

Curriculum Vitae
Amy K. Kearns Ph.D.

TRAINING

- 2006-2007 Postdoctoral Research Fellow
Division of Cardiology Hartford Hospital, Hartford CT.
Mentor: Paul D. Thompson MD
- 2003-2006 M.S./Ph.D. Kinesiology, University of Massachusetts, Amherst, MA
Dissertation: The Acute Effects of Exercise and Inactivity on Vascular Function. Thesis: The relationship between blood flow and oxidative stress following short-term ischemia reperfusion
Mentor: Priscilla M. Clarkson Ph.D
- 2000 B.S. Cardiopulmonary Sciences, Northeastern University, Boston, MA

TEACHING EXPERIENCE

- 2013-Current Massachusetts General Hospital Institute of Health Professions Prerequisites Program, Boston. Co-Instructor for online Exercise Physiology Course. 20 students per semester. Desire to Learn online classroom. Lead multiple groups in weekly research based discussions. Course included a laboratory report and practical application case studies.
- 2005-2006 University of Massachusetts, Amherst - Co-instructor for Junior Year Writing course to Kinesiology majors. Assisted in development of course material, lectures, exams and website.
- 2004-2005 University of Massachusetts, Amherst - Co-lecturer undergraduate general education course in Kinesiology Human Performance and Nutrition. Lectured chapters of undergraduate course to 220 students.
- 2002-2004 University of Massachusetts, Amherst - Head Teaching Assistant for undergraduate general education course in Kinesiology Human Performance and Nutrition. Oversaw seven undergraduate teaching assistants. Organized discussion section content for all teaching assistants. Prepared course exams. Taught 2 one-hour discussion sections per week. Managed class website
- 2000-2002 University of Massachusetts, Amherst -Teaching Assistant for undergraduate general education course in Kinesiology Human Performance and Nutrition. Taught 2-3 one-hour discussion sections per week. Graded term papers, mentored students for physical activity promotion projects.

RESEARCH EXPERIENCE

- 2005-2006 Study Coordinator – Merck clinical trial. Examined the effects of a low and high dose statin medication on muscle soreness/pain, creatine kinase and myoglobin following downhill walking or resistance exercise in men with high cholesterol. Responsibilities include set up of study protocols and case report forms, Intuitional

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- Review Board approval, recruitment, daily data collection, stress tests, phlebotomy, and supervision of 10 staff members.
- 2004 Study Coordinator – Medinova clinical trial. Examined the effects of a 10% topical ibuprofen gel on muscle soreness from exercise. Three-month study with 200 participants and 14 staff members. Responsibilities included: supervised recruiting, screening, data collection phlebotomy, and evaluation of subjects. Coordinated staff and subject scheduling, review of daily blood work for each subject.
- 2001 Study Coordinator – Nutritional supplement trial. Examined the effect of nutritional extract supplementation on heat shock proteins with muscle damage following eccentric exercise. Supervised a visiting faculty from Korea.
- 2001-2005 Research Assistant/ Study Coordinator - Multi center trial sponsored by the NIH examining the genetic polymorphisms associated with muscle growth following 12-weeks of resistance training. One of three graduate students responsible for running the study, responsibilities included subject recruitment, blood collection, weekly resistance training, phlebotomy, MRI, data analysis.
- 2000 Research Assistant and Lead Soreness Evaluator in a clinical trial examining the effects of analgesics on muscle pain. Examined the effects of a topical analgesic on indices of muscle soreness as assessed by a VAS scale. Oversaw five soreness evaluators to ensure proper techniques and consistency between evaluators.

CLINICAL EXPERIENCE

- 2000 Cardiac Rehabilitation- Beverly Hospital, Beverly, MA. Worked in a cardiac rehabilitation program alongside a senior exercise physiologist. Monitored and instructed patient exercise sessions. Instructed patients through seminars on proper exercise and diet to maintain a heart healthy lifestyle.
- 2000 Exercise Stress Test Technician- Beth Israel Deaconess Medical Center, Boston, MA. Assisted with pharmacological, nuclear and exercise stress tests in the Cardiology department. Responsibilities included preparing patients with a 12-lead EKG, explaining the stress test, monitoring EKG during exam for arrhythmias.
- 1998 EKG Technician- Waltham Hospital, Waltham, MA. On-call EKG technician. Provided physicians with 12 lead EKG on patients as needed. Assisted with providing patients with 24-hour heart monitors.
- 1997 Research Assistant- Beth Israel Deaconess Medical Center, Boston, MA. Assisted with clinical research trial testing the efficacy of Fosamax on Osteoporosis prevention. Collected data from patient visits, assisted nurse practitioner with physical exam and blood draws, and conducted follow-up phone calls and visit scheduling with patients.

GRANTS

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- 2006 University of Massachusetts School of Public Health and Health Sciences Travel Grant. Acute Effects of Exercise on Vascular Function. \$300.
- 2003 University of Massachusetts School of Public Health and Health Sciences Travel Grant. Gender Differences in Muscle Quality After a 12-Week Resistance Training Program. \$150.
- 2001 American College of Sports Medicine/EAS Research Grant on Sports Nutrition and Human Performance; Principal Investigator Amy Howell, \$5000.
- 2001 Baystate/ University of Massachusetts Collaborative Biomedical Research Grant; Principal Investigator Dr. Priscilla Clarkson Graduate Student Co-Investigator Amy (Howell) Kearns, \$20,000.

AWARDS AND HONORS

- 2004 Honorable Mention recipient of the University of Massachusetts School of Public Health and Health Science Research Day. Abstract titled "The Relationship Between Blood Flow and Oxidative Stress During Short-Term Ischemia Reperfusion"
- 2003 New England American College Sport Medicine - Mark Connolly Masters Scholarship
- 2003 Third place award recipient of the University of Massachusetts School of Public Health and Health Science Research Day. Abstract titled "Gender Differences in Muscle Quality Following a 12-week Resistance Training Program"
- 2000 Dean's Undergraduate Research Award, Northeastern University
- 1999 Dean Leroy C. Keagle scholarship for academic ability and soundness of character, Northeastern University
- 1998-2000 Deans list, Northeastern University

PROFESSIONAL SERVICE

- 2002-2004 Assistant Editor for the New England American College of Sports Medicine MAX Newsletter
- 2000-2002 New England American College of Sports Medicine Student Advisory Committee member: Graduate Student Representative, University of Massachusetts
- 1999-2000 New England American College of Sports Medicine Student Advisory Committee member: Student Representative, Northeastern University
- 1999 New England American College of Sports Medicine Student Advisory Committee member: Public Relations/ Marketing Representative, Northeastern University

MENTOR TO HONORS STUDENT

- 2001 Laura Gould B.S. Thesis title: Alterations in Vasodilation Following Eccentric Exercise

MANUSCRIPT REVIEWER

- 2006 International Journal of Sport Nutrition & Exercise Metabolism

OTHER SKILLS

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Phlebotomy
Biochemical Assay
Ultrasound measurement of blood flow
Venous occlusion plethysmography

PEER REVIEWED PUBLICATIONS (in chronological order)

Manuscripts

Maiden name: Howell

1. Libonati JR, Howell AK, Incanno NM, Pettee KK, Glassberg HL. Brief Muscle Hypoperfusion/hyperemia: An Ergogenic Aid? J. Strength Cond. Res. 2001 15(3):362-366.
2. Howell AK, Gaughan JP, Cairns MA, Faigenbaum AD, Libonati JR. The Effect of Muscle Hypoperfusion-hyperemia on Repetitive Vertical Jump Performance. J. Strength Cond. Res. 2001 15(4):446-49.
3. Clarkson, PM, Hoffman EP, Zambraski E, Gordish-Dressman H, Kearns A, Hubal M, Harmon B, Devaney J. ACTN3 and MLCK Genotype Associations with Exertional Muscle Damage. J Appl Physiol. 2005 Aug;99(2):564-9.
4. Clarkson, PM, Kearns AK, Rouzier P, Rubin R, Thompson PD. Serum creatine kinase levels and renal function measures in exertional muscle damage. Med Sci Sport Ex. 2006 April ;38(4):623-7.
5. Devaney JM, Hoffman EP, Gordish-Dressman H, Kearns A, Zambraski E, Clarkson PM. IGF-II gene region polymorphisms related to exertional muscle damage. J Appl Physiol. 2007 May;102(5):1815-23.
6. Sewright K, Kearns AK, Hubal MJ, Clarkson PM. Sex Differences in Response to Maximal Eccentric Exercise. Med. Sci. Sport Exerc. 2008 Feb;40(2):242-51.
7. Kearns AK, Bilbie CL, Clarkson PM, White CM, Sewright KA, O'Fallon KS, Gardarla M, Thompson PD. The Creatine Kinase Response to Eccentric Exercise with Atorvastatin 10mg or 80mg. Atherosclerosis. 2008 Sept;200(1):121-5.
8. Gardala M, Kearns AK, Thompson PD. Efficacy of Rosuvastatin (5 mg and 10 mg) twice a week in patients intolerant to daily statins. Am J Cardiol. 2008 Jun 15;101(12):1747-8.
9. Hubal MJ, Devaney JM, Hoffman EP, Zambraski EJ, Gordish-Dressman H, Kearns AK, Larkin JA, Adham K, Patel RR, Clarkson PM. CCL2 and CCR2 polymorphisms are associated with markers of exercised-induced skeletal muscle damage. J Appl Physiol. 2010 Jun;108(6):1651-8.

Abstracts

Maiden name: Howell

10. Incanno NM, Pettee KK, Howell AK, Doherty T, Cox MI, Sousa D, Libonati JR. The Effect of Aspirin on Hyperemia, Forearm Blood Flow and Exercise Performance. Med. Sci. Sport Exerc. 32(5):S228, 2000.
11. Pettee KK, Incanno NM, Howell AK, Doherty T, Libonati JR. The Effects of Eccentrically Induced Muscle Soreness on Brachial Artery Blood Flow. Med. Sci. Sport Exerc. 32(5):S322, 2000.
12. Libonati JR, Caldwell TM, Howell AK, Glassberg HL. Flow Mediated Dilation and Exercise Capacity in Humans. Med. Sci. Sport Exerc. 32(5):S179, 2000.
13. Howell AK, Incanno NM, Pettee KK, Guazzi M, Glassberg HL, Libonati JR. Effects of Muscle Hypoperfusion/ Hyperemia: An Ergogenic Aid? Med. Sci. Sport Exerc. 32(5):S361, 2000.

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14. Howell AK, Hubal MJ, Price TB, Clarkson PM. Gender Differences in Muscle Quality After a 12-Week Resistance Training Program. *Medicine and Science in Sport and Exercise* 35(5):S402, 2003.
15. Kearns AK, Rouzier P, Rubin R, and Clarkson PM. High Blood Creatine Kinase Levels do not Portend Renal Failure. *Medicine and Science in Sport and Exercise* 36(5):S36, 2004.
16. Kearns AK, Holbrook MT, Clarkson PM. Variability of creatine kinase increase and strength loss in men and women following eccentric exercise. *Medicine Science Sport Exercise* 37(5):S318, 2005.
17. Kearns AK, Kyung HK, Blumberg J, Berman J, Clarkson PM. The Relationship Between Blood Flow and Oxidative Stress Following Short-term Ischemia Reperfusion. *The Physiologist* 47(4):289, 2005.
18. Kearns AK, Chipkin S, Clarkson PM. Acute Effects of Exercise on Vascular Function: A Preliminary Report. *Medicine Science Sport Exercise* 38(5):S197, 2006.

PRESENTATIONS

Maiden name: Howell

19. Howell AK, Incanno NM, Pettee KK, Guazzi M, Glassberg HL, Libonati JR. Effects of Muscle Hypoperfusion/ Hyperemia: An Ergogenic Aid? NEACSM October 1999. Slide Presentation.
20. Lee J, Howell AK, Clarkson PM. Does Resting Blood Pressure Affect Muscle Soreness after Eccentric Muscle Actions? University of Massachusetts School of Public Health and Health Sciences Annual Research Day. 2001. Poster Presentation.
21. Lee J, Howell AK, Clarkson PM. Does Resting Blood Pressure Affect Muscle Soreness after Eccentric Muscle Actions? NEACSM, Providence, RI 2001. Poster Presentation.
22. Howell AK, Clarkson PM. Blood Flow Response to Varying Intensities of Exercise. University of Massachusetts School of Public Health and Health Sciences Annual Research Day. 2002. Poster Presentation.
23. Howell AK, Hubal MJ, Price TB, Clarkson. Gender Differences in Muscle Quality After a 12-week Resistance Training Program. ACSM San Francisco, CA 2003. Slide presentation.
24. Kearns AK, Rouzier P, Rubin R, and Clarkson PM. High Blood Creatine Kinase Levels do not Portend Renal Failure. ACSM, Indianapolis IN 2004.
25. Kearns AK, Blumberg J, Kyung HK, Berman J, Clarkson PM. The Relationship Between Blood Flow and Oxidative Stress Following Short-term Ischemia Reperfusion. School of Public Health and Health Sciences (SPHHS) Research Day. Amherst, MA. 2004.
26. Kearns AK, Blumberg J, Kyung HK, Berman J, Clarkson PM. The Relationship Between Blood Flow and Oxidative Stress Following Short-term Ischemia Reperfusion. APS-Integrative Biology Meeting. Austin TX 2004.
27. Kearns AK, Chipkin S, Clarkson PM. Acute Effects of Exercise on Vascular Function: A Preliminary Report. School of Public Health and Health Sciences (SPHHS) Poster Day. Amherst, MA. 2006. Poster Presentation
28. Kearns AK, Chipkin S, Clarkson PM. Acute Effects of Exercise on Vascular Function: A Preliminary Report. ACSM Denver, CO 2006. Poster Presentation.