

MICHAEL A. FIGUEROA, ED.D., CSCS

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CURRICULUM VITAE

EDUCATION

TEACHERS COLLEGE – COLUMBIA UNIVERSITY
Ed.D., Applied Physiology, December 2006

TEACHERS COLLEGE – COLUMBIA UNIVERSITY
Ed.M., Applied Physiology, October 2004

BROOKLYN COLLEGE CUNY
M.S., Exercise Science and Rehabilitation, February 1999

HUNTER COLLEGE CUNY
B.A., Human Movement Studies, May 1995

WORK EXPERIENCE

FULL PROFESSOR (*FALL 2017 - PRESENT*)

PROGRAM DIRECTOR, GRADUATE STUDIES (*FALL 2017 – PRESENT*)

ASSOCIATE PROFESSOR (*FALL 2014 - 2017*)

UNDERGRADUATE PROGRAM DIRECTOR, EXERCISE SCIENCE (*FALL 2014 – 2017*)

WILLIAM PATERSON UNIVERSITY – WAYNE, NJ (*9/08 – PRESENT*)

DEPARTMENT OF KINESIOLOGY

○ Courses Taught

- KNES 2300: Tests & Measurements
- KNES 3500: Physiology of Exercise
- KNES 4900: Independent Study
- EXSC 3100: Essentials of Strength and Conditioning
- EXSC 3600: Exercise Programs for Older Adults
(formerly PEDA 4620)
- EXSC 4100: Exercise Programs for Special Populations
(formerly EXSC 3300)
- EXSC 4200: Graded Exercise Testing and Prescription
(formerly EXSC 3200)
- EXSC 4300: Advanced Exercise Physiology and Sport Nutrition
(formerly EXSC 4820)
- EXSC 4800: Contemporary Issues
- EXSC 4900: Internship in Exercise Physiology (undergraduate)
- EXSC 5010: Introduction to Interdisciplinary Research (graduate)
- EXSC 5020: Research Methods and Design (graduate)
- EXSC 5030: Seminar in Contemporary Topics (graduate)
- EXSC 6100: Advanced Physiological Principles of Human Performance
(graduate)
- EXSC 6120: Cardiovascular Physiology and Metabolic Diseases (graduate)

- EXSC 7700: Internship and Fieldwork Experience (graduate)
 - EXSC 7800: Thesis Advisement (graduate)
- WPU faculty participant in ACUE (Association of College and University Educators) Microcredential Course on Inspiring Inquiry and Preparing Lifelong Learners: Cohort 115 (Spring 2023)
 - Worked with administration in the changing of the concentrations in MS Exercise and Sport Studies to two new graduate programs for Fall 22: MS Exercise Physiology and MS Sport Administration.
 - Guided and collaborated with colleagues in the development of two 4 + 1 Undergraduate / Graduate program for both the Exercise Physiology and Sport Management / Administration programs which took effect Fall 2022.
 - Update graduate curriculum for courses on the MS Exercise Physiology to transition to a fully online degree program.
 - Develop online webinars and presentations for remote instruction for both undergraduate and graduate courses.
 - Host in-person and virtual Graduate Open House sessions since Fall 2017.
 - Advise all graduate students conducting thesis work by collaborating with faculty sponsors.
 - Purchase necessary equipment for the data collection of all thesis projects.
 - Create webinar presentations and information sessions for the graduate program during the fall, spring and summer semesters.
 - Worked alongside Sport Management faculty in the creation of and successful acceptance the new graduate concentration in Sport Administration, which began in Fall 2019.
 - Collaborate with colleagues in the reevaluation and/or development of new undergraduate and graduate courses
 - Evaluate graduate applications throughout the fall, spring, winter, and summer semesters.
 - Interview, hire and supervise Graduate Assistants.
 - Work closely with members of the Department of Graduate Admissions in the promotion of the two concentrations of the graduate program in Exercise and Sport Studies. This includes, but is not limited to promotional flyers, updating the graduate handbook, open houses, webinars, in-person information sessions with potential applicants, streamlining the review process, and maintaining the website of the program.
 - Reviewer for the American College of Sports Medicine (ACSM) Exercise Prescription and Testing textbook (2017 edition)
 - Contributing author for ACSM Certification Review Manual (2017 edition)
 - National Strength and Conditioning Association (NSCA) Education Recognition Program (ERP) sponsor at William Paterson University (2014 – present)
 - Interim Program Director of Graduate Studies (Spring and Summer 2012)
 - Use laboratory materials as an adjunct to lecture topics for all courses taught.
 - Assist in the supervision of students during their internship studies.
 - Academic Advisor for 20 - 45 students per semester
 - Update, purchase and maintain laboratory equipment, software and hardware.
 - Instructor for American College of Sports Medicine Health Fitness Specialist Certification.

Committee Work

- University
 - ACUE (Association of College and University Educators) – WPU Faculty Participant [Spring 2023]
 - Interprofessional Collaboration Education (IPE) Activity [Fall 2016 – present]
 - New Faculty Mentoring Program [Fall 2013 – Fall 2015]
 - Institutional Review Board Committee (University) [Fall 2010 – 2016]

- Chair of IRB Committee [*Fall 2011 – 2014*]
- College of Science and Health
 - Assessment Committee [*Spring 2010 – 2014*]
 - Search Committee for new faculty in the Department of Nursing [*Fall 2011 – 2015*]
- Department of Kinesiology
 - Budget and Equipment [*Fall 2016 – present*]
 - Department Council [*Fall 2014 – present*]
 - Undergraduate Curriculum [*Fall 2014 – 2016*]
 - Retention Committee for tenure track faculty [*Fall 13 – present*]
 - Graduate Studies Committee [*Fall 13 – present*]
 - Technology Committee (Department of Kinesiology) [*Fall 08 – 2015*]
 - Search Committee for new faculty [*Spring 10 – present*]
 - Recruitment and PR Committee [*Fall 11 – 2015*]

BOARD MEMBER

UNION COUNTY VOCATIONAL TECHNICAL HIGH SCHOOL (*SPRING 2021 – PRESENT*)

- Advise faculty at UC Vocational Tech HS on the development and implementation of an Exercise Physiology course at the high school level
- Advise on curriculum development, suggestions for equipment, and development of laboratory procedures to reinforce lectures.

CONSULTANT

FELICIAN UNIVERSITY OF NEW JERSEY (*SPRING 2017*)

- Review the proposed Bachelor's in Exercise Sports Science program for the School of Arts and Sciences.
- Site evaluation and tour of both the Lodi and Rutherford campuses.
- Provide a detailed written assessment of the proposed program with a recommendation for approval.

SCIENCE TEACHER

MONSIGNOR SCANLAN H.S. – BRONX, NY (*9/04 – 6/08*)

DEPARTMENT OF SCIENCE

- Educate the student body in the following courses:
 - Biology: Living Environment (Sophomores) in preparation for the NYS Regents examination.
 - Anatomy and Physiology (Seniors)
 - Health Education (Sophomores)
 - Physics Honors (Seniors)
 - Coach for Varsity Boys Volleyball, Varsity Girls Volleyball, Intramural Soccer, Assistant Coach for JV Boys Basketball.

ADJUNCT LECTURER

TOURO COLLEGE, NEW YORK

DEPARTMENT OF PHYSICAL THERAPY (*SPRING 2008*)

- Taught a course in Exercise Physiology to doctoral students of Physical Therapy.
- Tailored the curriculum to emphasize the science of Exercise Physiology as it relates to Physical Therapy.
- Developed and conducted laboratory sessions to reinforce lecture materials.

ADJUNCT LECTURER

DOMINICAN COLLEGE, NEW YORK

DEPARTMENT OF HEALTH, PHYSICAL THERAPY (*SUMMER 2006 - FALL 2006*)

- Taught courses in Exercise Physiology, Motor Learning and Research.
- Supervised and advised research for doctoral candidates.
- Provided laboratory instruction for practical application of lecture material.

ADJUNCT LECTURER

QUEENSBOROUGH COMMUNITY COLLEGE CUNY

DEPARTMENT OF HEALTH, PHYSICAL EDUCATION AND DANCE (*SPRING 2006*)

- Developed and implemented a curriculum for teaching a course in Weight Lifting.
- Instruction of various methodologies in exercise program design.
- Hands-on training of movement patterns and analysis of proper techniques.

EXERCISE PHYSIOLOGIST

BETH ISRAEL MEDICAL CENTER – SINGER DIVISION

DEPARTMENT OF REHABILITATION THERAPIES (*12/96 – 8/04*)

- Developed and implemented strength and conditioning programs for a range of patient populations. These included teenage to elderly and laypersons to professional athletes.
- Provided inservices to the Department of Rehabilitation Therapies on topics related to exercise science and rehabilitation.
- Pre-Season stress testing for professional athletes associated with Beth Israel Medical Center.
- Motion analysis, using Biomechanical software, for evaluative and rehabilitative purposes.

ADJUNCT LECTURER

HUNTER COLLEGE CUNY

DEPARTMENT OF CURRICULUM AND TEACHING (*FALL 2001, SPRING 2001, SUMMER 1998*)

- Developed and employed a curriculum for courses in Motor Learning, Foundations of Human Movement, and Biomechanics to undergraduate students.
- Designed laboratories, projects and use of Kinematics Analysis software and other instruments for physiological analysis within the curriculum.

EXERCISE PHYSIOLOGIST

SPORTS CENTER AT CHELSEA PIERS (*1/96 – 12/96*)

- Established fitness evaluation procedures and training protocols for members.
- Strength and cardiovascular fitness testing and training.

RESEARCH ASSISTANT / LABORATORY INSTRUCTOR

HUNTER COLLEGE CUNY

DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION (*3/94 – 7/95*)

- Assisted in research and data collection for studies in electromyography, EKG, and aerobic and anaerobic capacity of various athletes.
- Co-author of EMG research study presented at the 1995 American College of Sports Medicine National Conference.
- Instructor for Kinesiology and Exercise Physiology class laboratories during Fall, Spring, and Summer semesters.
- Designed laboratory sessions and projects to assist students in the learning of the curriculum.

PUBLICATIONS

Peer Reviewed Articles

LaSala, T., Run-Kowzun, T., **Figueroa, M.A.**, “The effect of a Hatha Yoga practice on hamstring flexibility.” *Journal of Body Work and Movement Therapies*, 28 (2021), p. 439-449.

Cola, J., Stiroh, T., **Figueroa, M.A.**, “Effects of Hex-Bar Deadlift Training Loads on Vertical Jump Performance During Complex Training.” *International Journal of Health Sciences*, 9 (1), March 2021, p. 9-16. DOI: 10.15640/ijhs.v9n1a2

LaSala, T., Cola, J., **Figueroa, M.A.**, Hack, D., “Peak Fat Oxidation Rates in Deconditioned Normal Weight Males during Treadmill Walking with Body Weight Support.” *International Journal of Applied Science and Technology*, 10 (4), December 2020, p. 14-22.

Figueroa, M.A. (contributing author), “Is It Safe for My Family to Exercise with Face Masks?” *Parents Magazine*, May 14, 2020.

Louie, K.B., Kollia, B., Vargas, P., **Figueroa, M.A.**, LaSala, T., Emmons, R., “Assessment of Interprofessional Competencies Among Graduate Students in Nursing, Communication Disorders, and Exercise Science in the US.” *International Journal of Applied Science and Technology*, 8 (4), December 2018, p. 10-15.

LaSala, T., Cola, J., **Figueroa, M.A.**, Emmons, R., “Determination of Exercise Intensity that Elicits Maximal Fat Oxidation on a Body Weight Supported Treadmill in Normal Weight Males.” *International Journal of Applied Science and Technology*, 8 (4), December 2018, p. 1-9.

LaSala, T., Cola, J., **Figueroa, M.A.**, Pinto Zipp, G., “Energy Expenditure of Obese Men Walking with Body Weight Support.” *International Journal of Applied Science and Technology*, 7 (3), September 2017, p. 1-8.

Figueroa MA, DiStephano P (*student*), Poole C (*student*), LaSala T, Emmons-Hindelong R, Manning J, “Aerobic Conditioning in Two Simulated Reduced-Gravity Environments Compared to Terrestrial Treadmill Training.” *International Journal of Applied Science and Technology*, 6 (4), December 2016, p. 1-7.

LaSala T, Genevieve Z, DeBari V, **Figueroa MA**, “Physiological Responses of Walking on a Lower Body Positive Pressure Treadmill in Males Classified as Obese.” *International Journal of Applied Science and Technology*, 6 (3), September 2016, p. 58-66.

Maher MT (*student*), **Figueroa MA**, “The Effects of Simulated Altitude Training on Aerobic Capacity and Function.” *International Journal of Applied Science and Technology*, 6 (2), June 2016, p. 11-16.

LaSala T, Genevieve Z, DeBari V, **Figueroa MA**, “Peak Fat Oxidation Rates in Males with Obesity during Treadmill Walking With Body Weight Support.” *International Journal of Applied Science and Technology*, 5 (5), October 2015, p. 10-18.

Wicke J, Gainey K (*student*), **Figueroa MA.**, “A Comparison of Self-administered Proprioceptive Neuromuscular Facilitation to Static Stretching on Range of Motion and Flexibility.” *Journal of*

Strength & Conditioning Research. 28 (1), January 2014. p. 168-172. doi:
10.1519/JSC.0b013e3182956432.

Figueroa MA, Wicke J, Manning J, Escamilla P (*student*), Santillo N (*student*), Wolkstein J, Weis M. "Validation of ACSM metabolic equations in an anti-gravity environment: A pilot study." *The International Journal of Applied Science and Technology*. 2 (7), August 2012, p. 204-210.

Figueroa MA, DeMeersman RE, Manning J. "The autonomic and rate pressure product responses of Tai Chi practitioners." *North American Journal of Medical Sciences*, 4 (6), June 2012, p. 270-275.

Figueroa MA, Manning J, Escamilla P (*student*). "Physiological responses to the AlterG Anti-Gravity treadmill." *The International Journal of Applied Science and Technology*. 1 (6), December 2011, p. 92-97.

Peer Reviewed Abstracts

Wicke J, Breeman K (*student*), Abdallah K, **Figueroa MA**, "Relationship Between Anthropometric Measures and Bicycle Seat Height in Non-Cyclists." *12th International Conference on Kinesiology and Exercise Sciences*, Athens, Greece July 25-28, 2016

LaSala T, Zipp GP, **Figueroa M**, Debari V, "The Effects of Lower Body Positive Pressure Treadmill Walking on Fat Oxidation in Overweight/Obese Males." *International Journal of Exercise Science: Conference Proceedings*: 9 (3), Article 52, 2015

Gainey, K., Wicke, J., **Figueroa, M**. "A Comparison of Self-Administered Proprioceptive Neuromuscular Facilitation To Static Stretching On Range of Motion and Flexibility," *International Journal of Exercise Science: Conference Proceedings*: 9 (1), Article 23, 2013

Figueroa MA, Manning J, Wolkstein JM, Escamilla P (*student*). "Metabolic responses when jogging on an anti-gravity treadmill." *Medicine and Science in Sports & Exercise*, Volume 44, Number 5, Supplement to May 2012, p. 533.

Figueroa MA, Schmidt G, Manning J, "Selection of upper or lower body video games affects energy expenditure." *Medicine and Science in Sports & Exercise*, Volume 42, Number 5, Supplement to May 2010, p. 746.

Burke TJ, Sierra N, **Figueroa MA**, "Upper body muscle activity during lower body exercise." American College of Sports Medicine National Conference, May 1995.

Manuscripts in progress

Figueroa MA, Emmons R, LaSala T, Cola, J., "Long slow distance training vs. high intensity interval training in a simulated reduced gravity-gravity environment."

Featured in

WPU NEWS (2016) *Students from Three Majors Come Together for One Project in the Name of Health*
William Paterson University adopts uncommon approach to interprofessional education

retrieved from link:

<http://www.wpunj.edu/articles/news/2016-12-13/interprofessional-education-pilot-program/>

Melone L., “The Awesome Stretch You’ve Never Heard Of.” *Prevention*. February 12, 2014.

Contributing Author

American College of Sports Medicine (ACSM) *Exercise Testing and Prescription, 1st ed.* (2018)

American College of Sports Medicine (ACSM) *Certification Review Manual* (2017)

Reviewer

American College of Sports Medicine (ACSM) *Exercise Prescription and Testing textbook* (2017 & 2022 editions)

DOCTORAL ADVISOR

LaSala T., “Estimation of lipid oxidation in obese individuals on an Anti-Gravity treadmill.” (doctoral thesis, Seton Hall University, successfully defended December 2014)

THESIS ADVISOR

Massa, I, “Freezing of Gait and Balance in People with Parkinson’s Disease after 6 Weeks of Virtual Reality Training.” (graduate thesis – Fall 2023)

Khormi, T, “Analysis of Students’ Attitudes Towards Physical Education and their Preferences of Sports and Activities.” (graduate thesis – May 2021)

Lawler, C, “Vertical Jump: Do Different Types of Tape Enhance Jump Height?” (graduate thesis - May 2020)

Diorio, P, “The effects of dry cupping and Instrument Assisted Soft Tissue Mobilization (IASTM) on active and passive ROM.” (graduate thesis - May 2020)

Run-Kowzun T, “The Effect of a 7-Week Yoga Intervention on Hamstrings Flexibility.” (graduate thesis - May 2020)

Erol, ME, “Determination of Heart Rate Percentages at Anaerobic Threshold and the Accuracy of Different Types of Heart Rate Monitors.” (graduate thesis May 2019)

Simon N, “Blood Pressure Response to Chiropractic Manipulation in Hypertensive Individuals.” (graduate thesis – May 2019)

Robbins, Z., “The Effects of Self-Myofascial Release on Anaerobic Power.” (graduate thesis – May 2018)

Mather, M., “The Effects of Simulated Altitude Training on Aerobic Capacity and Function.” (graduate thesis – May 2016)

Carpenter, T., “Effects of Power Output Utilizing Post-Activation Potential versus Static Stretching on the Vertical Jump.” (graduate thesis – December 2014)

Ehlers M., “Estimation of 1-Repetition Maximum Bench Press from Push-Up Endurance Test.” (graduate thesis – May 2013)

Greenberg H., “Fitness information assessment.” (graduate thesis – May 2013)

Monberger M., “Carbohydrate ingestion and aerobic performance.” (graduate thesis co-advisor – May 2013)

DiStefano PJ., “Training benefits of maximal oxygen consumption using an anti-gravity treadmill versus a terrestrial treadmill.” (graduate thesis – May 2012)

CURRENT RESEARCH AGENDA

Bilateral Body Composition Measures and the Development of Genderless Equations for Assessment

The use of a Virtual Reality Simulated Environment and its effect on improving function in an individual with Parkinson’s Disease.

Long slow distance training vs. high intensity interval training in a simulated reduced gravity-gravity environment.

STUDENT SPONSORED RESEARCH

Figueroa MA, DiStephano P (*student*), Poole C (*student*), LaSala T, Emmons-Hindelong R, Manning J, “Aerobic Conditioning in Two Simulated Reduced-Gravity Environments Compared to Terrestrial Treadmill Training.” *International Journal of Applied Science and Technology*, 6 (4), December 2016, P.1-7.

Maher MT (*student*), **Figueroa MA**, “The Effects of Simulated Altitude Training on Aerobic Capacity and Function.” *International Journal of Applied Science and Technology*, 6 (2), June 2016, p. 11-16.

Figueroa MA, DiStephano P (*student*), Poole C (*student*), LaSala T, Emmons-Hindelong R, Manning J, “Aerobic Conditioning in Two Simulated Reduced-Gravity Environments Compared to Terrestrial Treadmill Training.” *International Journal of Applied Science and Technology*, 6 (4), December 2016, p. 1-7.

Wicke J, Gainey K (*student*), **Figueroa MA.**, “A Comparison of Self-administered Proprioceptive Neuromuscular Facilitation to Static Stretching on Range of Motion and Flexibility.” *Journal of Strength & Conditioning Research*. 28 (1), January 2014. doi: 10.1519/JSC.0b013e3182956432. p. 168-172.

EDUCATIONAL PRESENTATIONS AND PROGRAMS

Chimenti J, Cola J, Wicke J, **Figueroa MA**, Sprinting Velocity Increases Through Postactivation Potentiation with a Hex-Bar Farmers Walk, Mid-Atlantic Regional Chapter of the American College of Sports Medicine Annual Meeting. November 4-5, 2022, Harrisburg, PA.

Figueroa MA, Emmons-Hindelong R, The Role of Sport Nutrition for Health and Wellness. Invited lecturers for the Health Expo at Roxbury High School, Succasunna, NJ. May 2022.

LaSala T, **Figueroa MA**, To Determine the Effect of a 7-Week Hatha Yoga Practice on Hamstring Flexibility, 2nd International Conference on Alternative Medicine, Wellington, England, October 26, 2021 (online conference)

Erol ME, **Figueroa MA**, Hadzovic E., The Accuracy of Heart Rate Monitors and Determination of Heart Rate Percentages at Anaerobic Threshold, 67th Annual Meeting of the American College of Sports Medicine (ACSM), San Francisco, CA. May 30, 2020 (online conference)

Louie K, Kollia B, Vargas P, **Figueroa M**, LaSala T, Emmons R., The Implementation and Evaluation of Interprofessional Education (IPE) in the Graduate Nursing Program. Sigma Theta Tau International Nursing Research Congress, Calgary, Canada. July 26, 2019.

Erol ME, **Figueroa MA**, Hadzovic E., Determination of Heart Rate Percentages at Anaerobic Threshold and the Accuracy of Different Types of Heart Rate Monitors. William Paterson University Explorations. April 4, 2019.

Simon N, LaSala T, **Figueroa MA**. Blood Pressure Response to Chiropractic Manipulation in Hypertensive Individuals. William Paterson University Explorations. April 4, 2019.

Shah N, Slazar C, LaSala T, **Figueroa MA**. Physical Therapy for Bilateral Knee Osteoporosis. William Paterson University Explorations. April 4, 2019.

Run-Kowzun T, LaSala T, **Figueroa MA**. The Effect of a 7-Week Yoga Intervention on Hamstrings Flexibility. William Paterson University Explorations. April 4, 2019.

Meola C, Ferrucci M, Lyons T, **Figueroa MA**, LaSala T. Effects of Chiropractic Treatment to Minimize Symptoms of Dizziness and Vertigo. William Paterson University Explorations. April 2, 2019.

Johnson B, LaSala T, **Figueroa MA**, Dextrocardia in 35-Year Old Female. William Paterson University Explorations. April 2, 2019.

Mortensen T, Emmons RR, **Figueroa MA**. The effect of sucrose vs. non-nutritive sweeteners on blood glucose levels during exercise. Mid-Atlantic Regional Chapter of the American College of Sports Medicine Annual Meeting. November 2-3, 2018, Harrisburg, PA.

Patel K, LaSala T, Emmons RR, **Figueroa MA**, Cola JL, Dabon J. Caffeine Supplementation Effects on Repeated Wingate Sprints. Mid-Atlantic Regional Chapter of the American College of Sports Medicine Annual Meeting. November 2-3, 2018, Harrisburg, PA.

Emmons RR, **Figueroa MA**, LaSala T. Postprandial lipemic responses after acute high intensity short duration and low intensity long duration exercise. American College of Sports Medicine Annual Meeting. May 30-June 2, 2018, Minneapolis, Minnesota.

LaSala T, Cola J, Emmons RR, **Figueroa MA**, Frabasile F. Acute Physiological Responses During Steady State and High Intensity Interval Training in Inactive Men. American College of Sports Medicine Annual Meeting. May 30-June 2, 2018, Minneapolis, Minnesota.

Emmons RR, **Figueroa MA**, LaSala T. Postprandial Lipemic Responses after a High-Fat Meal and Low- or High-Intensity Exercise. William Paterson University Explorations. April 12, 2018.

Robbins, Z., **Figueroa MA**, “The Effects of Self-Myofascial Release on Anaerobic Power.” William Paterson University Explorations. April 12, 2018.

Patel K, LaSala T, Cola J, Emmons R, **Figueroa M**, Dabon J. Caffeine Supplementation Performance Effects on Sprint Interval Exercise. William Paterson University Explorations. April 12, 2018.

Mortensen T, Emmons R, **Figueroa M**. The Effect of Sucrose vs. Non-Nutritive Sweeteners on Blood Glucose Levels During Exercise. William Paterson University Explorations. April 12, 2018.

Louie K, Kollia B, Vargas P, **Figueroa M**, LaSala T, Emmons R., Evaluation of Interprofessional Competencies among Graduate Nursing, Communication Disorders, and Exercise Science Students. William Paterson University Explorations. April 10, 2018.

Aura L, LaSala T, **Figueroa M**. The Acute Physiological Adaptations of High Intensity Interval Training on an Anti-Gravity Treadmill. William Paterson University Explorations. April 10, 2018.

LaSala T, Cola J, Zipp G, **Figueroa M**. Energy Expenditure of Obese Men Walking with Body Weight Support. William Paterson University Explorations. April 10, 2018.

Quinn E, **Figueroa M**. Cardiac Rehabilitation Case Study. William Paterson University Explorations. April 10, 2018.

K. Louie, PhD, APN FAAN, B. Kollia, PhD, CCC-SLP, **M. Figueroa, Ed.D**, P. Vargas, DNP, APN (2017). *A Pilot Interprofessional Education Activity: Application for Readiness for Interprofessional Education (IPE) Learning*. April 13, 2017 Sigma Theta Tau International Nursing Honor Society, Iota Alpha Chapter Annual Research Conference- *Nurses' Influence Through Evidenced Based Research*, William Paterson University, Wayne NJ.

K. Louie, PhD, APN FAAN, B. Kollia, PhD, CCC-SLP, **M. Figueroa, Ed.D**, P. Vargas, DNP, APN (2017). *A Pilot Interprofessional Education Activity: Application for Readiness for Interprofessional Education (IPE) Learning*. Tuesday, April 4, 2017, Explorations 2017: Research, Scholarship and Creative Expression, William Paterson University of NJ.

LaSala T, **Figueroa MA**. “Peak Fat Oxidation Rates in Males with Obesity during Treadmill Walking with Body Weight Support” American Society of Exercise Physiologist Conference, Bethlehem, PA, April 18, 2015.

LaSala T, **Figueroa MA**. “The Effects of Lower Body Positive Pressure Treadmill Walking on Fat Oxidation in Overweight/Obese men.” Mid-Atlantic Regional Chapter of the American College of Sports Medicine Annual Regional Meeting, Harrisburg, PA. October 31, 2014

Figueroa MA, “Vigorous and High Intensity Training with an Anti-Gravity Treadmill.” Mid-Atlantic Regional Chapter of the American College of Sports Medicine Annual Regional Meeting, Harrisburg, PA. November 1, 2013.

Figueroa MA, Manning J, Schmidt G, “Ventilatory Threshold Responses at Different Percentages of Body Weight on the AlterG® Anti-Gravity Treadmill: A Pilot Study.” Mid-Atlantic Regional Chapter of the American College of Sports Medicine Annual Regional Meeting, Harrisburg, PA. November 1, 2013.

Figueroa MA, Wicke J, Gainey K, “A Comparison of Self-Administered Proprioceptive Neuromuscular Facilitation to Static Stretching on Range of Motion and Flexibility.” Mid-Atlantic Regional Chapter of the American College of Sports Medicine Annual Regional Meeting, Harrisburg, PA. November 2, 2012.

Figueroa MA, Manning J, Schmidt G, “Validation of ACSM Metabolic Equations in an Anti-Gravity Environment: A Pilot Study.” Mid-Atlantic Regional Chapter of the American College of Sports Medicine Annual Regional Meeting, Harrisburg, PA. November 2, 2012.

Figueroa MA, Manning J, Schmidt G, “Metabolic Responses When Jogging on an Anti-Gravity Treadmill.” American College of Sports Medicine Annual Conference, San Francisco, CA., May 31, 2012.

Figueroa MA, Manning J, Schmidt G, “Physiological Responses to the AlterG Anti-Gravity Treadmill” Research and Scholarship Day, William Paterson University, April 5, 2012.

Figueroa MA, “Autonomic Responses of Tai Chi Practitioners.” Mid-Atlantic Regional Chapter of the American College of Sports Medicine Annual Regional Meeting, Harrisburg, PA. November 4, 2011.

Figueroa MA, “Autonomic Responses of Tai Chi Practitioners.” Research and Scholarship Day, William Paterson University, April 7, 2011.

Figueroa MA, Manning J, Schmidt G, “Selection of Upper or Lower Body Video Games Affects Energy Expenditure.” American College of Sports Medicine Annual National Conference, Baltimore, MD. June 4, 2010

Figueroa MA, Manning J, Schmidt G “Technology vs. Physiology” during the Research and Scholarship Day, William Paterson University, April 1, 2010.

Instructor for ACSM Health Fitness Specialist Certification (WPU) (Summer 2009-present).

Inservice for Athletic Training Majors on the proper use of the Biodex Isokinetic Dynamometer. This inservice addressed topics such as device calibration, set-up, test selection, test administration and the interpretation of the results. Spring 2011.

Women’s Health & Fitness Night at the Rec Center, March 25, 2010. Provided a station for body composition assessment with students of the Kinesiology Department.

“Healthy Kids Day” at the Wyckoff YMCA. Provided physiological measures (blood pressure, body composition) and information to parents and children during the annual event with students from William Paterson University. Spring 2009.

Presenter to Beth Israel Medical Center – Department of Physical Medicine and Rehabilitation.

“Dynamic Strengthening” (2/04)

“Efficiency of Program Design Using a Periodized Protocol” (3/01)

“Strength Testing and Assessment for Program Design” (6/01)

“Skeletal Muscle Adaptations to Strength and Power Training. Periodization vs. Traditional Methods.” (2/99)

“Cardiovascular Testing & Training” (11/98)

“Training and Overtraining” (9/97)

“Motion Analysis” (2/97)

“Flexibility Training” (12/96)

Motion Analysis Lab, Beth Israel Medical Center – Department of Physical Medicine and Rehabilitation, (12/96 – 8/04).

PROFESSIONAL ORGANIZATIONS

- International Sports Sciences Association (ISSA) (6/21 – present)
- Clinical Exercise Physiology Association (CEPA) (6/12 – present)
- American College of Sports Medicine – National Member (12/09 – present)
- Mid-Atlantic Regional Chapter (MARC) American College of Sports Medicine (9/11 – present)
- National Strength and Conditioning Association (8/98 – present)
- Kappa Delta Pi – International Honors Society (12/03 – present)
- Greater New York Regional Chapter – American College of Sports Medicine: [Continuing Education Committee] (9/94 – 2/96)

GRANTS

- Collaborated with Dr. Jason Wicke and Dr. Racine Emmons on obtaining an NIH grant to support research on segmental inertial body changes in pregnant women performing activities of daily living (9/15 – 6/17).

CERTIFICATIONS

- ACUE (Association of College and University Educators) Microcredential Course on Inspiring Inquiry and Preparing Lifelong Learners: Cohort 115 (Spring 2023)
- International Sport Sciences Association – Certified Nutritionist (3/22 – present)
- National Strength and Conditioning Association – Certified Strength and Conditioning Specialist (8/98 – present)
- Maximum Performance International – Flexibility Technician (7/96 – present)
- American Red Cross – CPR/AED (12/08 - present)

SKILLS

- Knowledge of Mac OS X, Windows, MS Office, Word Perfect, Metabolic Analysis software, MedGraphics systems, BioRadio Autonomic Physiology System, Vivotronics VivoSense Autonomic Physiology Software, AlterG Anti-Gravity Treadmill, Biodex Isokinetic Dynamometer, Kinematic Analysis, Blackboard, LabView and other software and hardware applications.
- Foreign Language Skills: Spanish (Fluent), Japanese (Elementary)
- Martial Arts (43+ years of training)