

Jay R. Gump, Ph.D.

Department of Kinesiology University of Massachusetts, Amherst
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EDUCATION

Ph.D. in Molecular Physiology and Biophysics (2001).

University of Vermont, Burlington, VT.

Dissertation: *Structural determinants of INK4 protein function: A renewed examination of cell signaling motifs.*

M.S. Exercise and Sport Science (1997), Concentration in Exercise Physiology.

Colorado State University, Fort Collins, CO.

Thesis: *Arterial oxygen saturation, peak heart rate, and peak power output in elite cyclists while breathing supplemental oxygen.*

B.A. Mathematics (1990).

University of North Carolina, Chapel Hill, NC.

TEACHING EXPERIENCE

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|----------------|--|
| 2018 - present | Senior lecturer, University of Massachusetts, Amherst <ul style="list-style-type: none">• KIN 270, Anatomy and physiology, first semester• KIN 272, Anatomy and physiology, second semester |
| 2010 – 2018 | Associate professor, assistant professor, instructor
Greenfield Community College <ul style="list-style-type: none">• BIO 215, Anatomy and physiology, first semester• BIO 216, Anatomy and physiology, second semester• BIO 132, Lifestyle, Health, and Medicine |
| 2010 | Adjunct instructor, Greenfield Community College <ul style="list-style-type: none">• Medical terminology |
| 2003 | Postdoctoral teaching fellow
University of California, San Francisco School of Medicine <ul style="list-style-type: none">• Cancer block |
| 1998 – 2000 | Medical college tutor, University of Vermont <ul style="list-style-type: none">• Medical physiology |
| 1997 – 2001 | Graduate teaching assistant, University of Vermont, Burlington, VT <ul style="list-style-type: none">• Undergraduate anatomy and physiology |

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RESEARCH EXPERIENCE

2001-2003	Postdoctoral fellow, laboratory of Frank McCormick, Ph.D. Cancer Research Center, University of California, San Francisco
1998-2001	Graduate student, laboratory of James Koh, Ph.D. Department of Pathology, Department of Molecular Physiology, University of Vermont College of Medicine
1997-98	Myocyte signaling and differentiation project, laboratory of James Posada, Ph.D. University of Vermont, Burlington, VT
1997	Biophysics of muscle contraction, laboratory of Christopher Berger, Ph.D. University of Vermont, Burlington, VT
1997	Evaluation and validation of portable lactate meters Olympic Training Center, Colorado Springs, CO

PROFESSIONAL EXPERIENCE

2013-2018	Liberal Arts, Health Sciences program coordinator, Greenfield Community College.
2017-18	Science department professional development coordinator, Greenfield Community College
2011 – 2015	Graduation Review Board, Greenfield Community College
2011-2018	Adjunct faculty evaluator, Greenfield Community College
2014 – 2016	Information Literacy Advisory Committee, Greenfield Community College
2012-13	Online transition faculty for lab sciences: Anatomy and Physiology 1; Anatomy and Physiology 2; Lifestyle, Health, and Medicine. Greenfield Community College
2011	Course Developer, "Lifestyle, Health, and Medicine," Greenfield Community College
2003- 2010	Owner and chief scientific officer Incline Training, LLC (an athletic evaluation, training, and coaching company)
2004 – 2005	Director, Webcor Builders Professional Cycling Team
1997	Resident coach, United States Olympic Training Center, Colorado Springs, CO
1990-95	Manager, assistant manager, technician Blue River Sports, Breckenridge, CO

PEER REVIEWED PUBLICATIONS

Greenblatt, MS, Beaudet, JG, **Gump, JR**, Godin, KS, Trombley, L, Koh, J, and Bond JP. (2003) Detailed computational study of p53 and p16: using evolutionary sequence analysis and disease-associated mutations to predict the functional consequences of allelic variants, *Oncogene* 22, 1150-63.

Gump, J, Stokoe, D, and McCormick, F. (2003). Phosphorylation of p16^{INK4A} correlates with cdk4 association, *J Biol. Chem* 278, 6619-6622.

Gump, J, Turner, S, and Koh, J. (2001) The COOH-terminus of p18^{INK4C} distinguishes function from p16^{INK4A}, *Cancer Research* 61, 3863-8.

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Gump, J and Koh, J. (2001) An antibody to p16^{INK4A} recognizes a modified form of galectin-3. *Hybridoma* 20, 167-74.

RELEVANT NON-PEER REVIEWED CONTRIBUTION

Using science to improve professional practice, parts 1-3(2006-2007). *Strength and Conditioning Journal* 28(6), 29(1) and 29(3).

PROFESSIONAL AFFILIATIONS

Human Anatomy and Physiology Society
National Center for Case Study Teaching in Science

AWARDS and HONORS

Distinguished teaching award nominee (2018).

MSP Flex Grant –2018, 2019, 2020

Faculty Mentor, “29 Who Shine” Exceptional Student Award (2015). Boston, MA.

Poster award, Environmental Carcinogenesis Research Symposium (2020). Burlington, VT.

1st place, 3rd place, 1st place, Graduate/Medical Research Symposium, University of Vermont College of Medicine (1998-2000, respectively). Burlington, VT.

John Stenner Memorial Scholarship for contributions to collegiate cycling, awarded by the United States Cycling Federation (1996-97).

Pi Mu Epsilon – National mathematics honor society, University of North Carolina chapter (1990).

Coker-Fox Scholarship from the University of North Carolina, awarded for character, scholarship, and leadership (1986-90).

Presentations and Conferences

Panelist, Remote Learning Assessment Webinar (2020). University of Massachusetts, Amherst. Amherst, MA

Panelist, Asynchronous/Synchronous Learning Webinar (2020). University of Massachusetts, Amherst. Amherst, MA

Getting it all backwards: How starting at the end improves course design, presented at graduate/faculty research seminar (2020). Amherst, MA

Lilly Conference: Teaching for Active and Engaged Learning (2020). San Diego, CA.

Panelist, Careers in industry and non-R01 tenure track, presented at the kinesiology and graduate student organization meeting (2018). Amherst, MA.

Strategies to Engage Your Students, presented to administration and faculty at Greenfield Community College (2014). Greenfield, MA.

American Physiological Society Workshop on Teaching and Learning (2016). Madison, WI.

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Engaged Classrooms, Universal Design, and the Course Manual, presented at the New England Faculty Development Consortium (2015). East Greenwich, RI.

Training for Multiday Events, presented at US Ski Association Coaches Symposium (2015). Lake Placid, NY.

League for Innovation in the Community College Annual Meeting (2015). Boston, MA.

The Community College Application Experience, presented to the Greenfield Community College administration and faculty (2015). Greenfield Community College.

Active Learning in the Community College Classroom, presented to administration and faculty at Greenfield Community College (2014). Greenfield, MA.

Active Learning in the Anatomy and Physiology Classroom, presented at the Human Anatomy and Physiology Society Annual Meeting (2014). Jacksonville, FL.

The Pursuit of Excellence presented at the Phi Theta Kappa honor society induction ceremony (2012). Greenfield, MA.

The Art of Evidence Based Practice, presented at grand rounds, Franklin Baystate Hospital (2011). Greenfield, MA, March.

National Strength and Conditioning Association Annual Meeting (2007). Atlanta, GA.

American College of Sports Medicine Annual Meeting (2006). Denver, CO.

USA Cycling International Coaching Summit (2006). Colorado Springs, CO.

Measuring and Training Endurance, presented at Peaks Coaching and Athlete Performance Summit (2005). Bedford, VA.

International Altitude Training Symposium (2004). Colorado Springs, CO.

International Symposium on Molecular and Cellular Proteomics (2003). San Francisco, CA.

Antibody Discovery and Preclinical Drug Development (2003). San Diego, CA.

A phosphorylated form of p16Ink4A is associated with cdk4 in normal human fibroblasts presented at Cancer Genetics and Tumor Suppressor Genes meeting (2002). Cold Spring Harbor, NY.

Power meters in cycling (2002). Philadelphia, PA.

Lustgarten Meeting for Pancreatic Cancer (2000). Cold Spring Harbor, NY.

American College of Sports Medicine Annual Meeting (1997). Denver, CO.

USA Cycling Elite Coaches Symposium (1997). Colorado Springs, CO.