

# Curriculum Vitae

## Gwendolyn A. Thomas

### General Information

Address: Department of Exercise Science  
201 Women's Building  
820 Comstock Avenue  
Syracuse, New York 13244

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### Professional Preparation

2010 Ph.D., University of Connecticut, Major: Kinesiology  
2006 M.A., University of Connecticut, Major: Exercise Science  
1994 B.A., The Pennsylvania State University,  
Major: International Politics

### Professional Credential(s)

2005-present USA Weightlifting (USAW) Level 1 Coach  
2002-present Certified Strength and Conditioning Specialist (CSCS) through  
the National Strength and Conditioning Association (NSCA).  
2000-present CPR/AED Certification through the American Red Cross.

### Professional Experience

2016-present **Assistant Professor**, Department of Exercise Science, Syracuse  
University  
2016-Aug.2016 **Associate Research Scientist**, Yale School of Public Health, Yale  
University  
2013-2015 **Research Associate**, Yale Stress Center, Yale University

2010-present	<b>Research Affiliate</b> , Center for Health Intervention and Prevention (CHIP), University of Connecticut
2010-2012	<b>Postdoctoral Fellow</b> , NIH T32 Fellowship, Center for Self and Family Management, Yale University
2009-2010	<b>Research Coordinator</b> , Human Performance Lab, University of Connecticut
2007-2010	<b>Lecturer</b> , Department of Kinesiology, University of Connecticut
2004-2006	<b>Assistant Strength and Conditioning Coach</b> , University of Connecticut

### **Honors, Awards, and Prizes**

Dissertation Fellowship Award, University of Connecticut (2010)

## **Teaching**

### **Courses Taught**

Principles of Conditioning (PPE 483)

Exercise Endocrinology (PPE 500)

Exercise Endocrinology (PPE 773)

Exercise Prescription for Special Populations (PPE 500)

Resistance Training Exercise Techniques and Evaluation (EKIN 3545)

Free Weight Training (EKIN 1160)

### **Course Lectures**

Exercise and Sports Science for Coaches (EKIN 3215)

Fundamentals of Resistance Training (EKIN 3225)

Rehabilitation of Athletic Injuries (EKIN 3135)

Mechanisms and Adaptation in Sport and Exercise (4510)

Physiological Assessment of Competitive Athletes (3530)

## **Research and Original Creative Work**

### **Publications**

#### **Refereed Journal Articles**

1. **Thomas GA**, Cartmel B, Harrigan M, Fiellin M, Capozza S, Zhou Y, Ercolano E, Gross CP, Hershman D, Ligibel J, Schmitz K, Li FY, Sanft T, Irwin ML. The effect of exercise on body composition and bone mineral density in breast cancer survivors taking aromatase inhibitors. *Obesity (Silver Spring)*. Feb 2017.
2. **Thomas GA**, Alvarez-Reeves M, Lu, L, Yu H, Irwin ML. Effect of Exercise on Metabolic Syndrome Variables in Breast Cancer Survivors. *International Journal of Endocrinology*, 2013 Nov 11.
3. **Thomas GA**, Kraemer WJ, Comstock BA, Dunn-Lewis C, Maresh CM, Volek JS. Obesity, Growth Hormone and Exercise. *Sports Medicine*. 2013;43(9):839-49.
4. Playdon M, **Thomas GA**, Sanft T, Harrigan M, Ligibel J, Irwin ML. Weight Loss Interventions in Breast Cancer Survivors: A Systematic Review. *Current Breast Cancer Reports* 2013 May: 222-246
5. Comstock BA, **Thomas GA**, Dunn-Lewis C, Volek JS, Szivak TK, Hooper DR, Kupchak BR, Denegar CR, Kraemer WJ. Effects of Acute Resistance Exercise on Muscle Damage and Perceptual Measures in Men who are Lean and Obese. *J Strength Cond Res*. 2013 Mar 8.
6. Jones SB, **Thomas GA**, Hesselsweet SD, Alvarez-Reeves M, Yu H, Irwin ML. Effect of Exercise on Markers of Inflammation in Breast Cancer Survivors: The Yale Exercise and Survivorship Study. *Cancer Prevention Research*. 2013 Feb;6(2):109-18.
7. **Thomas GA**, Kraemer WJ, Comstock BA, Lewis, CD, Volek JS, Denegar CR, Maresh CM. Effects of Acute Resistance Exercise and Obesity Level on Ghrelin and Cortisol in Men. *Metabolism*. 2012 Jun;61(6):860-8.
8. **Thomas GA**, Kraemer WJ, Kennett MJ, Comstock BA, Maresh CM, Denegar CR, Volek JS, Hymer WC. Immunoreactive and Bioactive Growth Hormone Responses to Resistance Exercise in Men Who Are Lean or Obese. *J Appl Physiol* 2011 Aug; 111(2):465-72.

9. Kraemer WJ, Dunn-Lewis C, Comstock BA, **Thomas GA**, Clark JE, Nindl BC. Growth hormone, exercise, and athletic performance: a continued evolution of complexity. *Curr Sports Med Rep*. 2010 Jul-Aug;9(4):242-52.
10. Kraemer WJ, Flanagan SD, Comstock BA, Fragala MS, Earp JE, Dunn-Lewis C, Ho JY, **Thomas GA**, Solomon-Hill G, Penwell ZR, Powell MD, Wolf MR, Volek JS, Denegar CR, Maresh CM. Effects of a whole body compression garment on markers of recovery after a heavy resistance workout in men and women. *J Strength Cond Res*. 2010 Mar; 24(3):804-14.
11. Ho JY, Kraemer WJ, Volek JS, Fragala MS, **Thomas GA**, Dunn-Lewis C, Coday M, Häkkinen K, Maresh CM. L-Carnitine L-Tartrate Supplementation Favorably Affects Biochemical Markers of Recovery from Physical Exertion in Middle Age Men and Women. *Metabolism*. 2010 Aug;59(8):1190-1199.
12. McCullough AS, Kraemer WJ, Volek JS, Solomon-Hill GF Jr, Hatfield DL, Vingren JL, Ho JY, Fragala MS, **Thomas GA**, Häkkinen K, Maresh CM. Factors affecting flutter kicking speed in women who are competitive and recreational swimmers. *J Strength Cond Res*. 2009 Oct;23(7):2130-6.
13. Bower ME, Kraemer WJ, Potteiger JA, Volek JS, Hatfield DA, Vingren JL, Spiering BA, Fragala MS, Ho JY, **Thomas GA**, Earp JE, Häkkinen K, Maresh CM. Relationship Between Off-Ice Testing Variables and On-Ice Speed in Women's Collegiate Synchronized Figure Skaters: Implications for Training. *J Strength Cond Res*. 2010 Mar;24(3):831-9.
14. Migiano MJ, Vingren JL, Volek JS, Maresh CM, Fragala MS, Ho JY, **Thomas GA**, Hatfield DL, Häkkinen K, Ahtiainen J, Earp JE, Kraemer WJ. Endocrine Response Patterns to Acute Unilateral and Bilateral Resistance Exercise in Men. *J Strength Cond Res*. 2010 Jan;24(1):128-34.
15. Kraemer WJ, Joseph MF, Volek JS, Hoffman JR, Ratamess NA, Newton RU, Fragala MS, French DN, Rubin MA, Scheet TP, McGuigan MR, **Thomas GA**, Gomez AL, Häkkinen K, Maresh CM. Endogenous opioid peptide responses to opioid and anti-inflammatory medications following eccentric-induced muscle damage. *Peptides*. 2010 Jan;31(1):88-93.

16. Vingren JL, Kraemer WJ, Hatfield DL, Volek JS, Ratamess NA, Anderson JM, Häkkinen K, Ahtiainen J, Fragala MS, **Thomas GA**, Ho JY, Maresh CM. Effect of Resistance Exercise on Muscle Steroid Receptor Protein Content in Strength Trained Men and Women. *Steroids*. 2009 Nov-Dec;74(13-14):1033-9.
17. Kraemer WJ, Hatfield DL, Volek JS, Fragala MS, Vingren JL, Anderson JM, Spiering BA, **Thomas GA**, Ho JY, Quann EE, Izquierdo M, Häkkinen K, Maresh CM. Effects of Amino Acids Supplement on Physiological Adaptations to Resistance Training. *Med Sci Sports Exerc*. 2009 May;41(5):1111-21
18. Kraemer WJ, Vingren JL, Schuenke MD, Kopchick JJ, Volek JS, Fragala MS, Häkkinen K, Jen-Ho, **Thomas GA**, Staron RS. Effect of circulating growth hormone on muscle IGF-I protein concentration in female mice with growth hormone receptor gene disruption. *Growth Horm IGF Res*. 2009 Jun;19(3):242-4.
19. Kraemer WJ, Spiering BA, Volek JS, Martin GJ, Howard RL, Ratamess NA, Hatfield DL, Vingren JL, Ho JY, Fragala MS, **Thomas GA**, French DN, Anderson JM, Häkkinen K, Maresh CM. Recovery from a national collegiate athletic association division I football game: muscle damage and hormonal status. *J Strength Cond Res*. 2009 Jan;23(1):2-10.
20. Fragala MS, Kraemer WJ, Volek JS, Maresh CM, Puglisi MJ, Vingren JL, Ho JY, Hatfield DL, Spiering BA, Forsythe CE, **Thomas GA**, Quann EE, Anderson JM, Hesslink RL Jr. Influences of a dietary supplement in combination with an exercise and diet regimen on adipocytokines and adiposity in women who are overweight. *Eur J Appl Physiol*. 2009 Mar;105(5):665-72.
21. Vingren JL, Kraemer WJ, Hatfield DL, Anderson JM, Volek JS, Ratamess NA, **Thomas GA**, Ho JY, Fragala MS, Maresh CM. Effect of Resistance Exercise on Muscle Steroidogenesis. *J Appl Physiol*. 2008 Dec;105(6):1754-60.
22. Spiering BA, Kraemer WJ, Hatfield DL, Vingren JL, Fragala MS, Ho JY, **Thomas GA**, Häkkinen K, Volek JS. Effects of L-Carnitine L-Tartrate Supplementation on Muscle Oxygenation Responses to Resistance Exercise. *J Strength Cond Res*. 2008.

Jul;22(4):1130-5.

23. Torres EM, Kraemer WJ, Vingren JL, Volek JS, Hatfield DL, Spiering BA, Ho JY, Fragala MS, **Thomas GA**, Anderson JM, Häkkinen K, Maresh CM. Effects of Stretching on Upper-Body Muscular Performance. *J Strength Cond Res*. 2008 Jul;22(4):1279-85.
24. **Thomas GA**, Kraemer WJ, Spiering BA, Volek JS, Anderson JM, Maresh CM. Maximal power at different percentages of one repetition maximum: influence of resistance and gender. *J Strength Cond Res*. 2007 May;21(2):336-42.  
**\*Article has been cited over 128 times**

### Chapters

1. Kraemer WJ, **Thomas GA**, Fleck SJ. Optimizing Strength Training. 2010 *The Look* (ed: Jose Antonio).
2. Kraemer WJ, Vingren JL, Hatfield DL, Spiering BA, Fragala MS, **Thomas GA**. Resistance Training Programs. *ACSM's Resources for the Personal Trainer* (third edition). Philadelphia. Lippincott Williams & Wilkins, 2009.
3. Kraemer, WJ, Fragala, MS, **Thomas GA**. Chapter 15. Resistance Training. *Netter's Sports Medicine: The Team Physician's Handbook*. Edited by *Christopher Madden and Margot Putukian*, 2009.
4. Kraemer WJ, Flanagan S, **Thomas GA**. The Physiological Basis for Recovery: Special Considerations in Tennis. United States Tennis Association, 2009.

### Presentations

#### Refereed Presentations at Conferences

1. **Thomas GA**, Irwin ML, Li F, Sanft T, Harrigan M, Zhou Y, Cartmel B. Effects of a Combined Resistance and Aerobic Exercise Intervention on Sarcopenia in Postmenopausal Breast Cancer Survivors taking Aromatase Inhibitors. *National Institute of Health Understanding the Role of Muscle and Body Composition in Studies of Cancer Risk and Prognosis In Cancer Survivors*, NIH Rockville MD, September 2017.
2. **Thomas GA**, Cartmel B, Harrigan M, Fiellin M, Capozza S, Zhou Y, Ercolano E,

Gross C, Hershman D, Ligibel J, Schmitz K, Li FY, Sanft T, Irwin ML.  
Randomized  
Trial Of Exercise On Body Composition In Breast Cancer Survivors Taking  
Aromatase Inhibitors. *American College of Sports Medicine Annual Meeting*,  
Boston, MA, May 2016.

3. **Thomas GA**, Yu H, Alvarez-Reeves M, Irwin ML. Aerobic Exercise Effects on Metabolic Syndrome in Breast Cancer Survivors. *American College of Sports Medicine Annual Meeting*, San Francisco, CA, May 2012.
4. **Thomas GA**, Kraemer WJ, Comstock BA, Dennegar CR, Volek JS, Maresh CM. Effects of Resistance Exercise and Obesity Level on Ghrelin and Cortisol. *The Obesity Society Annual Scientific Meeting*, Orlando, FL, October 2011.
5. Fragala MS, Kraemer WJ, Flanagan SD, Comstock BA, Earp JE, Coday MA, Dobbins KA, Dunn-Lewis C, Hopkins AK, Ho JY, **Thomas GA**, Solomon-Hill G, Penwell ZR, Powell MD, Wolf MR, Volek JS, and Maresh CM. Effects of a Whole Body Compression Garment on Markers of Recovery After an Intense Whole Body Resistance Training Workout in Women. *National Strength and Conditioning Association National Conference*, Las Vegas, NV, July, 2009.
6. Flanagan SD, Kraemer WJ, Comstock BA, Earp JE, Coday MA, Dobbins KA, Dunn- Lewis C, Hopkins AK, Fragala MS, Ho JY, **Thomas GA**, Solomon-Hill G, Penwell ZR, Powell MD, Wolf MR, Volek JS, and Maresh CM. Effects of a Whole Body Compression Garment on Markers of Recovery After an Intense Whole Body Resistance Training Workout in Men. *National Strength and Conditioning Association National Conference*, Las Vegas, NV, July, 2009.
7. Kraemer WJ, Staron RS, Fry AC, **Thomas GA**, Fleck SJ, Dudley GA, Nindl BC, Campos GER, Hagerman FC, Volek JS, Spiering BA, Fragala MS, Vingren JL, Ho JY, Hatfield DL, Maresh CM. Intensity of Resistance Training: Contrast of Bioactive and Immunoassays for Growth Hormone. *6th International Conference on Strength Training*, Colorado Springs, Colorado, October 2008.
8. Vingren JL, Kraemer WJ, Hatfield DL, Anderson JM, Volek JS. NA. Ratamess, **Thomas GA**, Bailey BL, Ho JY, Fragala MS, Maresh CM. Effect of resistance exercise on muscle androgen receptor content in highly trained men and women. *6th International Conference on Strength Training*, Colorado Springs,

Colorado, October 2008.

9. Vingren JL, Kraemer WJ, Hatfield DL, Anderson JM, Volek JS, Ratamess NA, **Thomas GA**, Bailey BL, Flanagan SD, Dunn- Lewis CM, Solomon-Hill GF, Ho JY, Fragala MS, Maresh CM. Effect of resistance exercise on muscle steroidogenesis. *Integrated Biology*, Hilton Head, South Carolina, September 2008, The Physiologist, Program 152.
10. Earp, JE. Martin GJ, Howard R L, Ratamess NA, French DN, Vingren JL, Volek JS, Hatfield DL, Spiering BA, Ho JY, Fragala MS, **Thomas GA**, Powell MD, Anderson JM, Maresh CM, Kraemer WJ. A Comparison of creatine kinase responses to an American football game from two different seasons. *National Strength and Conditioning Association National Conference*, Las Vegas, NV, July, 2008.
11. Vingren, JL. Migiano MJ, McCullough AS, Maresh CM, Volek JS, Hatfield DL, Fragala MS, Ho JY, **Thomas GA**, Anderson JM, . Boyd BM, Solomon-Hill GF, Duba JE, Kraemer WJ. Hormonal response to upper-body unilateral and bilateral resistance exercise. *National Strength and Conditioning Association National Conference*, Las Vegas, NV, July, 2008.
12. Hatfield DL, **Thomas GA**, Fragala MS, Vingren JL, Maresh CM, Volek JS, Ho JY, Solomon-Hill GF, Flanagan SD, Dunn- Lewis CM, Coday MA, . Migiano MJ, Duba JE, Boyd BM, Earp JE, Anderson JM, Hopkins AK, Kraemer WJ. Influence of training level on IGF-1 and growth hormone response patterns to resistance exercise stress in women. *National Strength and Conditioning Association National Conference*, Las Vegas, NV, July, 2008.
13. Fragala MS, Keuning M, Gordon SE, Gómez AL, Vingren JL, Maresh CM, Volek JS, Hatfield DL, Ho JY, **Thomas GA**, Hopkins AK, Newton RU, Häkkinen K, Anderson JM, Kraemer WJ. Effects of step-aerobics with resistance exercise on salivary cortisol and testosterone concentrations in women. *National Strength and Conditioning Association National Conference*, Las Vegas, NV, July, 2008.
14. **Thomas GA**, Fragala MS, Vingren JL, Hatfield DL, Ho JY, Hopkins AK, Solomon-Hill GF, Flanagan SD, Powell MD, Dunn- Lewis CM, Coday MA, Volek JS, Anderson JM, Penwell ZR, Maresh CM, . Kraemer WJ. Proenkephalin



- Peptide F Responses to Resistance Exercise Stress in Men and Women. *National Strength and Conditioning Association National Conference, Las Vegas, NV, July, 2008.*
15. Ouellette KA, Bower M, **Thomas GA**, Fragala MS, Vingren JL, Hatfield DL, Ho JY, Hopkins AK, Spiering BA, Volek JS, Anderson JM, Maresh CM, Kraemer WJ. Optimizing power training: Relationship between sets repetition schemes in female collegiate rowers. *National Strength and Conditioning Association National Conference, Las Vegas, NV, July, 2008.*
  16. Ho JY, Mills MD, Fragala MS, **Thomas GA**, Vingren JL, Hatfield DL, Hopkins AK, Spiering BA, Volek JS, Anderson JM, Maresh CM, Kraemer WJ. Impact of type of muscle action in fatigue during resistance exercise. *National Strength and Conditioning Association National Conference, Las Vegas, NV, July, 2008.*
  17. Penwell ZR, Torres EM, Kraemer WJ, Vingren JL, Volek JS, McCullough AS, Hatfield DL, Spiering BA, Ho JY, Fragala MS, **Thomas GA**, Anderson JM, Häkkinen K, Maresh CM. Effects of stretching on upper-body muscular performance. *National Strength and Conditioning Association National Conference, Las Vegas, NV, July, 2008.*
  18. Flanagan SD, Vingren JL, Hopkins AK, McCullough AS, Migiano MJ, Maresh CM, Volek JS, Hatfield DL, Fragala MS, Ho JY, **Thomas GA**, Anderson JM, Boyd BM, Solomon-Hill GF, Duba JE, Kraemer WJ. Role of body size and training level in reducing physical performance differences between men and women. *National Strength and Conditioning Association National Conference, Las Vegas, NV, July, 2008.*
  19. Vingren JL, Kraemer WJ, Anderson JM, Howard R, Maresh CM, Martin G, Ratamess NA, French DN, Hatfield DL, Ho JY, Fragala MS, Silvestre R, Torres E, **Thomas GA**, Carter M, Volek JS. Tracking Biochemical Changes of American NCAA Division I Football Players Over a Season. *National Strength and Conditioning Association. Washington, DC, July 2006.*
  20. Kraemer WJ, Torine JC, Silvestre R, French DN, Ratamess NA, Spiering BA, Hatfield DL, Vingren JL, Fragala MS, Ho JY, Torres E, **Thomas GA**, Volek JS. Changes in Body Composition From Mini-camp to Summer in National Football

League (NFL) Players. *National Strength and Conditioning Association*.  
Washington, DC, July 2006.

### Research Support

#### **Pending**

NIH

NIDA R03

The Effect of Resistance Exercise on Craving and Cannabis Use in Individuals with Cannabis Use Disorder

Role: Principal Investigator

Annual direct costs: \$75,000

#### **Current**

Robert E. Leet and Clara Guthrie Patterson Trust (Thomas)

Patterson Trust Fellowship

*An Enhanced Behavioral Intervention to Increase Daily Exercise Adherence in Breast Cancer Survivors*

A fellowship to support mentored investigators conducting clinical research with a focus on patient- oriented or translational laboratory research.

School of Education Internal Grant Award (Thomas)

Syracuse University-School of Education

*Resistance Exercise Effects on Cannabis Use*

A grant to allow pilot funding for faculty.

#### **Completed**

NIH NINR T32 (PI: Nancy Reynolds, PhD)

*Self and family management research program*

Training fellowship in self and family management of chronic disease or the risk for their development. Primary mentor during the fellowship was Dr. Margaret Grey, a researcher with a focus on prevention and behavioral interventions for diabetes and metabolic disorders. Secondary mentorship from Dr. Melinda Irwin in the Yale School of Public Health, an expert on exercise and lifestyle interventions in cancer survivors.

Role: Postdoctoral Fellow

DOD (PI: William Kraemer, PhD).

*Maximizing the Osteogenic Properties of Plyometric Exercise to Induce Optimal Structural Adaptations in Bone and Muscle: Effects on Endocrine and Cellular Controls*

Aim of grant was to examine potential frequency and dose effects of plyometric exercise to induce efficient adaptation in bone and muscle in sedentary, healthy individuals. Implications were to identify optimal resistance exercise prescription for increased activity levels in previously sedentary individuals while decreasing potential for injury.

Role: Project Coordinator

## **The Profession**

### **Service**

Internal Review Board Student Member, University of Connecticut (2009-2010)

Faculty Search Committee Department of Exercise Science (Fall 2017)

### **Current Membership in Professional Organizations**

American College of Sports Medicine

National Strength and Conditioning Association

The Obesity Society

United States Weightlifting

### **Grant Review**

The Research Foundation – Flanders, Belgium (August 2017) “Targeted reduction in subcutaneous fat cell size by ultrasound-induced cavitation in obese individuals: molecular and clinical impact.”

### **Editorial Board**

Journal of Aging and Physical Activity (2018-present)

### **Reviewer for Refereed Journals**

Annual Research and Review in Biology (2014-present)

Applied Physiology, Nutrition and Metabolism (2011-present)

Brain, Behavior and Immunity (2012-present)

European Journal of Applied Physiology (2007-present)

Heart and Lung: The Journal of Acute and Critical Care (2010-present)

Journal of Integrative Medicine (2017-present)

Journal of the American College of Nutrition (2018-present)

Journal of Strength and Conditioning Research (2005-present)

Medicine and Science in Sports and Exercise (2016-present)  
Scientific Reports (2017-present)