# LUKE MATTHEW PELTON, PhD, CSCS, CISSN, BCS, CES

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#### **EDUCATION**

### **Doctorate of Philosophy in Exercise Physiology**

August 2023

Springfield College, Springfield, MA
Specialization: Sports Physiology
Advisor: Samuel A. E. Headley, PhD
Committee Chair: Nicholas Coker, PhD

Dissertation: The effect of training style and anabolic-androgenic steroid use on

myogenic expression in iron sport athletes.

# **Master of Science in Sports Science**

December 2017

Hofstra University, Hempstead, NY

Concentration: Strength & Conditioning Advisor: Jamie J. Ghigiarelli, PhD

Capstone Project: Effects of a 6-week bench press program using the freak bar in a

sample of collegiate club powerlifters

### **Bachelor of Science in Exercise Science**

May 2014

Hofstra University, Hempstead, NY Advisor: Katie M. Sell, PhD

### ACADEMIC APPOINTMENTS

#### Springfield College, Springfield, MA

Fall 2023-Present

Assistant Professor, Department of Exercise Science & Athletic Training

AEXS 335: Measurement & Statistics in Exercise Science

AEXS 360: Exercise Testing & Prescription AEXS 620: Genetics for Exercise Science

RSCH 610: Foundations and Methods of Research

### University of Hartford, West Hartford, CT

2022-Present

Adjunct Instructor, Department of Exercise Science

EX 315: Sports Nutrition

EX 370W: Exercise Physiology EX 380: Injury Care and Prevention

EX 421W: Exercise Prescription for Special Populations

#### Manchester Community College, Manchester, CT

2020-Present

Adjunct Lecturer, Health and Exercise Science Program

HPE B243-32807: Kinesiology

HPE B241-10286 Exercise Physiology

## Smith College, Northampton, MA

Fall 2021

Adjunct Instructor, Department of Exercise and Sports Studies

ESS 509: Musculoskeletal Anatomy

### Springfield College, Springfield, MA

Spring 2021

Adjunct Instructor, Department of Biology/Chemistry

BIOL 133: Anatomy & Physiology Concepts II Lab

### Springfield College, Springfield, MA

2019-2023

Doctoral Teaching Fellow, Department of Physical Education and Health Education

RSCH 610: Foundations and Methods of Research

RSCH 612: Proposal Design

RSCH 618: Guided Individual Study

RSCH 620: Educational Psychology Statistics I

RSCH 712: Dissertation Proposal Design

## Hofstra University, Hempstead, NY

2018-2019

Adjunct Instructor, Department of Health Professions

HPR 251: Special Reading Seminar

HPR 290: Scientific Foundations of Strength and Conditioning

#### Hofstra University, Hempstead, NY

2015-2019

Adjunct Instructor, Department of Specialized Programs in Education

PESP 025: Fitness for Life PESP 038B: Weight Training PESP 180N: Powerlifting

### **SCHOLARSHIP**

### **Journal Publications**

**Pelton, LM**, Maris, SA, Loseke, J. The effects of anabolic-androgenic steroids on gene expression in skeletal muscle: A systematic review. *International Journal of Exercise Science*, 2023;16(3): 53-82.

**Pelton, LM,** Mullin, EM. The relationship of anabolic-androgenic steroids and sexual health among male competitive strength athletes: 1138. *Medicine & Science in Sports & Exercise*, 2021;53(8S):368.

Ghigiarelli JJ, Fulop AM, Burke A, Ferrara A, Sell KM, Gonzalez AM, **Pelton LM**, Zimmerman JA, Coke S, Marshall D. The effects of whole-body photobiomodulation

light-bed therapy on creatine kinase and salivary interleukin-6 in a sample of trained males: A randomized, crossover study. *Frontiers in Sports and Active Living*, 2020. https://doi: 10.3389/fspor.2020.00048.

Ghigiarelli JJ, **Pelton LM**, Gonzalez AM, Fulop AM, Gee JY, Sell KM. Effects of a 6-week bench press program using the freak bar in a sample of collegiate club powerlifters. *Journal of Strength and Conditioning Research*, 2018;32(4):938-949.

### **Conference Presentations**

**Pelton LM**, Fields J, Nitzsche E, Pelton JA. (2022). Impacts of cannabis use timing, biologic gender, and iron sport participation on perceived recovery. Presented at: 2022 NEACSM Fall Conference.

**Pelton LM**, Mullin EM. (2021). The relationship of anabolic-androgenic steroids and sexual health among male competitive strength athletes. Presented at: 2021 ACSM Annual Meeting.

Ambord, M., Hauch, E., Baker, G., **Pelton, L.**, Stenson, M. (2021). The Predictive Relationship Between Training Impulse, Sleep Quality, and Sleep Quantity. Presented at: 2021 American College of Sports Medicine Northland Chapter Spring Tutorial, Virtual. *1st Place, Outstanding Undergraduate Research Award.* 

Berglove, M., **Pelton, L.**, Stenson, M. (2021). Changes in Training Load and Perceived Health Across a Division III Women's Basketball Season. Presented at: 2021 American College of Sports Medicine Northland Chapter Spring Tutorial, Virtual. *3rd Place, Outstanding Undergraduate Research Award*.

Reding, J., Miller, J., **Pelton, L.**, Stenson, M. (2021). The Relationship Between Sleep Quality and Quantity and Muscle Readiness, Stress, and Overall Health in College Athletes. Presented at: 2021 American College of Sports Medicine Northland Chapter Spring Tutorial, Virtual. *2nd Place, Outstanding Undergraduate Research Award*.

Schabaker, A., **Pelton, L.**, Stenson, M. (2021). Perceived Stress, Energy, and Mood State During High and Low Stress Academic Weeks in Division III Female Athletes. Presented at: 2021 American College of Sports Medicine Northland Chapter Spring Tutorial, Virtual.

### **Guest Presentations**

**Pelton LM.** (2022). Is bodybuilding a sport? Presented to: PHIL 120: Philosophy of Sport, Springfield College, Springfield, MA.

**Pelton LM.** (2021). Ad astra: Bringing space physiology to Springfield College. Presented to: Springfield College Graduate Student Organization PRIDETalks Initiative, Springfield College, Springfield, MA.

**Pelton LM.** (2021). The physiology of aging: Staying healthy in your senior years. Presented to: Springfield College Campus Recreation Employee Wellness Programs, Springfield College, Springfield, MA.

**Pelton LM**. (2018). Applying corrective exercise to competitive powerlifting. Presented to: HPR 170H: Corrective Exercise, Hofstra University, Hempstead. NY.

**Pelton LM**. (2017). Applying corrective exercise to competitive powerlifting. Presented to: HPR 170H: Corrective Exercise, Hofstra University, Hempstead. NY.

Pelton LM. (2016). Periodization for powerlifting.

Presented to: HPR 293: Scientific Foundations of Strength and Conditioning, Hofstra University, Hempstead, NY.

**Pelton LM**. (2016). The Westside Barbell conjugate powerlifting method. Presented to: HPR 292: Strength and Conditioning Techniques, Hofstra University, Hempstead, NY.

# **Grant Applications**

Pelton LM, Maris SA, Headley SAE. The effects of ground-based resistance exercise and simulated microgravity on muscle strength and gene expression. Student Investigator. American College of Sports Medicine NASA Space Physiology Research Grant (2021) **\$5,306** [Not funded]

### **Editorial Contributions**

American Physiological Summit 2023. American Physiological Society: Endocrinology & Metabolism Section. [Abstract Reviewer]

Kriel Y, Kerherve H, Askew C, Solomon C. Sprint interval training recovery format: Enjoyment & blood pressure in inactive men. *Journal of Clinical Exercise Physiology*. [Aided in peer review]

# **Manuscripts in Preparation**

**Pelton LM**, Coker N, Mullin EM, Field J. The effects of anabolic-androgenic steroid use and training style on myogenic expression in trained male iron sport athletes. Being prepared for submission to: *Performance Enhancement & Health*.

Browning T, Headley SAE, Loseke J, **Pelton LM**, Stehman M. Exercise as an anti-aging treatment. Being prepared for submission to: *Journal of Clinical Exercise Physiology*.

Hutchinson J, Murphy J, De Lucia B, O'Neill E, Curtis D, Mellano K, **Pelton L**, Coker N. Effects of preferred vs. nonpreferred music on bench press performance: A replication

and extension study. Submitted to: Communications in Kinesiology.

**Pelton LM**, McMahon E. The current state of the sports science field and careers. submitted to: *NSCA Coach*.

# **CERTIFICATIONS**

Certified Strength and Conditioning Specialist National Strength and Conditioning Association	2015
Certified Instructor of Sports Nutrition International Society of Sports Nutrition	2016
Behavior Change Specialist National Academy of Sports Medicine	2018
Corrective Exercise Specialist National Academy of Sports Medicine	2017
Certified Personal Trainer (Inactive) National Strength and Conditioning Association	2013
OTHER PROFESSIONAL EXPERIENCE	
Scientific Content	
ExPhysCast, East Hartford, CT Podcast Co-host	2021-Present
National Strength and Conditioning Association, Colorado Springs, CO Sports Science Intern	Spring 2022
Zachracowperformance.com Contributing Writer	2020
Clinical Work	
Baystate Cardiology, Baystate Health, Springfield, MA Cardiac Rehabilitation Clinical Exercise Physiology Intern	Fall 2021
Sportscare Physical Therapy, Farmingdale, NY Physical Therapy Aide	Spring 2017

# **Coaching**

Strong for Life Co., Remote Head Powerlifting Coach	2022-Present
Springfield College Team Ironsports, Springfield, MA Strength & Conditioning Coaching Intern	Fall 2022-Spring 2023
Black Squirrel Strength & Conditioning, LLC, East Hartford, CT Owner, Head Coach	2019-2020
Hofstra University Continuing Education, Hempstead, NY Sports Strength & Conditioning Camp Instructor	2017-2018
<b>Professional Athletic Performance Center</b> , Garden City, NY Performance Coach	2015, 2018-2019
<b>Hofstra University Department of Campus Recreation</b> , Hempstead, N Powerlifting Club Head Coach	Y 2014-2019
Hofstra University Athletics, Hempstead, NY Strength & Conditioning Intern	Spring 2014
Learning Exercise and the Right Nutrition, Baldwin, NY Personal Trainer	2013-2014
Camp Twin Creeks, Marlinton, WV Activity Specialist	Summer 2011
Other Experience	
Hofstra University Dep't of Health Studies and Kinesiology, Hempste Administrative Assistant	ad, NY 2013-2014
Hofstra University Center for University Advisement, Hempstead, NY University Tutorial Program Student Tutor Anatomy & Physiology, Biology in Society, Exercise Physiology	Fall 2013
<b>The Vitamin Shoppe</b> , Garden City, NY Health Enthusiast	2012-2013
PROFESSIONAL SERVICE & VOLUNTEER WORK	
American College of Sports Medicine, New England Chapter Fall Meeting Session Moderator	Fall 2022

Springfield College Exercise Physiology, Springfield, MA	2020-
Present Social Media Manager Department Apparel Manager	
Springfield College Graduate Student Organization, Springfield, MA Vice President	2021-2022
American College of Sports Medicine, New England Chapter Student Representative	2021-2023
Springfield College Office of Academic Affairs, Springfield, MA Evaluator, Scholars in Action Day	Spring 2021
Clinical Exercise Physiology Association Panel Introducer, CEPA Online Fall 2021 Conference Panel Introducer, CEPA Online Fall 2020 Conference	Fall 2020, 2021
Springfield College Peer Mentor Research Program, Springfield, MA Doctoral Research Peer Mentor	2019-2023
School of PEPSL, Springfield College, Springfield, MA Co-Director, Graduate Research Peer Mentoring Program	2019-2023
Revolution Powerlifting Syndicate Teen and Junior Advisor	2017-2019
Hofstra University Faculty Research Day, Hempstead, NY Presenter	Fall 2017
Learning Exercise and the Right Nutrition, Baldwin, NY Receptionist	Spring 2013
HONORS AND AWARDS	
Legacy Scholarship Recipient, NSCA	2022
PRIDETalks Initiative, Springfield College Spring 2021	
Doctoral Teaching Fellowship, Springfield College	2019-2023
Graduate with Distinction, Hofstra University	Fall 2017

Graduate Physical Education Scholarship, Hofstra University	2016-2017
Graduate Assistantship, Hofstra University	Fall 2014
Magna cum Laude, Hofstra University	Spring 2014
Dean's List, Hofstra University	2010-2014
PROFESSIONAL TRAINING	
Human Subjects Research: Basic Course CITI Program	2021
Preventing Harassment & Discrimination Springfield College	2021
Sexual Assault Prevention for Graduate Students Springfield College	2020, 2021
COMMUNITY SERVICE	
Springfield College Team Ironsports, Springfield, MA \$806 Bench Press for Breast Cancer fundraiser event Breast Cancer Research Foundation	2022
<b>Springfield College Campus Recreation,</b> Springfield, MA \$1,005 Bench Press for Breast Cancer fundraiser event Breast Cancer Research Foundation	2021
Protectors of Animals, South Windsor, CT Wedding favor donation	2020
Hofstra Campus Recreation, Hempstead, NY Thanksgiving Food Drive	2018
Revolution Powerlifting Syndicate, Royersford, PA Thanksgiving Pet Shelter Drive	2017
Snatch and Rescue, Freeport, NY \$500 Fundraiser	2015
EXTRACURRICULAR ACTIVITIES	

Reddit.com  Moderator, /r/exercisescience	2021-Present
Hofstra University Powerlifting Club, Hempstead, NY Club Founder, Captain, President	2013-2014
PROFESSIONAL AFFILIATIONS	
Human Enhancement Drugs Network	2023-Present
American Physiological Society	2021-Present
Clinical Exercise Physiology Association	2020-Present
American College of Sports Medicine	2019-Present
American College of Sports Medicine (New England Chapter)	2019-Present
National Academy of Sports Medicine	2017-Present

# LABORATORY TECHNIQUES

International Society of Sports Nutrition

National Strength and Conditioning Association

### **A** Cardiovascular measurements

■ 12-Lead ECG

Aerospace Physiology Society

Aerospace Medical Association

- Cardiovascular Impedance
- Blood Pressure w/sphygmomanometer
- Pulse Wave Velocity w/sphygmoCor
- Ankle-Brachial Index (ABI) w/doppler ultrasound (Balke protocol)

### **❖** Graded exercise testing

- Bruce protocol
- Cycle ergometry

# **❖** Functional testing

- 6-minute walk test
- Get-up and go test
- Berg balance test
- Sit-to-stand test

2016-Present

2013-Present

2020-2022

2020-2022

### Functional reach test

# **❖** Muscular strength/power assessment

- Biodex isokinetic dynamometer
- EMG
- Handgrip dynamometer
- Resistance exercise
- LESS Landing Scale

# **&** Body composition assessment

- Tanita Digital Scale
- Skinfold measurements w/calipers
- Circumference measures
- BodPod

### **&** Biomechanics

Goniometer measures

### **A** Calibration

- Treadmill
- Cycle ergometer
- Metabolic cart
- Automated sphygmomanometer
- ECG
- Scale
- Spirometer
- BodPod

# **&** Biochemistry Techniques

- Blood processing
- ELISA