

BIOGRAPHICAL SKETCH

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NAME Judith G. Regensteiner	POSITION TITLE Professor of Medicine		
eRA COMMONS USER NAME (credential, e.g., agency login) REGENSTJ			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Colorado, Boulder, CO	BA	1976	Anthropology
University of Colorado, Boulder, CO	MA	1978	Anthropology
University of Colorado, Boulder, CO	PhD	1984	Physiological
University of Colorado Health Sciences Center, Denver, CO	Post-Doc	1986	Cardiovascular and Applied Physiology

A. Positions and Honors

Positions and Employment

1986-1988 Instructor of Medicine, University of Colorado Health Sciences Center (UCHSC), Denver
 1988-1995 Assistant Professor of Medicine, Internal Medicine and Cardiology, UCHSC
 1995-2002 Associate Professor of Medicine, Internal Medicine and Cardiology, UCHSC
 2002-Present Professor of Medicine, Internal Medicine and Cardiology, UCHSC
 1988-Present Program Director, Cardiovascular Rehabilitation Laboratory, UCHSC
 1997-Present Director, Clinical Treadmill Laboratory, UCHSC
 2004-Present Director, Center for Women's Health Research

Honors

1994 Department of Medicine, Ph.D. Teaching and Research Award for 1994
 1997 Henry Christian Award, The American Federation of Medical Research
 1998 Diabetes, Vascular Disease and Exercise: State of the Art Lecture. Western Federation for Medical Research. Carmel, California
 2003 Visiting Professor in Women's Health, Drexel University
 1999 Department of Medicine, Ph.D. Teaching and Research Award for 2000
 2000-2001 Organizing Chair for the United States, Second Trans-Atlantic Conference on Clinical Trial Guidelines in peripheral arterial disease. Basel, Switzerland
 2003 Elizabeth Gee Memorial Lectureship for Outstanding Scholarship in Women's Health, University-wide award
 2005 Organizing Chair for the United States, Fourth Trans-Atlantic Conference on Clinical Trial Guidelines in peripheral arterial disease. Glasgow, United Kingdom
 2006 Institute of Medicine: Workshop on the adequacy of evidence for physical activity guidelines development. Invited Presenter on diabetes and other metabolic disorders (October, Washington, DC)
 2007-2008 Department of Health and Human Services: Appointment to Physical Activity Guidelines for Americans Committee. This Committee was charged with writing evidence for the first national guidelines for physical activity in the US which was issued in 2008.
 2009 Appointed to writing committee for guidelines on exercise for persons with diabetes for the American Diabetes Association/American College of Sports Medicine

B. Selected peer-reviewed publications (from 82)

Regensteiner JG, Pickett CK, McCullough RE, Weil JV, Moore LG. Possible gender differences in the effects of exercise on hypoxic ventilatory response. *Respiration* 1988; 53:158-165.

- Regensteiner JG**, Woodard WD, Hagerman DD, Weil JV, Pickett CK, Bender PR, Moore LG. Effects of estrogen, progesterin and mild exercise on ventilatory drives in women. *J Appl Physiol* 1989; 66(2): 808-813.
- Hiatt WR, **Regensteiner JG**, Hargarten ME, Wolfel EE, Brass EP. Benefit of exercise conditioning for patients with peripheral arterial disease. *Circulation* 1990; 81:602-609.
- Regensteiner JG**, McCullough RE, McCullough RG, Pickett CK, Moore LG. Combined effects of female hormones and exercise on hypoxic ventilatory response. *Respir Physiol* 1990; 82:107-114.
- Regensteiner JG**, Sippel J, McFarling ET, Wolfel EE, Hiatt WR. Effects of non-insulin dependent diabetes on maximal exercise performance. *Med Sci Sport Exerc* 1995; 27:875-881.
- Hiatt WR, Hirsch A, **Regensteiner JG**, Brass EP. Assessment of patients with peripheral arterial disease: Review of Approaches and Development of Recommendations for Therapeutic Trials. *Circulation* 1995; 92:614-621.
- Regensteiner JG**, Hiatt WR. Benefits of exercise rehabilitation for patients with peripheral arterial disease. *Exercise and Sport Sciences Reviews*. 1995; 23:1-24.
- Lindenfeld J, Clarke SH, Reusch JEB, Manco-Johnson MJ, Lefkowitz JB, **Regensteiner JG**. Fibrinolysis is diminished non-insulin-dependent women. *Circulation*, 1995; 92:549.
- Hiatt WR, **Regensteiner JG**. Peripheral arterial and venous disease. *Geriatric Medicine* Blackwell Scientific, Cambridge, 1996; 502-513.
- Regensteiner JG**, Steiner JF, Hiatt WR. Exercise training improves functional status in patients with peripheral arterial disease. *J Vasc Surg* 1996;23; 104-115.
- Estacio R, Wolfel EE, **Regensteiner JG**, Havrenek EP, Nagel NJ, Jeffers B, Savage S, Reusch JJ, Schrier RW. Affect of Risk Factors on exercise capacity in non insulin-dependent diabetes mellitus (NIDDM): Role of hypertension, obesity, age, race and ethnicity. *Diabetes* 1996; 45:79-85.
- Hiatt WR, **Regensteiner JG**, Carry M, Wolfel EE, Brass EP. Effect of exercise training on skeletal muscle histology and metabolism in peripheral arterial disease. *Journal of Applied Physiology* 1996; 81:780-788.
- Regensteiner JG**, Bauer TA, Reusch JEB, Brandenburg SL, Sippel JT, Vogelsong AM, Smith S, Wolfel, EE, Eckel RH, Hiatt WR. Abnormal oxygen uptake kinetic responses in women with type II diabetes mellitus. *J. Appl. Physiol.* 1998; 85(1): 310-317.
- Scherer S, Bainbridge S, Hiatt WR, **Regensteiner JG**. Temporal gait characteristics of patients with claudication. *Archives of Physical Medicine and Rehabilitation* 1998; 79:529-531.
- Bauer TA, **Regensteiner JG**, Brass EP, Hiatt WR. Oxygen uptake kinetics during exercise are slowed in patients with peripheral arterial disease. *Journal of Applied Physiology* 1999; 87:809-816.
- Brandenburg SL, Bauer TA, Reusch JEB, Hiatt WR, **Regensteiner JG**. Effects of exercise training on oxygen uptake kinetic responses in women with type 2 diabetes. *Diabetes Care* 1999; 221:640-6.
- AT Hirsch, MH Criqui, D Treat-Jacobson, **JG Regensteiner**, J Olin, S Krook, A Comerota, E Walsh, MM. McDermott, MA Creager, WR Hiatt. The PARTNERS Program: A National Survey of Peripheral Arterial Disease Prevalence, Awareness, and Ischemic Risk. *JAMA* 2001; 286:1317-1324.
- Brandenburg SL, Felder K, Lindenfeld J, Reusch JEB, **Regensteiner JG**. Impaired fibrinolysis in premenopausal women with type 2 diabetes mellitus. *J Investigative Medicine* (2002; 50:110-5).
- Regensteiner JG**, Zhang P, Ware JE, McCarthy WJ, Heckman J, Forbes WP, Hiatt WR. Effect of Cilostazol on Community-Based Walking Ability and Health-Related Quality of Life in Patients with Peripheral Arterial Disease: Results of Six Randomized Controlled Trials. *Journal of the American Geriatric Society* 2002; 50:1939-1946.
- Stewart KS, Hiatt WR, **Regensteiner JG**, Hirsch AT. Exercise Training for Peripheral Arterial Disease: Potential Mechanisms for Improving Functional Capacity and Claudication Symptoms. *New Engl J Med* 2002; 347:1941-1951.
- Regensteiner JG**, Popylisen S, Bauer TA, Lindenfeld J, Gill E, Smith S, Ratchford A, Pickett C, Reusch JEB, and Weil JV. Administration of L-arginine or antioxidant vitamins increases endothelial dilator function in women with type 2 diabetes mellitus. *Vasc Med* 2003; 8:169-175.
- Brandenburg SL, Lindenfeld J, Reusch JEB, **Regensteiner JG**, Women, Diabetes and the Heart. *Medical Clinics of North America* 2003;87:955-969.
- Reusch JEB, **Regensteiner JG**, and Watson PA. . Novel vascular actions of thiazolidinediones on vascular function and exercise capacity: Review Article on thiazolidinediones' Novel Vascular Effect. *Am J Medicine* 2003; 115 Suppl 8A: 69S-74S.

- Falcone RA, Hirsch AT, **Regensteiner JG**, Treat-Jacobson D, Williams MA, Hiatt WR, Stewart KJ. Peripheral arterial disease rehabilitation: A Review. *Journal of Cardiopulmonary Rehabilitation*. 2003; 23:170-175.
- American Diabetes Association: Position Statement: Sheehan P, Edmonds M, Januzzi JI, **Regensteiner J**, Sykes M. Peripheral arterial disease in people with diabetes. *Diabetes Care* 2003; 26:3333-3341.
- Regensteiner JG**. Type 2 diabetes mellitus and cardiovascular exercise performance. *Reviews in Endocrine and Metabolic Disorders* 2004;5: 269-276.
- Mayer-Davis EJ, Sparks KC, Hirst K, Costacou T, Lovejoy J, **Regensteiner JG**, Hoskins M, Kriska A, Bray G and the Diabetes Prevention Program Research Group. Dietary intake in the Diabetes Prevention Program cohort: Baseline and 1 year post-randomization. *Annals of Epidemiology* 2004;14: 763-772.
- Wing R, Hamman R, Bray G, Delahanty L, Edelstein, E, Hill J, Horton E, Hoskin M, Kriska A, Lachin J, Mayer-Davis E., Pi-Sunyer X, **Regensteiner JG**, Venditti B, Wylie-Rosett J. Diabetes Prevention Program Research Group. Achieving weight and activity goals among diabetes prevention program lifestyle participants. *Obesity Res*. 2004;12: 1426-1434.
- Regensteiner JG**, Bauer TA, Reusch JEB. Rosiglitazone improves exercise capacity in individuals with in type 2 diabetes. *Diabetes Care*, 2005 Dec;28(12):2877-83.
- Huebschmann AG, **Regensteiner JG**, Vlassara A, Reusch JEB. Diabetes Mellitus and Advanced Glycooxidation End Products. *Diabetes Care* 2006;29:1420-1431.
- Kriska A, Edelstein SL, Hamman RF, Otto A, Bray GA, Mayer Davis EJ, Wing R, Horton ES, Haffner S, **Regensteiner JG**. *Medicine and Science in Sport and Exercise* 2006;38:826-832.
- Hamman R, Wing R, Edelstein S, Lachin J, Bray G, Delahanty L, Hoskin M, Kriska A, Mayer Davis E, Pi-Sunyer, **Regensteiner JG**, Venditti B. Effect of weight loss with lifestyle intervention on risk of diabetes in the Diabetes Prevention Program (DPP). *Diabetes Care* 2006;29:2102-7
- Hill, JO., Stult J, Wyatt HR, **Regensteiner JG** Physical activity in prevention and management of obesity and type-2 diabetes. *Nestle Nutr Workshop Ser Clin Perform Programme*. 2006;11:183-96.
- Regensteiner JG**, Stewart KJ. New and evolving drug therapies for claudication in peripheral vascular disease. *Nature Clinical Practice: Cardiovascular Medicine Nat Clin Pract Cardiovasc Med*. 2006; 3:604-10
- Scherer SA, Hiatt WR, **Regensteiner JG**. Gait Parameters do not Explain the Limitations in Physical Function in Peripheral Arterial Disease. *J Vasc Surg* 2006;44:782-8.
- Haugen S, Casserly IP, **Regensteiner JG**, Hiatt WR. Risk Assessment in the Patient with Established Peripheral Arterial Disease. *Vasc Med*. 2007;12:343-50
- Robert G Mitchell, Brian D Duscha, Anne M Pippen, **Judith G Regensteiner**, William R Hiatt, Jennifer L Robbins, Erin Wochos, Daniel R Bensimhon, William E Kraus, Brian H Annex. Increased Levels of Apoptosis in Peripheral Skeletal Muscle in patients with peripheral arterial disease. *Vasc Med*. 2007;2:285-90
- [McCullum M, Ellis SL, Regensteiner JG, Zhang W, Sullivan PW](#). Minor depression and health status among US adults with diabetes mellitus. *Am J Manag Care*. 2007;13:65-72.
- Bauer TA, Reusch JEB, Levi M, **Regensteiner JG**. Effects of Type 2 Diabetes on Skeletal Muscle Deoxygenation and Estimated Microvascular Blood Flow Kinetics Following the Onset of Moderate Exercise. *Diabetes Care*, *Diabetes Care*. 2007;30:2880-5.
- Regensteiner JG**, Hiatt WR, Criqui MH, Treat-Jacobson D, McDermott MM, Coll J, Hirsch AT. The Impact of Peripheral Arterial Disease on Health-Related Quality of Life and Functional Status in the PAD Awareness, Risk, and Treatment: New Resources for Survival (PARTNERS) Program. *Vasc Med*. 2008;13:15-24.
- Murphy TP, Hirsch AT, Ricotta JJ, Cutlip DE, Mohler E, **Regensteiner JG**, Comerota AJ, Cohen DJ. CLEVER Steering Committee. The Claudication: Exercise Vs. Endoluminal Revascularization (CLEVER) study: Rationale and methods. *J Vasc Surg*. 2008;47:1356-63
- Espeland MA, **Regensteiner JG**, Jaramillo SA, Gregg E, Knowler W, Wagenknecht L, Bahnson J, Haffner S, Hill JO, and **Regensteiner JG**. Ankle-brachial index in a cohort of individuals with obesity and type 2 diabetes: Results from the Action for Health in Diabetes Study Group. *Vasc Med* 2008;13:225-33.
- Bauer TA, Reusch JEB, Levi M, **Regensteiner JG**. Effects of Type 2 Diabetes on Skeletal Muscle Deoxygenation and Estimated Microvascular Blood Flow Kinetics Following the Onset of Moderate Exercise. *Diabetes Care*, *Diabetes Care*. 2008;30:2880-5.
- Regensteiner JG**, Bauer TA, Reusch JEB, Quaipe RA, Chen MY, Smith SC, Miller TM, Groves BM, Wolfel EE.

Cardiac Dysfunction during exercise in uncomplicated type 2 diabetes. Med Sci Sport Exerc 2009;41:977-984.

Nadeau K, Zeitler P, Bauer T, Brown MS, Dorosz J, Draznin B, Reusch JEB, **Regensteiner JG**. Insulin resistance in adolescents with type 2 diabetes is associated with impaired exercise capacity. Journal Clin Endo Metab (in Press)

C. Current Research Support

5 UO1 DK57151

08/01/99-07/30/11

NIH-NIDDK

Role: Investigator

Title: Look AHEAD

Multicenter study looking at weight control as a means of altering the cardiovascular outcomes of diabetes.

1R01 HL075752-01

09/01/03 – 08/31/09

NIH/NHLBI

Role: Principal Investigator: Colorado Consortium

Title: Angiogenesis and Mechanisms of Exercise Training in PAD

The major goals of this project are: 1) Establish the baseline vascular abnormalities present in male vs. female patients with PAD compared with male and female controls in order to provide the appropriate context to understand the changes induced by exercise training. 2) Determine the predictive index of vascular abnormalities evaluated in Specific Aim 1 to predict peak oxygen consumption in patients with PAD. 3) Establish the ability of exercise training to modify the vascular abnormalities in PAD by examining the changes in measures made in Specific Aim 1. B) Establish the association between the changes in vascular abnormalities with objective (i.e. maximal and pain-free walking times on treadmill testing) and patient perceived outcomes (quality of life measures) of exercise training.

1UO1 HL077221-01A1 (Investigator, Steering Committee, Head of Exercise Committee) (02/01/06 – 01/01/11)

NIH/NHLBI

Role: Investigator

Title: Claudication: Exercise Vs Endoluminal Revascularization

Objective: The major goals of this multicenter project are to compare in a randomized fashion, exercise rehabilitation vs peripheral endoluminal revascularization to see which better improves walking ability in persons with claudication. My role is on the steering committee as the head of the exercise intervention group.

1K12HD057022-01 (Principal Investigator and Program Director)

(6/30/2007-5/31/2012)

NIH/NICHD

Role: Principal Investigator and Program Director

Title: Building Interdisciplinary Careers in Women's Health.

Objective: This is a K-12 training grant to foster interdisciplinary careers in women's health.

American Diabetes Association (Principal Investigator)

(1/01/2008-12/31/2011)

Role: Principal Investigator

Title: Influence of Endothelial Function on Central vs. Peripheral Causes of Exercise Impairment in Type 2 Diabetes

Objective: Determine the causes of the exercise impairment in Type 2 diabetes and evaluate the role of endothelial function as an overarching cause of the impairments. Examine the role of gender differences in this effort.

VA Merit Award (Reusch, PI; Regensteiner, Co-PI) (10/01/2007-09/30/2010)

Role: Co-PI

Title: Impact of lipid infusion on Functional Exercise Capacity