
1987	BRSG <i>Simultaneous Measurement of Ca<sup>2+</sup> and Motion in Single Cardiac Myocytes</i> Principal Investigator \$7,200
1984-1991	National Institute of Health <i>Properties of Normal and Hypertrophied Isolated Myocytes</i> Principal Investigator \$544,000
1985-1991	National Institute of Health <i>Calcium Homeostasis in Hypertrophied Cardiac Myocytes</i> Principal Investigator \$900,000
1985-2018	National Institute of Health Ca <sup>2+</sup> Regulation in Newly formed Myocytes Principal Investigator (merit Award) \$325,000 annual direct costs
1991-1995	National Institute of Health

	<p><i>Calcium Homeostasis in Hypertrophied Cardiac Myocytes</i> Principal Investigator \$1,300,000</p>
1995-1998	<p>Merck and Co., Inc. <i>Effects of Potassium Channel Blockers on Human Atrial Myocytes.</i> Principal Investigator \$50,000 annually</p>
1998	<p>Millenium Pharmaceuticals <i>Gene Expression in LVAD-supported Human Hearts</i> Principal Investigator \$30,000</p>
1995-2009	<p>National Institute of Health <i>Calcium Homeostasis in Hypertrophied Cardiac Myocytes</i> Principal Investigator \$2,531,000</p>
1998-2007	<p>National Institute of Health <i>Electromechanical Properties of Human Ventricular Myocytes after VAD support</i> PI: Kenneth Margulies, M.D. Coinvestigator: Steven Houser, Ph.D. \$2,000,000</p>
1998-2007	<p>National Institute of Health <i>Contractility of Failing and Recovering Human Myocytes</i> PI: Steven Houser \$2,000,000</p>
1996-2006	<p>Procter and Gamble Pharmaceuticals <i>Effects of Potassium Channel Blockers in Human Ventricular Myocytes.</i> Principal Investigator \$75,000 annually</p>
2006-2008	<p>Pfizer Human Stem Cells for Cardiac Repair</p>

\$200,000

2007-2012 National Institute of Health  
*Ca<sup>2+</sup> as a Molecular Signal*  
Principal Investigator  
\$498,000 annual direct costs

2007-2012 National Institute of Health  
*Ca<sup>2+</sup> Influx, Cardiac Myocyte Death and Hypertrophy*  
Co-Investigator  
\$250,000 annual direct costs

2007-2008 Boehringer Ingelheim  
*Cardiac Toxicology*  
Principal Investigator  
\$125,000 total costs

2008-2018 National Institute of Health  
*Ca<sup>2+</sup> Mediated Cardiac Injury and Repair*  
Principal Investigator (Merit Award)  
\$325,000 annual direct costs

2008-2019 National Institute of Health  
*Integrative Cardiovascular Pathophysiology*  
Principal Investigator  
\$196,123 Direct Costs

2012-2017 National Institute of Health  
*Improving Cardiac function after Myocardial Infarction*  
Principle Investigator  
Program Project Grant  
\$2,247,732 annual direct costs

2014-2019 National Institute of Health  
*Novel Mechanisms for Cardiac Injury and Repair*  
Principal Investigator - Project Leader  
\$2,312,979 annual direct costs

2014-2018 National Institute of Health  
*TRCP Channel Regulation of Cardiac Hypertrophy and Contractility*  
Principal Investigator  
\$220,527 annual direct costs

## **TEACHING EXPERIENCE:**

Medical School:

Primary Lecturer on Cardiac Electrophysiology, Excitation-Contraction Coupling, Electrocardiogram, Cardiac Mechanics, and Control of Cardiac Performance.

Laboratory experience with students including: ECG-dog, ECG-human, Cardiac cycle, Exercise, Neuron function, Muscle mechanics, General Physiology, Cardiac function.

Graduate School:

Conduct courses in Ion Channel Biophysics, Cell Biology and Cardiovascular Physiology and Pharmacology, Cardiovascular Pathophysiology.

## **HONORS:**

*Magna cum Laude*, Eastern College (BA)

University Fellowship, Temple University, 1976-1978

*Summa cum Laude*, Temple University School of Medicine (Ph.D.)

Winner of A.N. Richards Young Investigators Competition, 1984  
(Philadelphia Physiological Society)

National Heart, Lung and Blood Institute Method to Extend Research in Time (Merit) award

## **STUDENTS TRAINED IN THE LABORATORY**

Vuong duThinh MD/Ph.D. 1980-82

Lewis Silver, Ph.D. Postdoctoral fellow 1982-84

Edward Hemwall, Ph.D. Postdoctoral Fellow 1982-84

James Jaeger MD/Ph.D. 1981

Anthony Bahinski, Ph.D. 1981-84

Linda Miller, Ph.D. Postdoctoral Fellow 1984-86

Hali Hartmann Ph.D. Postdoctoral Fellow 1986-87

Robert Kleiman MD Fellow 1989-91

William duBell Ph.D. 1988-92

H. Bradley Nuss Ph.D. 1988-92

Karen Walker, Ph.D. 1989-92

Beth A. Bailey Ph.D. Postdoctoral Fellow 1993-95  
John Gaughan, Graduate Student 1994-96  
Gina Toaldo, Graduate Student 1994-96  
Andrew Gow, Graduate Student 1994-96  
Yingbo Yang, Graduate Student 1995-98  
Julian Mattiello, MD/PhD Student 1995-1999  
Konstantina Dipla, Graduate Student 1996-98  
Siyun Li, Graduate Student 1996-98  
Mitchell Cohen, M.D. Fellow 1996-97  
Valentino Piacentino III, 1998-2003  
David Harris, 2002-2005  
Khurham Chaudrey 2000-2004, PhD Student  
Eric Rossman, PhD Student 1999-2003  
Rebecca Petre, 2002-2006  
Xiogwen Chen, 1998-2004  
Geoffrey Mills, 2002-2006  
Albert Jung, 2002-2007  
Scott Macdonald, 2001-2005  
Rachael Wilson, 2003-2007  
Naser Jaleel, 2005- 2010  
Hongyu Zhang 2006-2010  
Catherine Makerewich 2010-2014  
Larry Barr 2010-2014  
Jason Duran 2010-2014  
Fang Wang 2011-2013  
Thomas Sharp 2012-  
Polina Gross 2013-  
Dean Troupes 2013-  
Shavonn Smith 2014 -

**MANUSCRIPTS AND BOOK CHAPTERS: (Abstracts not listed)**

Houser, S.R.: Characterization of an electrophysiological compartment within canine cardiac Purkinje cells and associative implications upon action potential parameters. *Temple University Thesis*, 1978.

Houser, S.R. and Freeman, A.R.: A simple method for volumetric measurements in isolated cardiac muscle. *Am. J. Physiol.* 236: H519-H524, 1979.

Houser, S.R. and Freeman, A.R.: Volumetric properties of canine cardiac Purkinje fibers: Evidence for a single cellular compartment. *Am. J. Physiol.* H561-H568, 1980.

Houser, S.R.: Cardiac electrophysiology: Cellular events which underlie the electrocardiogram. *J. Cardiovas. and Pulm. Tech.* 8: 44-51, 1980.

Breisch, E.A., Houser, S.R., Carey, R.A., Spann, J.M., and Bove, A.A.: Myocardial blood flow and capillary density in chronic pressure overload of the feline left ventricle. *Cardiovasc. Res.* 14: 469-475, 1980.

Houser, S.R., Freeman, A.R., Breisch, E.A., Jaeger, J.M., Coulson, R.L., Carey, R., and Spann, J.F.: Resting potential changes associated with Na-K pump in failing heart muscle. *Am. J. Physiol.* 240: H168-H176, 1981.

Jaeger, J.M., Houser, S.R., Freeman, A.R., and Spann, J.F.: The effect of thyroid hormone on canine cardiac Purkinje fiber transmembrane potential. *Am. J. Physiol.* H934-H940, 1981.

Houser, S.R.: Control of membrane voltage by the Na-K pump in hypertrophied cardiac muscle. *Bull. Phila. Physiol. Soc.* 1: 5-9, 1982.

Breisch, E.A., Houser, S.R., Coulson, R.L.: Reduced heat production in compensated pressure overload hypertrophy of the cat left ventricle. In: Myocardial Hypertrophy and Failure; Ed. N.R. Alpert, Raven Press, 1982. *Perspectives in Cardiovas. Res.* 7: 587-599, 1983.

Houser, S.R., Weinberg, D., Martin, F., and Burgis, V.: Effects of epinephrine on rate related changes in membrane potential in normal and failing cat heart muscle. *Am. J. Physiol.* 245: H90-H97, 1983.

Marino, T.A., Houser, S.R., Martin, F., and Freeman, A.R.: An ultrastructural morphometric study of the papillary muscle of right ventricle of the cat. *Cell Tissue Res.* 230: 543-552, 1983.

Duthinh, V. and Houser, S.R.: Tension development of normal and hypertrophied-failing papillary muscles following rapid stimulation. *Life Sciences* 32, 1885-1896, 1983.

Silver, L.H., Marino, T.A., Hemwall, E.L., and Houser, S.R.: The characteristics of calcium tolerant myocytes from cat ventricular tissue. *Am. J. Physiol.* 245: H891-H896, 1983.

Marino, T.A., Houser, S.R., and Cooper, G.: Early morphological changes of pressure-overloaded cat right ventricular myocardium. *Anat. Rec.* 207: 417-426, 1983.

Martin, F.G., Houser, S.R., Marino, T.A., and Freeman, A.R.: Potassium measurements in extracellular spaces of normal and failing cat myocardium. *Cardiovas. Res.* 17: 642-648, 1983.

Hemwall, E.L., Duthinh, V., and Houser, S.R.: Comparison of slow response action potentials from normal and hypertrophied myocardium. *Am. J. Physiol.* 246: H675-H682, 1984.

Houser, S.R., and Silver, L.H.: Determination of membrane permeability to potassium in isolated feline myocytes. *Bulletin Phila. Physiol. Soc.* 3: 12-20, 1985.

Wisnibaugh, T., Cooper, G., Bahinski, A., Houser, S.R., and Spann, J.M.: Rapid reversal of contractile dysfunction but persistent hypertrophy after removal of pressure overload in cat right ventricle. *Am. J. Physiol.*, 1984.

Silver, L.H. and Houser, S.R.: Transmembrane potassium fluxes in isolated feline myocytes. *Am. J. Physiol.* 248: H614-H621, 1985.

Houser, S.R., Bahinski, A., and Silver, L.H.: Passive membrane properties of isolated feline myocytes. *Am. J. Physiol.* 248: H622-H630, 1984.

Silver, L.H. and Houser, S.R.: Decreased sodium-potassium pump activity in isolated hypertrophied feline ventricular myocytes. *Life Sciences* 37(7): 607-615, 1985.

Philips, C.M., Duthinh, V., and Houser, S.R.: A simple technique to measure shortening in isolated feline cardiac myocytes. *IEEE* 33(10): 929-934, 1986.

duBell, W.H. and Houser, S.R.: A comparison of cytosolic free  $Ca^{2+}$  in resting feline and rat ventricular myocytes. *Cell Calcium* 8: 359-368, 1987.

Orchard, C.H., Houser, S.R., Kort, A.A., Bahinski, A., Capagrossi, M.C., and Lakatta, E.G.: Acidosis facilitates spontaneous sarcoplasmic reticulum  $Ca^{2+}$  release in rat myocardium. *J. Gen. Physiol.* 90: 145-165, 1987.

Capagrossi, M.C., Houser, S.R., Bahinski, A., and Lakatta, E.G.: Synchronous occurrence of spontaneous localized calcium release from the sarcoplasmic reticulum generate action potentials in cardiac myocytes at normal resting potential. *Circ. Res.* 61: 498-503, 1987.

Ten Eick, R.E., Houser, S.R., and Bassett, A.L.: Cardiac hypertrophy and altered cellular electrical activity of the myocardium: Possible electrophysiological basis

for myocardial contractility changes. In: Physiology and Pathophysiology of the Heart: Chapter 28, 573-594, 1988.

Duthinh, V. and Houser, S.R.: Contractile properties of isolated feline ventricular myocytes. *Am. J. Physiol.* 23: H59-H66, 1988.

Houser, S.R.: Calcium metabolism and kinetics. In: Biology of Isolated Adult Cardiac Myocytes. Elsevier Scientific Publishers. 322-328, 1988.

Hartmann, H.A., Mazzocca, N.J., and Houser, S.R.: Effects of phenylephrine on calcium currents and contractility of isolated feline ventricular myocytes. *Am. J. Physiol.* 255: H1173-H1180, 1988.

duBell, W.H., Philips, C., and Houser, S.R.: A technique for measuring cytosolic free Ca<sup>2+</sup> with Indo-1 in feline ventricular myocytes. In: Biology of Isolated Adult Cardiac Myocytes. Elsevier Scientific Publishers, 187-201, 1988.

Houser, S.R., Bahinski, A., Kleiman, R.B., duBell, W.H., Duthinh, V., Hartmann, H., and Philips, C.: Electromechanical properties of isolated feline myocytes. In: Biology of Isolated Adult Cardiac Myocytes. Elsevier Scientific Publishers. 414-417, 1988.

Stern, M.D., Silverman, H.S., Houser, S.R., Josephson, R., Capogrossi, M.C., and Lakatta, E.G.: Contractile and electrical failure coincide in hypoxic cardiac myocytes. *PNAS* 85: 6954-6958, 1988.

Kleiman, R.B. and Houser, S.R.: Electrophysiology and mechanical properties of single feline RV and LV myocytes. *JMCC* 20: 973-982, 1988.

Kleiman, R.B. and Houser, S.R.: Calcium currents in normal and hypertrophied isolated feline ventricular myocytes. *Am. J. Physiol.* 255: H1434-1442, 1988.

Kleiman R.B. and Houser, S.R.: Outward currents in normal and hypertrophied feline ventricular myocytes. *Am. J. Physiol.* 256: H1450-H1461, 1989.

duBell, W.H. and Houser, S.R.: Voltage and beat dependence of the Ca<sup>2+</sup> transient in feline ventricular myocytes. *Am. J. Physiol.* 257: H746-H759, 1989.

duBell, W.H. and Houser, S.R.: Ryanodine accelerates rest decay of contractility in feline ventricular myocytes. *Am. J. Physiol.* 258: H395-H402, 1990.



Pollack, P.S., Carson, N.L., Nuss, H.B., Marino, T.A., and Houser, S.R.: Mechanical properties of adult feline ventricular myocytes in culture. *Am. J. Physiol.*: H234-H241, 1991.

Marino, T.A., Cassidy, M., Marino, D.R., Carson, N.L., and Houser, S.R.: Norepinephrine-induced cardiac hypertrophy of the cat heart. *Anat. Rec.* 229: 505-510, 1991.

Nuss, H.B. and Houser, S.R. Voltage dependence of contraction of hypertrophied feline ventriculocytes. *J. Mol. Cell. Cardiol.* 23: 717-726, 1991.

Bailey, B.A. and Houser, S.R.: Calcium transients in feline left ventricular myocytes with hypertrophy induced by slow progressive pressure overload. *J. Mol. Cell. Cardiol.* 24: 365-373, 1991.

Nuss, H.B. and Houser, S.R.: Na/Ca Exchange-mediated contractions in feline ventriculocytes. *Am. J. Physiol* 1992

Bailey, B.A. and Houser, S.R.: Sarcoplasmic reticulum related changes in cytosolic calcium in pressure overload induced left ventricular hypertrophy. *Am. J. Physiol.* 1993.

Pollack, P.S., Bailey, B.A., Budjak, R., Fernandez, E., and Houser, S.R.: Progressive feline pressure-overload: Noninvasive assessment correlates with abnormalities in single cells. *Am. J. Physiol.* 264:H1307-H1314, 1993.

Nuss, H.B. and Houser, S.R.: T-type Ca current is expressed in hypertrophied adult feline left ventricular myocytes. *Circ. Res.* 73:777-782, 1993

Walker, K.E. Lakatta, E. G. and Houser, S.R.: Age-associated changes in membrane currents in rat ventricular myocytes. *Cardiovasc. Res.* 27:1968-77, 1994

Nuss, H.B. and Houser, S.R.: The duration of depolarization is not responsible for prolonging contractions of hypertrophied myocytes. *Cardiovas. Res.* 1994.

Pollack, P.S., Houser, S.R., Budjak, R., and Goldman, B.: C-myc gene expression is localized to the myocyte following hemodynamic overload in vivo. *J. Cellular Biochem.* 54:1-7, 1995

Bailey, B.A., Dipla, K., Li, S. and Houser, S.R. The Cellular Basis of Contractile Derangements of Hypertrophied Feline Ventricular Myocytes. *J. Mol. Cell. Cardiol.* 27: 331-343, 1997

Libonati, J. and Houser, S.R. Exercise training reduces contractile derangement resulting from ischemia-reperfusion. *Ex. Sci. Sp. Med.*, 1997

Libonati JR, Gaughan JP, Hefner CA, Gow A, Paolone AM, Houser SR. Reduced ischemia and reperfusion injury following exercise training. *Med Sci Sports Exerc.* 1997;29:509-16.

Dipla K, Mattiello JA, Jeevanandam V, Houser SR, Margulies KB. Myocyte recovery after mechanical circulatory support in humans with end-stage heart failure. *Circulation.* 1998;97:2316-22.

Gaughan JP, Hefner CA, Houser SR. Electrophysiological properties of neonatal rat ventricular myocytes with alpha1-adrenergic-induced hypertrophy. *Am J Physiol.* 1998;275:H577-90.

Mattiello JA, Margulies KB, Jeevanandam V, Houser SR. Contribution of reverse-mode sodium-calcium exchange to contractions in failing human left ventricular myocytes. *Cardiovasc Res.* 1998;37:424-31.

Zafeiridis A, Jeevanandam V, Houser SR, Margulies KB. Regression of cellular hypertrophy after left ventricular assist device support. *Circulation.* 1998;98:656-62.

Dipla K, Mattiello JA, Margulies KB, Jeevanandam V, Houser SR. The sarcoplasmic reticulum and the Na<sup>+</sup>/Ca<sup>2+</sup> exchanger both contribute to the Ca<sup>2+</sup> transient of failing human ventricular myocytes. *Circ Res.* 1999;84:435-44.

Gaughan JP, Furukawa S, Jeevanandam V, Hefner CA, Kubo H, Margulies KB, McGowan BS, Mattiello JA, Dipla K, Piacentino V, 3rd, Li S, Houser SR. Sodium/calcium exchange contributes to contraction and relaxation in failed human ventricular myocytes. *Am J Physiol.* 1999;277:H714-24.

Houser SR, Lakatta EG. Function of the cardiac myocyte in the conundrum of end-stage, dilated human heart failure. *Circulation.* 1999;99:600-4.

Houser SR, Piacentino V, 3rd, Mattiello J, Weisser J, Gaughan JP. Functional properties of failing human ventricular myocytes. *Trends Cardiovasc Med.* 2000;10:101-7.

Houser SR. When does spontaneous sarcoplasmic reticulum CA(2+) release cause a triggered arrhythmia? Cellular versus tissue requirements. *Circ Res.* 2000;87:725-7.

Houser SR, Piacentino V, 3rd, Weisser J. Abnormalities of calcium cycling in the hypertrophied and failing heart. *J Mol Cell Cardiol.* 2000;32:1595-607.

Piacentino V, 3rd, Dipla K, Gaughan JP, Houser SR. Voltage-dependent Ca<sup>2+</sup> release from the SR of feline ventricular myocytes is explained by Ca<sup>2+</sup>-induced Ca<sup>2+</sup> release. *J Physiol.* 2000;523 Pt 3:533-48.

Yang Y, Chen X, Margulies K, Jeevanandam V, Pollack P, Bailey BA, Houser SR. L-type Ca<sup>2+</sup> channel alpha 1c subunit isoform switching in failing human ventricular myocardium. *J Mol Cell Cardiol.* 2000;32:973-84.

Harding JD, Piacentino V, 3rd, Gaughan JP, Houser SR, Margulies KB. Electrophysiological alterations after mechanical circulatory support in patients with advanced cardiac failure. *Circulation.* 2001;104:1241-7.

Houser SR. Reduced abundance of transverse tubules and L-type calcium channels: another cause of defective contractility in failing ventricular myocytes. *Cardiovasc Res.* 2001;49:253-6.

Kubo H, Margulies KB, Piacentino V, 3rd, Gaughan JP, Houser SR. Patients with end-stage congestive heart failure treated with beta-adrenergic receptor antagonists have improved ventricular myocyte calcium regulatory protein abundance. *Circulation.* 2001;104:1012-8.

Welsh DC, Dipla K, McNulty PH, Mu A, Ojamaa KM, Klein I, Houser SR, Margulies KB. Preserved contractile function despite atrophic remodeling in unloaded rat hearts. *Am J Physiol Heart Circ Physiol.* 2001;281:H1131-6.

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**Authorisation to the personal data treatment according to the Italian D.Lgs. 196/2003 and successive modification**

The undersigned authorizes the personal data treatment according to the above mentioned Italian laws.

Yours faithfully

Signature



**Self – certification according to the articles nr. 46, 47 and 76 of the Italian DPR 445/2000**

The undersigned Steven R. Houser, born in (town) Camden the (date) 29/03/1951, living in (town) Philadelphia, aware of the possible consequences in case of false declaration, according to the content of article 76 of DPR 445/2000, declares that all the information detailed in the attached curriculum vitae are true

Place, 17/11/2016

Yours faithfully

Signature

