CURRICULUM VITAE

NAME: Loren E. Wold

EDUCATION:

1997 B.S. (Biology and Psychology, *cum laude*) Boston University, Boston, MA.

2000 M.S. (Physiology) University of North Dakota, Grand Forks, ND.
Title: Isolated ventricular myocytes from copper-deficient rat hearts exhibit enhanced contractile function.
Advisor: Jun Ren, M.D., Ph.D.

2003 Ph.D. (Physiology) University of North Dakota, Grand Forks, ND.
Title: Oxidative stress and diabetic cardiomyopathy.
Advisor: Jun Ren, M.D., Ph.D.

PROFESSIONAL EXPERIENCE:

1996-1997 Teaching Assistant, Department of Psychology, supervisor: Dr. Richard Ely, Boston University, Boston, MA.

1997-1998 Instructor, Division of Mathematics and Natural Sciences, University of Mary, Bismarck, ND. Taught Anatomy and Physiology lecture and labs to undergraduates.

1998-2003 Graduate Student (Graduate Research Assistant), Department of Pharmacology, Physiology and Therapeutics, University of North Dakota School of Medicine & Health Sciences, Grand Forks, ND. Lecturer in Physiology.

2003-2005 Cardiology Research Fellow, The Heart Institute, Good Samaritan Hospital and Division of Cardiovascular Medicine, University of Southern California, Keck School of Medicine, Los Angeles, CA.

2005-2006 Senior Research Associate in Molecular Cardiology, Department of Pharmacology, University of New England School of Osteopathic Medicine, Biddeford, ME.

2006-pres Principal Investigator, Center for Cardiovascular Medicine, The Research Institute at Nationwide Children's Hospital, Columbus, OH.

2006-pres Assistant Professor, Department of Pediatrics, The Ohio State University College of Medicine, Columbus, OH.

2007-pres Faculty, Integrated Biomedical Graduate Program, The Ohio State University, Columbus, OH

TEACHING EXPERIENCE:

1996-1997 Undergraduate Teaching Assistant, Introductory Psychology, Department of Psychology, Boston University, Boston, MA.

1997-1998 Instructor, Chemistry 101, Chemistry 102, Anatomy & Physiology I and II, Department of Science, University of Mary, Bismarck, ND.

1998 Graduate Teaching Assistant, Human and Medical Physiology, Department of Physiology, University of North Dakota, Grand Forks, ND.

2001-2003 Instructor, Indians Into Medicine Program, University of North Dakota, Grand Forks, ND.

2003-2005	Instructor, Kaplan MCAT Course, Grand Forks, ND and Los Angeles, CA.
2005-2006	Faculty, Medical Biochemistry and Cell Biology, University of New England College of Osteopathic Medicine, Biddeford, ME (1st year medical student course).
2006	Facilitator, Medical Physiology of Organ Systems, University of New England College of Osteopathic Medicine, Biddeford, ME (1st year medical student course).

SERVICE:

2000	Participant, Indians into Medicine DREAM Project, University of North Dakota School of Medicine & Health Sciences
2000 & 2001	New Facilitator Trainer, University of North Dakota School of Medicine & Health Sciences
2000 & 2001	New Graduate Student Mentor, University of North Dakota Graduate School
2001	Member, Search Committee for Dean of the Graduate School, University of North Dakota
2002	Member, Search Committee for Vice President for Research, University of North Dakota (presidential appointment)
2002 & 2003	Member, University of North Dakota Research Council (presidential appointment)
2006	Interviewer, Medical School Admissions, University of New England College of Osteopathic Medicine
2007-present	Associate Editor, *Life Sciences*

AWARDS:

2000	Travel Fellowship Grant, Society for Experimental Biology and Medicine
2000	Best Poster Award, Frank N. Low Research Day, University of North Dakota School of Medicine & Health Sciences
2000 & 2001	A. Rodger Denison Research Award, North Dakota Academy of Sciences
2000 & 2001	Summer Research Award, University of North Dakota Office of Research and Program Development
2001	Travel Fellowship Grant, International Society for Heart Research
2001	Physiology Award, Frank N. Low Research Day, University of North Dakota School of Medicine & Health Sciences
2003	Exemplary Service Award, Good Samaritan Hospital

PROFESSIONAL SOCIETIES:

1999-present	American Heart Association (Basic Cardiovascular Sciences Council)
1999-present	American Physiological Society (Cardiovascular and Endocrinology and Metabolism Sections)
1999-2003	Society for Experimental Biology and Medicine
2000-2003	American Society of Pharmacology and Experimental Therapeutics
2000-2003	American Diabetes Association
2001-2003	The Endocrine Society
2001-2003	North Dakota Academy of Sciences

PROFESSIONAL SOCIETY COUNCILS, COMMITTEES AND OTHER PROFESSIONAL ACTIVITIES:

Session Co-Chairman Protein *O*-Linked *N*-Acetylglucosamine: Nutrient sensor and modulator of cardiovascular function. Experimental Biology. Washington, DC. April 29th, 2007.

MAJOR RESEARCH INTERESTS:

The overall goal of my laboratory is to understand the cardiovascular complications associated with diabetes, obesity, hypertension and alcohol intake. We have also began to investigate the role of cardiac-resident progenitor cells in settings of cardiac stress, such as myocardial infarction. We have several major areas of interest:

1) Investigating the functional and intracellular signaling mechanisms of diabetes-, obesity-, and hypertensive cardiomyopathy at the whole heart and isolated myocyte level.
2) Investigating the electrophysiological changes of myocytes under clinical states of diabetes, obesity and hypertension.
2) Investigating the modulatory role of inflammation on calcium signaling in the heart, particularly in disease states.
3) Development of interventions (both conventional and non-conventional) to prevent the progression of heart failure.
4) Understanding the pathogenesis of heart disease in the young.
5) Understanding the role of cardiac-resident progenitor cells in heart function, particularly under cardiac stress.

A common theme to all these projects is the role of inflammation. We propose that this is a central mechanism by which changes in metabolism are transduced into alterations in cellular function.

ACTIVE SUPPORT:

Presence of cardiac-resident stem cells in pediatric heart tissue
Principal Investigator: Loren E. Wold, Ph.D.
Support Mechanism: University of New England College of Osteopathic Medicine Dean's Fellowship
Role: 10% time for PI
Direct costs: $5,000
Action: Funded

Internal Start-Up
Principal Investigator: Loren E. Wold, Ph.D.
Support Mechanism: The Research Institute at Nationwide Children's Hospital
Direct costs: $150,000

PENDING SUPPORT:

Ultrafine particle-induced heart dysfunction
Principal Investigator: Loren E. Wold, Ph.D. (25% effort)
Support Mechanism: American Heart Association National Scientific Development Award
Role: 20% time for PI
Total costs: $308,000

Action: Pending

Cardiac-resident progenitor cells in hypoplastic left heart syndrome
Principal Investigator: Loren E. Wold, Ph.D. and Alistair Phillips, M.D. (Multiple PI; 30% effort)
Support Mechanism: NIH R21
Total costs: $396,000
Action: Pending

RNAi therapy for ultrafine particle-induced heart dysfunction
Principal Investigator: Loren E. Wold, Ph.D. and Scott Q. Harper, Ph.D. (Multiple PI; 25% effort)
Support Mechanism: NIH R21
Total costs: $396,000
Action: Pending

Air pollution particles, ER stress and cardiac health
Principal Investigator: Jun Ren, MD, PhD (Role: Co-PI; 10% effort)
Support Mechanism: NIH R21
Total costs: $50,400
Action: Pending

Cytoskeletal alterations in a porcine model of restrictive ventricular septal defect
Principal Investigator: Mark Gerhardt, M.D., Ph.D. (Role: Co-PI; 10% effort)
Support Mechanism: Children's Cardiomyopathy Foundation
Total costs: $2,800
Action: Pending

Cytoskeletal alterations in congenital heart disease
Principal Investigator: Mark Gerhardt, M.D., Ph.D. (Role: Co-PI; 10% effort)
Support Mechanism: NIH R21
Total costs: $72,000
Action: Pending

LVAD implantation: surgical therapy for reverse cytoskeletal remodeling
Principal Investigator: Mark Gerhardt, M.D., Ph.D. (Role: Multiple PI; 10% effort)
Support Mechanism: NIH R01
Total costs: $771,143
Action: Pending

PUBLICATIONS:

1. Ren J., **Wold L.E.** and P.N. Epstein. (2000) Diabetes enhances acetaldehyde-induced depression of cardiac myocyte contraction. *Biochem Biophys Res Commun*. **269(3)**:697-703.
2. Nickola M.W.*, **Wold L.E.***, Colligan P.B., Wang G.J., Samson W.K. and J. Ren. (2000) Leptin attenuates cardiac contraction in rat ventricular myocytes: Role of NO. *Hypertension*. **36(4)**:501-505. *** = equal first authorship.**
3. **Wold L.E.**, Saari J.T. and J. Ren. (2001) Isolated ventricular myocytes from copper-deficient rat hearts exhibit enhanced contractile function. *Am J Physiol Heart Circ Physiol*. **281(2)**:H476-H481.

4. Hintz K.K., **Wold L.E**., Colligan P.B., Scott G.I., Lee K.J., Sowers J.R. and J. Ren. (2001) Influence of ovariectomy on ventricular myocyte contraction in simulated diabetes. *J Biomed Sci.* **8(4)**:307-313.
5. **Wold L.E.**, Relling D.P., Colligan P.B., Scott G.I., Hintz K.K., Ren B.H., Epstein P.N. and J. Ren. (2001) Characterization of contractile function in diabetic hypertensive cardiomyopathy in adult rat ventricular myocytes. *J Mol Cell Cardiol.* **33(9)**:1719-1726.
6. **Wold L.E**., Norby F.L., Hintz K.K., Colligan P.B., Epstein P.N. and J. Ren. (2001) Prenatal ethanol exposure alters ventricular myocyte contractile function in the offspring of rats: Influence of maternal Mg^{2+} supplementation. *Cardiovasc Toxicol*. **1(3)**:215-224.
7. **Wold L.E.**, Relling D.P., Duan J., Norby F.L. and J. Ren. (2002) Abrogated leptin-induced cardiac contractile response in ventricular myocytes under spontaneous hypertension: Role of Jak/STAT pathway. *Hypertension.* **39(1)**:69-74.
8. Ren J., **Wold L.E.**, Natavio M, Ren B.H., Hannigan J.H. and R.A. Brown. (2002) Influence of prenatal alcohol exposure on myocardial contractile function in adult rat hearts: Role of intracellular calcium and apoptosis. *Alcohol Alcohol*. **37(1)**:30-37.
9. Norby F.L., **Wold L.E**., Duan J., Hintz K.K. and J. Ren. (2002) IGF-1 attenuates diabetes-induced cardiac contractile dysfunction in ventricular myocytes. *Am J Physiol Endocrinol Metab.* **283(4)**:E658-E666.
10. Ren J., Roughead Z.K., **Wold L.E.,** Norby F.L., Rakoczy S., Mabey R.L. and H.M. Brown-Borg. (2003) Increases in insulin-like growth factor-1 level and peroxidative damage after gestational ethanol exposure in rats. *Pharmacol Res*. **47(4)**:341-347.
11. Privratsky J.R.*, **Wold L.E.***, Sowers J.R., Quinn M.T. and J. Ren. (2003) AT_1 blockade prevents glucose-induced cardiac dysfunction in ventricular myocytes: Role of the AT_1 receptor and NADPH oxidase. *Hypertension*. **42(2)**:206-212. * = **equal contribution**.
12. **Wold L.E.**, Muralikrishnan D., Albano C.B., Norby F.L., Ebadi M. and J. Ren. (2003) Insulin-like growth factor I (IGF-1) supplementation prevents diabetes-induced alterations in coenzymes Q-9 and Q-10. *Acta Diabetol*. **40(2)**:85-90.
13. Klein A.L., **Wold L.E.** and J. Ren. (2004) The cyclooxygenase-2 product prostaglandin E2 modulates cardiac contractile function in adult rat ventricular cardiomyocytes. *Pharmacol Res.* **49(2)**:99-103.
14. Ren J., Porter J.E., **Wold L.E.**, Aberle II N.S., Muralikrishnan D. and J.R. Haselton. (2004) Depressed contractile function and adrenergic responsiveness of cardiac myocytes in an experimental model of Parkinson disease, the MPTP-treated mouse. *Neurobiol Aging*. **25(1)**:131-138.
15. Davidoff A.J., Mason M.M., Davidson M.B., Carmody M.W., Hintz K.K., **Wold L.E.**, Podolin D.A. and J. Ren. (2004) Sucrose-induced cardiomyocyte dysfunction is both preventable and reversible with clinically relevant treatments. *Am J Physiol Endocrinol Metab.* **286(5)**:E718-E724.
16. **Wold L.E.** and J. Ren. (2004) Streptozotocin directly impairs cardiac contractile function in isolated ventricular myocytes via a p38 map kinase-dependent oxidative stress mechanism. *Biochem Biophys Res Commun.* **318(4)**:1066-1071.
17. **Wold L.E.**, Dai W., Sesti C., Hale S.L., Dow J.S., Martin B.J. and R.A. Kloner. (2004) Stem cell therapy for the heart. *Congest Heart Fail*. **10(6)**:293-301.
18. Dong F., Zhang X., **Wold L.E.**, Ren Q., Zhang Z. and J. Ren. (2005) Endothelin-1 enhances oxidative stress, cell proliferation and reduces apoptosis in human umbilical vein endothelial cells: Role of ET_B receptor, NADPH oxidase and caveolin-1. *Br J Pharmacol*. **145(3)**:323-333.
19. **Wold L.E.**, Aberle N.A. II and J. Ren. (2005) Doxorubicin induces cardiomyocyte dysfunction via an oxidative stress mechanism. *Cancer Detect Prev.* **29(3)**:294-299.

20. Dai W., Hale S.L., Martin B.J., Kuang J-Q, Dow J.S., **Wold L.E.** and R.A. Kloner. (2005) Allogeneic mesenchymal stem cell transplantation in postinfarcted rat myocardium: short- and long-term effects. *Circulation*. **112(2)**:214-223.
21. **Wold L.E.**, Dutta K., Mason M.M., Ren J., Cala S.E., Schwanke M.L. and A.J. Davidoff. (2005) Impaired SERCA function contributes to cardiomyocyte dysfunction in insulin resistant rats. *J Mol Cell Cardiol*. **39(2)**:297-307.
22. **Wold L.E.**, Ceylan-Isik A.F. and J. Ren. (2005) Oxidative stress and stress signalling: menace of diabetic cardiomyopathy. *Acta Pharmacol Sin*. **26(8)**:908-917.
23. Dai W., **Wold L.E.**, Dow J.S. and R.A. Kloner. (2005) Thickening of the infarcted wall by collagen injection improves left ventricular function in rats: a novel approach to preserve cardiac function after myocardial infarction. *J Am Coll Cardiol*. **46(4)**:714-719.
24. Nordlie M.A., **Wold L.E.** and R.A. Kloner. (2005) Genetic contributors toward increased risk for ischemic heart disease. *J Mol Cell Cardiol*. **39(4)**:667-679.
25. Nordlie, M.A., **Wold L.E.**, Simkhovich B.Z., Sesti C. and R.A. Kloner. (2006) Molecular aspects of ischemic heart disease: Ischemia/reperfusion-induced genetic changes and potential applications of gene and RNAi therapy. *J Cardiovasc Pharmacol Therapeut.* **11(1)**:17-30.
26. **Wold L.E.**, Ceylan-Isik A.F., Fang C.X., Yang X., Li SY, Sreejayan N., Privratsky J.R. and J. Ren. (2006) Metallothionein alleviates cardiac dysfunction in streptozotocin-induced diabetes: Role of Ca(2+) cycling proteins, NADPH oxidase, Poly(ADP-Ribose) polymerase and myosin heavy chain isozyme. *Free Radic Biol Med*. **40(8)**:1419-1429.
27. **Wold L.E.**, Simkhovich B.Z., Kleinman M.T., Nordlie M.A., Dow J.S., Sioutas C., Kloner R.A. (2006) *In vivo* and *in vitro* models to test the hypothesis of particle-induced effects on cardiac function and arrhythmias. *Cardiovasc Toxicol*. **6(1)**:69-78.
28. Saari J.T., **Wold L.E.**, Duan J., Ren J., Carlson H.L., Bode A.M., Lentsch A.B., Zeng H., Schuschke D.A. (2007) Cardiac nitric oxide synthases are elevated in dietary copper deficiency. *J Nutr Biochem.* **18(7)**:443-448.
29. Barcelo-Coblijn G., **Wold L.E.**, Ren J., Murphy E.J. (2007) Prenatal ethanol exposure alters brain cholesterol content in adult rats. *Lipids*. **xx**:xx-xx.
30. Mihm M.J., Cook A.C., Schanbacher B.L., **Wold L.E.**, Joshi M., Bauer J.A. Alterations in cardiac connexion 43 during diabetic cardiomyopathy: role of mediators of oxidative stress. *Cardiovasc Res*. Submitted.
31. Han B., Huang H., Joshi M.S., **Wold L.E.**, Bauer J.A. Electrocardiographic and contractile effects of cardiac glutathione depletion: relation to cardiac reactive nitrogen species and NOS2 induction. *J Mol Cell Cardiol*. Submitted.
32. Giannone P.J., Luce W.A., Nankervis C.A., Hoffman T.M., **Wold L.E**. Necrotizing enterocolitis in neonates with congenital heart disease. *Life Sciences*. Accepted.
33. Dhanasekaran M., Karuppagounder S.S., Uthayathas S., **Wold L.E.**, Babu R.J., Suppiramaniam V., Patel M., Brown-Borg H.M. Effect of dopaminergic neurotoxin MPTP/MPP^+ on coenzyme Q content. *Life Sciences*. Submitted.

BOOK CHAPTERS AND MANUALS:

1. Ren J. and **L.E. Wold.** (2001) Measurement of cardiac mechanical function in isolated ventricular myocytes from rats and mice by computerized video-based imaging. *Biol Proced Online.* **3(1)**: 43-53.
2. **Wold L.E.** and J. Ren. (2007) Mechanical measurement of contractile function of the isolated ventricular myocyte. *Vascular Biology Protocols*. In: Methods in Molecular Medicine. Sreejayan N. and Ren J., eds. Humana Press. Totawa, New Jersey. pp. 263-270.

3. **Wold L.E.**, Dai W., Dow J.S. and R.A. Kloner. (2007) Stem cell therapy in the heart and vasculature. *Vascular Biology Protocols*. In: Methods in Molecular Medicine. Sreejayan N. and Ren J., eds. Humana Press, Totowa, New Jersey. pp. 355-370.

ABSTRACTS:

1. Ren J., **Wold L.E**. and A.M. Bode. "Altered cardiac E-C coupling in ventricular myocytes from spontaneously diabetic BB hearts." International Conference on Diabetes and Cardiovascular Disease. Winnipeg, Manitoba, June 3-6, 1998.
2. **Wold L.E.**, Saari J. and J. Ren. "Isolated ventricular myocytes from copper-deficient rat hearts exhibit enhanced cardiac contractile function." ND/SD EPSCoR conference. Fargo, ND, September 10, 1999.
3. **Wold L.E.**, Saari J. and J. Ren. "Isolated ventricular myocytes from copper-deficient rat hearts exhibit enhanced cardiac contractile function." *FASEB J*. **14**:A157, 2000.
4. Nickola M.W., **Wold L.E.**, Colligan P.B. and J. Ren. Leptin attenuates cardiac contraction in adult rat ventricular myocytes: Role of nitric oxide. *MBRS Annual Meeting***,** Phoenix, AZ, November, 1999.
5. **Wold L.E.**, Colligan P.B., Samson W.K. and J. Ren. "Leptin attenuates cardiac contraction in rat ventricular myocytes: role of nitric oxide." 20th Annual Frank N. Low Research Day. UNDSoMHS, April 7, 2000. *** = equal first authorship**.
6. Hintz K.K., **Wold L.E**., Scott G.I., Lee K. and J. Ren. "The effect of ovariectomy on high [glucose]-cultured rat ventricular myocytes: role of nitric oxide. 20th Annual Frank N. Low Research Day, UNDSoMHS, April 7, 2000.
7. **Wold L.E.**, Colligan P.B. and J. Ren. "Leptin attenuates cardiac contraction in rat ventricular myocytes: role of nitric oxide." ND/SD/MN Academy of Sciences Tri-State Meeting. Moorhead State University, April 28-29, 2000.
8. Ren J, Nickola M.W., **Wold L.E.** and P.B. Colligan. "Leptin attenuates cardiac contraction in adult rat ventricular myocytes: Role of nitric oxide". *J Submicrosc Cytol Pathol*, **32**: 454, 2000.
9. Hintz K.K., **Wold L.E**., Dutta K., Podolin D.A. and A.J. Davidoff. "Isolated myocytes from sucrose-fed rats exhibit depressed SR Ca^{2+} uptake with normal Na^{+}/Ca^{2+} exchange." *FASEB J.* **15**:A490, 2001.
10. Norby F.L., **Wold L.E**. and J. Ren. "Influence of IGF-1 supplementation on cardiac excitation-contraction coupling in diabetes." ND Academy of Sciences Meeting. Bismarck, ND, April 26-27, 2001.
11. **Wold L.E**., Relling D.P. and J. Ren. "Characterization of excitation-contraction coupling in diabetic hypertensive cardiomyopathy in adult rat ventricular myocytes." ND Academy of Sciences Meeting. Bismarck, ND, April 26-27, 2001.
12. Relling D.P., **Wold, L.E.** and J. Ren. "Altered leptin-induced cardiac contractile response in ventricular myocytes under hypertension." ND Academy of Sciences Meeting. Bismarck, ND, April 26-27, 2001.
13. Norby F.L., **Wold L.E**. and J. Ren. "Influence of IGF-1 supplementation on cardiac excitation-contraction coupling in diabetes." *JMCC* **33**:A85, 2001.
14. Dutta K., **Wold L.E**., Hintz K.K., Carmody M.W., Davidson M.B., Possee R., Podolin D.A. and A.J. Davidoff. "Insulin resistance-induced cardiomyopathy is preventable and reversible." *JMCC* **33**:A30, 2001.
15. **Wold L.E.** and J. Ren. "Prenatal ethanol exposure alters cardiac myocyte contractile function in the offspring: Influence of maternal Mg^{2+} supplementation." *JMCC* **33**:A131, 2001.
16. **Wold L.E.** and J. Ren. "Streptozotocin directly depresses cardiac contractile function in ventricular myocytes: Role of oxidative stress and intracellular Ca^{2+}." *Diabetes* **51**:A487, 2002.

17. Privratsky J.R., **Wold L.E.** and J. Ren. "AT_1 receptor blockade by L-158,809 prevents the development of high [glucose]-induced diabetic cardiomyopathy: role of NADPH oxidase." *JMCC* **34**:A12, 2002.
18. Saari J.T., Duan J., **Wold L.E.**, Lentsch A.B., Schuschke D.A., Ren J. Enhanced endothelial and inducible nitric oxide synthase (NOS) protein expression is associated with elevated NOS activity and NF-κB activation in hearts from copper-deficient rats. *FASEB J.* 2003.
19. Sesti C., Hale S.L., Dai W., **Wold L.E**., Dow J.S., Simkhovich B.Z., Kloner R.A. Stem cells for repair of infarcted myocardium? NIH Stem Cell RFA Grantees Meeting, Bethesda, MD, April 26-28, 2004.
20. **Wold L.E.**, Dow J.S., Kleinman M.T., Sioutas C., Kloner R.A. Ultra-fine particles from ambient air and diesel fuel induce arrhythmias when administered directly to the vasculature. *Environmental Cardiology*. Louisville, KY, October 16-17, 2004.
21. Dai W., Hale S.L., Martin B.J., Kuang J-Q, **Wold L.E.**, Simkhovich B.Z., Kloner R.A. Long-term survival, differentiation, and "homing" of allogeneic mesenchymal stem cells in myocardial infarction in rats. *Stem Cells: Research & Therapeutics.* San Diego, CA, April 11-12, 2005.
22. **Wold L.E.**, Simkhovich B.Z., Kleinman M.T., Nordlie M.A., Dow J.S., Sioutas C. and R.A. Kloner. Ultra-fine particles isolated from ambient air and diesel fuel have direct cardiovascular mechanisms independent of pulmonary inflammation. 2005 Young Investigators Forum, American Heart Association Western Affiliate, University of California, Irvine. September 30, 2005, P62.
23. Dai W., **Wold L.E.**, Hale S.L., Dow J.S. and R.A. Kloner. Mesenchymal stem cells remain in the infracted heart but do not promote long-term functional improvement of the left ventricle. 2005 Young Investigators Forum, American Heart Association Western Affiliate, University of California, Irvine. September 30, 2005, P76.
24. **Wold L.E.**, Simkhovich B.Z., Nordlie M.A., Kleinman M.T., Sioutas C. and R.A. Kloner. Direct and acute cardiotoxicity of ultrafine air pollutants. 2006 Meeting of the American College of Cardiology. Atlanta, Georgia. March 11-14, 2006. *J Am Coll Cardiol*. **47(4)**:84A.
25. Dai W., **Wold L.E.**, Hale S.L. and R.A. Kloner. Mesenchymal stem cells improve cardiac function in a rat model of myocardial infarction through a mechanism independent of increasing muscle mass or limiting myocardial infarct size. 2006 Meeting of the American College of Cardiology. Atlanta, Georgia. March 11-14, 2006. *J Am Coll Cardiol*. **47(4)**:191A.
26. Dai W., **Wold L.E.**, Dow J.S. and R.A. Kloner. Collagen implantation as an internal support to prevent eccentric hypertrophy and preserve cardiac function after myocardial infarction in rats. 2006 Meeting of the American College of Cardiology. Atlanta, Georgia. March 11-14, 2006. *J Am Coll Cardiol*. **47(4)**:191A.
27. Simkhovich B.Z., Kleinman M.T., **Wold L.E.** and R.A. Kloner. Direct and acute cardiotoxicity of ultrafine air pollutants in langendorff-perfused young and old rat hearts. NIH/EPA Meeting. October, 2006.
28. **Wold L.E.**, Palmer C.D., Magner A., Jackson L.M. and A.J. Davidoff. Protein kinase C and angiotensin II inhibition prevent fatty acid-induced cardiomyocyte dysfunction. 2007 Experimental Biology Meeting. April 28-May 2, 2007. Washington, DC. *FASEB J*. **21(6)**:A828.
29. Davidoff A.J., Carmody M.W., Dube N., Palmer C.D. and **L.E. Wold**. Increased glucose or fatty acid flux through the hexosamine biosynthesis pathway produces cardiomyocyte insulin resistance and abnormal excitation-contraction coupling. 2007 Experimental Biology Meeting. Washington, DC. *FASEB J*. **21(6)**:A1398.
30. Thompson K.H., Manyan D.R. and **L.E. Wold**. Observations of learning and retention using team-based learning in a first year medical biochemistry course. 2007 International Association of Medical Science Educators Meeting. Cleveland, OH. July 21-24, 2007. Poster finalist nominee.

31. **Wold L.E.**, Palmer C.D., Shukitt-Hale B., Joseph J.A. and A.J. Davidoff. Blueberries partially reverse diabetic cardiomyocyte dysfunction *in vitro*. 2007 American Heart Association Meeting. Orlando, FL. *Circulation*. Submitted.

JOURNAL REVIEWS (since 2003):

Nature Biotechnology	2
Circulation	13
Cardiovascular Research	3
Diabetes	2
Journal of the American College of Cardiology	4
Journal of Molecular and Cellular Cardiology	3
Aging Cell	2
American Journal of Physiology: Heart and Circulatory Physiology	2
Life Sciences	6
Obesity Research	1
Atherosclerosis	2

INVITED LECTURES:

"*Basic Renal Physiology*", University of North Dakota, Grand Forks, ND, July 1999.
"*Basic Cardiac Electrophysiology and EKG interpretation*", University of Mary, Bismarck, ND, November 1999.
"*Cardiac Electrophysiology and EKG Interpretation*", University of North Dakota, Grand Forks, ND, February 2000. Presented to the first year graduate students in Medical Physiology (PHY523).
"*Leptin and Cardiovascular Disease*", University of Mary, Bismarck, ND, February 2001.
"*Basic Acid-Base Balance and Gastrointestinal Physiology*", University of North Dakota, Grand Forks, ND, March 2001.
"*Diabetes and Cardiovascular Disease: Experimental Prevention and Treatment*", University of Mary, Bismarck, ND and University of North Dakota, Grand Forks, ND, October 2001.
"Membrane Osmolality and the Membrane Potential", University of North Dakota, Grand Forks, ND, January, 2002.
"Leptin, Hypertension and Heart Failure", University of Mary, Bismarck, ND, March, 2002.
"Cardiovascular Physiology", University of North Dakota, Grand Forks, ND, October, 2002.
"Biochemistry of Metabolism", University of North Dakota, Grand Forks, ND, January 2003.
"Acid-Base Balance and Fluid Regulation", University of North Dakota, Grand Forks, ND, April, 2003.
"Heart Dysfunction in Diabetes", University of Mary, Bismarck, ND, September, 2003.
"Diabetes-Related Heart Dysfunction", University of Mary, Bismarck, ND, February, 2006.
"Stem Cells Therapy in the Heart", University of Wyoming, Laramie, WY, October, 2007.
"Environmental Particles and Cardiovascular Health", University of Wyoming, WY, October, 2007.