Michael J. Ryan, Ph.D.

College of Physical Activity and Sport Sciences

West Virginia University

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EDUCATION

**Ph.D. Exercise Physiology**

West Virginia University, Morgantown, WV  2003-2010

**Dissertation topic**: Aging-Dependent Effects of Training and

Antioxidant Supplementation on Oxidative Stress in Skeletal Muscle

**Masters of Education** specializing in *Exercise Physiology* 1997-2001

Auburn University, Auburn, Alabama

**Bachelor of Science** in *Exercise Physiology*  1992-1997

West Virginia University, Morgantown, West Virginia

ACADEMIC PROFESSIONAL POSITIONS

**West Virginia University**, Morgantown WV Aug 2019-present

Teaching Assistant Professor, Athletic Coaching Education

Athletic Coaching Education Program Coordinator, College of Physical Activity and Sport Sciences

**Fairmont State University**, Fairmont WV Aug 2009-July 2010

Associate Professor of Exercise Science in the School of Education, Department of Health & Human Performance

COACHING EXPERIENCE

Head Boys & Girls Cross Country Coach 2010-present

**Morgantown High School,** Morgantown, WV

Assistant Track & Field Coach 2011- present

**Morgantown High School,** Morgantown, WV

Head Youth (1st &2nd graders) Basketball Coach Winter 2019-2020

**Eastwood Basketball League,** Morgantown, WV

Head Track & Field Coach 2005-2010

**Morgantown High School,** Morgantown, WV

Women’s Assistant Cross Country / Track & Field Coach 2000-2003

**George Mason University,** Fairfax, VA

Volunteer Assistant Track & Field Coach 2000 Season

**West Virginia University,** Morgantown, WV

Graduate Assistant Cross Country / Track & Field Coach 1997-1999

**Auburn University,** Auburn, AL

TEACHING EXPERIENCE

Teaching Assistant Professor, Athletic Coaching Education, **West Virginia University**, Morgantown WV

Undergraduate Classes Taught at West Virginia University

ACE 256 Principles and Problems of Coaching. 3 Hours.

ACE 410 Training Theories for Coaches. 3 Hours.

ACE 430 Coaching Education Administration. 3 Hours.

ACE 475 Strength and Conditioning Internship. 3 Hours.

PET 124 Human Body: Structure and Function. 2 Hours.

PET 125 Principles of Human Movement. 2 Hours.

Graduate Classes Taught at West Virginia University

ACE 530 Coaching Education Administration. 3 Hours.

ACE 539 Create Healthy Competitive Environments. 3 Hours. (online course)

ACE 568 Sport Movement Analysis. 3 Hours.

Associate Professor of Exercise Science, **Fairmont State University**, Fairmont, WV

Undergraduate Classes Taught at Fairmont State University

HLTA 1100 Personal Health

HLTA 1150 Intro to Health

PHED 1100 Fitness & Wellness

PHED 1100 Fitness & Wellness (Honors Section)

PHED 2211 Anatomy & Physiology

PHED 2211 Anatomy & Physiology (Honors Section)

PHED 3313 Biomechanics

PHED 3316 Fitness Assessment & Exercise Prescription

PHED 3317 Clinical Applications of Exercise Physiology

PHED 3360 Strength & Conditioning

PHED 4410 Research Design Seminar

PHED 4410 Research Design Seminar (Honors Section)

PHED 4420 Internship

Graduate Classes Taught at Fairmont State University

PHED 6413 Neuromuscular Exercise Physiology II

PHED 6416 Advanced Strength & Conditioning

PHED 6480 Seminar in Exercise Science

(Athlete Development, Iron Deficiencies in Athletes & Strength Training in Endurance Athlete)

PHED 6490 Internship in Exercise Science

PHED 6499 Thesis Research

Graduate Assistant **West Virginia University School of Medicine**, Morgantown, WV

EXPH 365 Section; Body Composition, Energy Balance & Weight Fall 2008 & Spring 2009

Control: Undergraduate Students (10% of Total Course)

EXPH 365 Section; Exercise, Successful Aging & Disease Prevention: Fall 2008 & Spring 2009

Undergraduate Students (5% of Total Course)

Teaching Assistant at **Auburn University**, Auburn, AL

Class Instructor for Weight Training I & II Fall 1999

Designed and implemented syllabus and course-work

ADMINISTRATIVE DUTIES

Program Coordinator for Athletic Coaching Education, **West Virginia University**, Morgantown WV

Organized and ran regular programmatic meetings and participate in PC meetings

Handled daily student/faculty issues, including course substitution requests

Represented ACE major for all University organized recruitment events as well as individual student requests to meet with an ACE faculty member

Served as the point person for program and course changes in CIM and course catalog

Approved transfer credits

Coordinated course scheduling and found adjuncts to teach courses.

Coordinated assessment planning process and reporting

Served on CPASS's Undergraduate Curriculum and Student Awards Committee

Coordinated graduate admission decisions

MENTORING EXPERIENCE

Jacob Whitmore FSU Graduate Thesis Committee 2018

Thesis – *Shoulder Flexibility Training and Injuries in Collegiate Baseball Players*

Robert Jesmer FSU Graduate Thesis Committee Chair 2017

Thesis – *4 Week foam roller training program shows no increase in flexibility of the hamstrings, low back, thoracic spine, and shoulders*

Douglas Renshaw FSU Graduate Thesis Committee 2014

Thesis *- Unilateral Balance Training and Cross Education as Assessed by the Star Excursion Balance Test*

Brittany Tallhammer FSU Graduate Thesis Committee Chair 2013

Thesis - *The Effects of Vision Eye Training on Softball Skill Performance*

Jon Adams FSU Graduate Thesis Committee 2013

Thesis - *Speed Training: Impact of Land vs Aquatic Environment*

Megan Docherty WV-INBRE 2006 Summer Research Program

Project - *Effects of Antioxidant Supplementation and Repetitive Loading on the Expression of Antioxidant Genes*

Holly Dudash WV-INBRE 2005 Summer Research Program

Project - *Oxidative Stress and Antioxidant Treatment in Tibialis Anterior Muscle of Aged Rats*

SERVICE TO UNIVERSITY

Member FSU Institution Review Board Fall 2017 - present

Member Graduate Faculty Council Fall 2015 - present

Member Faculty Harassment Committee Fall 2014 – present

Member Faculty Senate Ad-hoc Technology Committee Spring 2013 - 2016

Member Committee on Committees Spring 2013 & 2014

Member Faculty Senate (HHP Dept. Representative) Spring 2010 - Spring 2014

Member Faculty Development Committee Fall 2010 - Spring 2012

Member Graduate Studies Marketing and Recruiting Subcommittee Fall 2011 - Spring 2012

Member of the FSU Diversity Work Group Spring 2011 - Spring 2013

SERVICE TO COLLEGE of EDUCATION

Co-development and Implementation of the M.Ed. in Exercise Science, Fitness & Wellness

 Implemented Fall 2011

Member of Ad Hoc Committee to Develop Standardized Exam Acceptance Scores for

SoEHHP Graduate School Admission (GRE, MAT ect) Fall 2011

PDS Liaison Spring 2010-Fall 2013

SERVICE TO THE DEPT of HEALTH & HUMAN PERFORMANCE

Oversee Exercise Science Program Assessment and Mapping Fall 2018

Chair Search Committee, School Health Education Position Spring 2018

Member Search Committee, School Health Education Position Spring 2016

Advise Exercise Science Undergraduate Majors Spring 2010-present

Exercise Science Curriculum revision Fall 2014

Organized a Graduate/Public Symposium Lecture Series Spring 2014

Co-Designed program goals for assessment of the

Exercise Science Graduate Program into Taskstream Summer 2014

Co-Designed program goals for assessment of the

Exercise Science Undergraduate Program into Taskstream Summer 2013

 Member Search Committee, School Health Education Position Spring 2013

Member Search Committee, Public Health Education Position Spring 2013

Member Search Committee, Physical Education Position Fall 2012 – Spring 2013

Chair Search Committee Exercise Science Position Fall 2012

Exercise Science Curriculum revision Fall 2012

New Faculty Mentor Fall 2011 – Fall 2012

Member Search Committee, Health Education Position Spring 2011

Member Search Committee Exercise Science Position Spring 2011

Member Faculty Development Committee Fall 2011 - Spring 2013

Member Graduate Recruiting and Marketing Subcommittee Fall 2011-Spring 2012

Exercise Science Curriculum Review Committee Fall 2009 - present

SERVICE TO THE FIELD & COMMUNITY

Peer Reviewer for the International Journal of Exercise Science 2012-present

Peer Reviewer for the Journal of Diabetes Research 2018-present

Invited Guest Lecturer at in the WVU College of Physical Activity and Sports Sciences - ACE 359 Techniques of Coaching: Track, Morgantown WV Fall 2013 & Spring 2017

Guest counselor US Naval Academy Summer Distance Camp 2001-2004 & 2017

Coach for North Elementary Girls on the Run team, Morgantown WV Spring 2015

Invited to the kindergarten classes at Suncrest Primary School in Morgantown WV to explain the physical activity section of the Food Pyramid and to lead the class in examples of types of physical activity that could be performed indoors during the winter months February 2011 & 2012

Assisted in planning, organizing and running the annual “FIELD DAY” at Suncrest Primary School in Morgantown WV 2011-2014

Head Boys & Girls Cross Country Coach – Morgantown High School 2010-present

 Coached five State Championships teams and four runner-up finishes

2017 USTFCCCA West Virginia High School Boys Cross Country Coach of the Year

 2017 NFHS West Virginia High School Girls Cross Country Coach of the Year

 2017 NFHS Mid-East High School Girls Cross Country Coach of the Year

2019 USTFCCCA West Virginia High School Boys Cross Country Coach of the Year

Volunteer Assistant Track& Field Coach – Morgantown High School 2010-present

Head Boys Track & Field Coach – Morgantown High School 2005-2010

PEER-REVIEWED PUBLICATIONS

Samuel Aloi, **Michael Ryan**, Paul Reneau, Julia Matzenbacher dos Santos. The relationship

among throwing velocity, one-repetition maximum bench press and squat and body composition in

college baseball pitchers. Revista Portuguesa de Ciências do Desporto (RPCD)/ Portuguese Journal of Sport Sciences 19(1): 64-71 Epub 2019, Jan 5 <https://doi.org/10.5628/RPCD.19.01.64>

Durbin SM, Jackson JR, **Ryan MJ**, Gigliotti JC, Alway SE, Tou JC. Resveratrol supplementation preserves long bone mass, microstructure, and strength in hindlimb-suspended old male rats.

J Bone Miner Metab. 2014 Jan;32(1):38-47. Epub 2013 May 19 PMID: 23686002

Durbin SM, Jackson JR, **Ryan MJ**, Gigliotti JC, Alway SE, Tou JC. Resveratrol supplementation influences bone properties in the tibia of hindlimb-suspended mature Fisher 344 × Brown Norway male rats.

Appl Physiol Nutr Metab. 2012 Dec;37(6):1179-88. doi: 10.1139/h2012-099. Epub 2012 Oct 10.

PMID: 23050779

[**Ryan MJ**](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Ryan%20MJ%22%5BAuthor%5D), [Jackson JR](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Jackson%20JR%22%5BAuthor%5D), [Hao Y](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Hao%20Y%22%5BAuthor%5D), [Leonard SS](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Leonard%20SS%22%5BAuthor%5D), [Alway SE](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Alway%20SE%22%5BAuthor%5D). Inhibition of xanthine oxidase reduces oxidative stress and improves skeletal muscle function in response to electrically stimulated isometric contractions in aged mice. [Free Radic Biol Med.](http://www.ncbi.nlm.nih.gov/pubmed/21530649) 2011 Jul 1;51(1):38-52. Epub 2011 Apr 7.

Jackson JR, **Ryan** **MJ**, Alway SE. [Long-term supplementation with resveratrol alleviates oxidative stress but does not attenuate sarcopenia in aged mice.](http://www.ncbi.nlm.nih.gov/pubmed/21454355) J Gerontol A Biol Sci Med Sci. 2011 Jul;66(7):751-64. Epub 2011 Mar 31.

Jackson JR, **Ryan MJ**, Hao Y, Alway SE. [Mediation of Endogenous Antioxidant Enzymes and Apoptotic Signaling by Resveratrol Following Muscle Disuse in the Gastrocnemius Muscles of Young and Old Rats.](http://www.ncbi.nlm.nih.gov/pubmed/20861279)

*Am J Physiol Regul Integr Comp Physiol*. 2010 Dec:299(6): R1572-81. Epub 2010 Sep 22.

**Ryan MJ**, Dudash HJ, Docherty M, Geronilla KB, Baker BA, Haff GG, Cutlip RG, Alway SE.

[Vitamin E and C supplementation reduces oxidative stress, improves antioxidant enzymes and positive muscle work in chronically loaded muscles of aged rats.](http://www.ncbi.nlm.nih.gov/pubmed/20705127) *Exp Gerontol. 2010 Aug 10*.

**Ryan MJ**, Jackson JR, Hao Y, Williamson CL, Dabkowski ER, Hollander JM, Alway SE.

[Suppression of oxidative stress by resveratrol after isometric contractions in gastrocnemius muscles of aged mice.](http://www.ncbi.nlm.nih.gov/pubmed/20507922) *J Gerontol A Biol Sci Med Sci. 2010 Aug;65(8)*:815-31. Epub 2010 May 27.

**Ryan MJ**, Dudash HJ, Docherty M, Geronilla KB, Baker BA, Haff GG, Cutlip RG, Alway SE.[Aging-dependent regulation of antioxidant enzymes and redox status in chronically loaded rat dorsiflexor muscles.](http://www.ncbi.nlm.nih.gov/pubmed/18948551)

*J Gerontol A Biol Sci Med Sci. 2008 Oct;63(10)*:1015-26.

Siu PM, Pistilli EE, **Ryan MJ**, Alway SE. [Aging sustains the hypertrophy-associated elevation of apoptotic suppressor X-linked inhibitor of apoptosis protein (XIAP) in skeletal muscle during unloading.](http://www.ncbi.nlm.nih.gov/pubmed/16127099)

*J Gerontol A Biol Sci Med Sci. 2005 Aug;60(8)*:976-83.

PEER REVIEWED PUBLISHED ABSTRACTS

**Michael J. Ryan**, Courtney Webb, Shinichi Asano, Paul Reneau. Cold-Water Immersion Attenuated Muscle Soreness after Plyometric Training while having no Impact on Sprint Performance: *Medicine & Science in Sports & Exercise*. May 2018 – Volume 50 – Issue 5S – 677

Jacob Whitmore, **Mike Ryan**, Shinichi Asano, Paul Reneau. Impact of Wearing Compression Pants on HR, RPE, Lactic Acid During a Submaximal Run: *Medicine & Science in Sports & Exercise*. May 2018 – Volume 50 – Issue 5S – 772-773

Nicole J. Uccello, Courtney L. Stack, **Michael J. Ryan**, Paul Reneau Reneau, Shinichi Asano Paul D.; Asano, Shinichi. Comparing Positional Differences In Physical and Performance Assessments Among Acrobatics and Tumbling Athletes: *Medicine & Science in Sports & Exercise*. May 2018 – Volume 50 – Issue 5S – 674

**Michael J. Ryan**, Matthew Robinson, and Jessica Alsup. The Effects of Caffeine and Pre workout Supplementation on Exercise Repetition during Sets and Muscular Endurance. *Medicine & Science in Sports & Exercise*: May 2017 - Volume 49 - Issue 5S - p 295

Paul Reneau, Alex Swauger, **Michael J. Ryan**. Blood Pressure Responses To Wearing An Abdominal Belt When Performing Differing Static Exercises. *Medicine & Science in Sports & Exercise:* May 2017 - Volume 49 - Issue 5S - p 903–904

### Kayla Hartley, Michael J. Ryan, Jessica Alsup, Shinichi Asano, Paul Reneau. Beetroot Supplementation Effects On Exercise Performance During Cycling And Oxidative Damage. *Medicine & Science in Sports & Exercise:* May 2017 - Volume 49 - Issue 5S - p 939

### Michael J. Ryan, Jessica Lego, Jessica Alsup, Paul Reneau. The Effect of Music and Sensory Deprivation on Exercise Cycling Performance, *Medicine & Science in Sports & Exercise:* May 2016 - Volume 47 - Issue 5S - p 376

Diane McKee, **Michael J. Ryan**, Jessica Alsup, Paul Reneau. Preschoolers Increased their Heart Rate when Music is Played Halfway through a 30 Minute Play-Period. *Medicine & Science in Sports & Exercise:* May 2016 - Volume 48 - Issue 5S - p 768

### Julia Falkenklous, Jessica Alsup, Michael Ryan, Paul Reneau. Effect of Caffeine and Rest Time on Repeated Sprint Running Performance *Medicine & Science in Sports & Exercise*: May 2015 - Volume 47 - Issue 5S - p 376

Nicole Sena, Jessica Alsup, Kristi Kiefer, **Michael Ryan**, Paul Reneau. Fitness Level Changes During an Acrobatic & Tumbling Season. *Medicine & Science in Sports & Exercise*: May 2015 - Volume 47 - Issue 5S - p 541

### DeLawder, Virginia, Reneau Paul, and Mike Ryan. The Optimal Gear for Recreational Cyclists Using Equal Power Outputs*. Medicine & Science in Sports & Exercise: Vol. 46 # 5* 530 Suppl. May 2014. #3495

**Michael J. Ryan**, Jobey Knapton, Paul Reneau. The Effect of Cold Water Immersion on Repetitive 1600m Run Performances in College-Aged Distance Runners. *Medicine & Science in Sports & Exercise: Vol. 45 # 5* Suppl. May 2013.

Ryan Watts, Paul Reneau, **Michael J. Ryan**, Douglas Powell, Jerry Mayhew. Comparison of One Rep Max Bench Press to a Rep to Max Equation of Ten, Seven and Three Reps. *Medicine & Science in Sports & Exercise: Vol. 45 #* 5 Suppl. May 2013.

Matthew Wilmer, Paul Reneau, **Michael J. Ryan**, Douglas Powell, Jerry Mayhew. Effect of Rest Interval on Repetition Performance in Successive Bench Press. *Medicine & Science in Sports & Exercise: Vol. 45 #* 5 Suppl. May 2013.

Paul Reneau, **Mike Ryan**, William Brechue, Thomas Pujol, Brian Mann, Jerry Mayhew. Accuracy of 1-RM Bench Press Prediction Equations in Untrained, Trained and Athletic College-Age Men. *Medicine & Science in Sports & Exercise: Vol. 45 #* 5 Suppl. May 2013.

Brittany Tallhammer, Randy Bryner,  **Michael J. Ryan**, Paul Reneau. The Effects of Vision Eye Training on Softball Skill Performance. *Medicine & Science in Sports & Exercise: Vol. 45 # 5* Suppl. May 2013.

### Julia Falkenklous, Amanda Morgan, Nicholas Hanson, Michael J. Ryan, Paul Reneau, Douglas Powell. Fatigue-induced median frequency shifts in healthy aging and Parkinson's disease. *Medicine & Science in Sports & Exercise: Vol. 44 # 5* Suppl. May 2012. #2182

Heidi Bastin, Douglas Renshaw, Nicholas Hanson, Matthew R. Bice, **Michael J. Ryan**, Paul Reneau, James Eldridge, Douglas Powell. Relationship between Lean Mass and Coactivation during Downward Stepping with Advancing Age. *Medicine & Science in Sports & Exercise: Vol. 44 # 5* Suppl. May 2012. #2199

Brittany Tallhammer, **Michael J. Ryan**, Katie Burgess, Paul Reneau, Randy Bryner. The Effects of Vision Training on Softball Performance. *Medicine & Science in Sports & Exercise: Vol. 44 # 5* Suppl. May 2012. #2283

Brandon Skoff, Paul Reneau, **Michael J. Ryan**, Jerry Mayhew, William Brechue. Effects of Training Status on Bench Press Prediction Accuracy from Repetitions and Lifting Load. *Medicine & Science in Sports & Exercise: Vol. 44 # 5* Suppl. May 2012. #2893

Paul Reneau, Brandon Skoff, Jerry Mayhew, **Michael J. Ryan**, Thomas Pujol. Accuracy of 1-RM Bench Press Prediction Equations in College-Age Men. *Medicine & Science in Sports & Exercise: Vol. 44 # 5* Suppl. May 2012. #2894

Jon Adams, Paul Reneau, **Michael J. Ryan**. Speed Training: Impact of Land vs Aquatic Environment. *Medicine & Science in Sports & Exercise: Vol. 44 # 5* Suppl. May 2012. #3007

### Mathew Ceran, Michael J. Ryan & Paul Reneau, Effects of Land and Aquatic Plyometric Training on the Vertical Jump Test. *Medicine & Science in Sports & Exercise: Vol 43 #5 Suppl May 2011* # 968

### Dale Childs, Paul Reneau & Michael J. Ryan The Effects of Core Strength Training on Maximal 800m Run Performance *Medicine & Science in Sports & Exercise: Vol 43 #5 Suppl May 2011* #2764

Joel DiStefano, Paul Reneau, **Michael J. Ryan** & Jerry L Mayhew, Can Maximal Squat Be Predicted from Structural and Anthropometric Dimensions? *Medicine & Science in Sports & Exercise: Vol 43 #5 Suppl May**2011* #2329

Lauren Gilbert, Paul Reneau & **Michael J. Ryan,** The Effect of an Acute Intake of Creatine Supplementation on Intermittent Sprints. *Medicine & Science in Sports & Exercise: Vol 43 #5 Suppl May**2011* #2962

### Michael J. Ryan, Janna R. Jackson, and Stephen E. Always Inhibition of xanthine oxidase activity reduced oxidative stress, apoptosis and improved muscle function in the plantar flexors from young and aged mice. *Medicine & Science in Sports & Exercise:* 2009

Janna R. Jackson, **Michael J. Ryan**, Steven M. Regal, Stephen E. Alway, **Resveratrol Preserves Muscles Mass, Force Output and Mediates Oxidative Stress in Gastrocnemius Muscles from Hindlimb Suspended Rats**. *Medicine & Science in Sports & Exercise:* 2009

**Ryan, M.J.**and S.E. Alway. Regulation of oxidative stress by resveratrol in repetitively loaded mice gastrocnemius muscles. *FASEB J.* 2008 22:1235.7

**Ryan, M.J.**, H.J. Dudash, M. Docherty, K.B. Geronilla, B.A. Baker, R.G. Cutlip, S.E. Alway. Effects of Antioxidant Supplementation and Repetitive Loading on Biomarkers of Oxidative Stress in Aged Rats. *FASEB J.* 2007, 21:732.3

Janna R. Jackson, **Michael J. Ryan**, Brent A. Baker, Robert G. Cutlip, Stephen E. Alway. Antioxidant Supplementation May Partially Ameliorate Apoptosis in the Extensor DigitorumLongus Muscle of Aged Fischer 344 Brown X Norway Rats. *FASEB J*. 2007, 21:943.6

**Ryan, M.J.**, H. Dudash, P.M. Siu, E. E. Pistilli, D.C. Butler, J.R. Jackson, R.G.Cutlip, and S.E. Alway.  Antioxidant Supplementation and Repetitive Loading on Markers of Oxidative Stress in Aged Rats *Medicine & Science in Sports & Exercise:* 38(5) [Suppl.], S522, 2006

Megan Docherty, **Michael J. Ryan**, Ken B. Geronilla, Emidio E. Pistilli, Janna R. Jackson, Stephen E. Alway. Effects of Antioxidant Supplementation and Repetitive Loading on the Expression of Antioxidant Genes*WV-INBRE 2006 Summer Research Symposium*

Jackson, J.R., P.M. Siu, E.E. Pistilli, J.M. Peterson, **M.J. Ryan**, D.C. Butler and S.E. Alway. Hindlimb Suspension does not Exacerbate Apoptotic Signaling in the Lateral Gastroc Muscles of Aged Rats *Medicine & Science in Sports & Exercise:* 38(5) [Suppl.], S64, 2006

Pistilli, E.E., P.M. Siu, D.C. Butler, J.R. Jackson, J.M. Peterson, **M.J. Ryan**, and S.E. Alway. TNF-α Associated Death Receptor Signaling in Aged Skeletal Muscle. *Medicine & Science in Sports & Exercise:*  38(5):S62, [Suppl.] 2006

Siu, P.M., Pistilli, E.E., Butler, D.C., Peterson, J.M., **Ryan, M.J.**, Jackson, J.R., and S.E. Alway  Stretch overload-induced hypertrophy is associated with apoptotic changes in young and aged quail fast muscles. *Medicine & Science in Sports & Exercise:* 38(5) [Suppl.], S275, 2006

Jonathan M Peterson, Randall W Byner, Emidio E Pistilli, Janna R Jackson, David C Bulter, **Michael J. Ryan**, Parco M Sui, and Stephen E Alway. Influence of myogenic regulatory factors on muscle mass of obese Zucker rats. *FASEB J.* 2006 20: A1171-A1172

DC Butler; EE Pistilli; PM. Siu; **M.J. Ryan**; Jonathan M. Peterson; JR Jackson; SE. Alway, Phospho-ablated Id2S5A is Growth Suppressive and Pro-apoptotic in Proliferating C2C12 Myoblasts: 842: *Medicine & Science in Sports & Exercise:* 38(5): S62 [Suppl] May 2006.

**Ryan, M.J.**, P.M. Siu, E.E. Pistilli, and S.E. Alway. Apoptotic repressors are expressed differently in atrophied young adult and old muscles following hypertrophy. *Medicine & Science in Sports & Exercise:* 37(5) [Suppl.] S32, 2005uiuy

**Ryan, M.J.** and D.D. Pascoe Influence of a cooled vest on time to raise core body temperature*. Medicine & Science in Sports & Exercise:* 32(5) [Suppl.], S902, 2000

PEER-REVIEWED PRESENTATIONS

**Michael J. Ryan**. Cold-Water Immersion Attenuated Muscle Soreness after Plyometric Training while having no Impact on Sprint Performance: 2772 Board #55 *American College of Sports Medicine (ACSM) National Conference 2018 (Poster Presentation)*

**Michael J. Ryan**. The Effects of Caffeine and Pre workout Supplementation on Exercise Repetition during Sets and Muscular Endurance: 1075 Board #254 *American College of Sports Medicine (ACSM) National Conference 2017 (Poster Presentation)*

**Michael J. Ryan.** The Effect of Music and Sensory Deprivation on Exercise Cycling Performance. 462 Board #299  *American College of Sports Medicine (ACSM) National Conference 2016 (Poster Presentation)*

**Michael J. Ryan**. Effect of Caffeine and Rest Time on Repeated Sprint Running Performance. *American College of Sports Medicine (ACSM) National Conference 2015 (Poster Presentation)*

**Michael J. Ryan**. Fitness Level Changes During an Acrobatic & Tumbling Season. *American College of Sports Medicine (ACSM) National Conference 2015 (Poster Presentation)*

**Michael J. Ryan**. The Effect of Cold Water Immersion on Repetitive 1600m Run Performances in College-Aged Distance Runners. *American College of Sports Medicine (ACSM) National Conference 2013 (Poster Presentation)*

**Michael J. Ryan**. Accuracy of 1-RM Bench Press Prediction Equations in Untrained, Trained and Athletic College-Age Men. *American College of Sports Medicine (ACSM) National Conference 2013 (Poster Presentation)*

**Michael J. Ryan.** Effect of Rest Interval on Repetition Performance in Successive Bench Press. *American College of Sports Medicine (ACSM) National Conference 2013 (Poster Presentation)*

### Michael J. Ryan Effects of Land and Aquatic Plyometric Training on the Vertical Jump Test. *American College of Sports Medicine (ACSM) National Conference 2011 (Oral Presentation)*

### Michael J. Ryan The Effects of Core Strength Training on Maximal 800m Run Performance *American College of Sports Medicine (ACSM) National Conference 2011 (Poster Presentation)*

### Michael J. Ryan Inhibition of xanthine oxidase activity reduced oxidative stress, apoptosis and improved muscle function in the plantar flexors from young and aged mice. *ACSM National Conference 2009* (Oral)

**Michael J. Ryan** Loading and Unloading Induces an Age-Dependent Regulation of Antioxidant Enzymes and Redox Status in Quail Patagialis Muscles, *ACSM National Conference 2008* (Oral)

**Michael J. Ryan** Regulation of oxidative stress by resveratrol in repetitively loaded mice gastrocnemius muscles *Experimental Biology Meeting2008, Abstract#1235.7* (Poster)

**Michael J. Ryan** Effects of Antioxidant Supplementation and Repetitive Loading on Biomarkers of Oxidative Stress in Young Adult and Aged Rats *Experimental Biology Meeting 2007, Abstract #72.3* (Poster)

**Michael J. Ryan** Antioxidant Supplementation and Repetitive Loading on Markers of Oxidative Stress in Aged Rats *ACSM National Conference 2006* (Poster)

**Michael J. Ryan** Apoptotic repressors are expressed differently in atrophied young adult and old muscles following hypertrophy. *ACSM National Conference 2005* (Poster)

**Michael J. Ryan** Influence of a cooled vest on time to raise core body temperature. *ACSM National Conference 2000* (Poster)

**Michael J. Ryan** Influence of a cooled vest on the thermoregulatory responses while wearing a protective barrier suit. *Southeastern Regional Conference of ACSM 2000* (Poster)

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GRANTS

Fairmont State University,

Strategic Implementation Awards, February 2012 $14,900

Replacement of Cycle Ergometers and Heart Rate monitors in the Human Performance lab

Fairmont State University,

Faculty Development Grant, February 2012 $250

Strength and Conditioning Specialist Certification for Exercise Science Faculty

Fairmont State University,

Strategic Implementation Awards, February 2011 $36,000

Replacement of Treadmills in Human Performance Lab

PROFESSIONAL AFFILIATION

Member of the American College of Sports Medicine 2005-present

National Federation of High School (NFHS) 2012-present

USATF Level 1 Certified Coach 1997

NON-PEER REVIEWED PUBLICATIONS

Technical Advisor/Contributing Author to Cassie Shortsleeve in the Article “When to take an Ice Bath” August 2, 2018 “Furthermore” Equinox’s online editorial website. https://furthermore.equinox.com/articles/2018/08/ice-baths

Technical Advisor/Contributing Author to Cassie Shortsleeve in the Article “How Exercise Today Affects You Tomorrow - Five perks of fitness, from a healthier future and a fitter body to a stronger mind.” November 2017 WeightWatchers online Newsletter - [www.weightwatchers.com/us/article/future-benefits-exercise](http://www.weightwatchers.com/us/article/future-benefits-exercise)

Technical Advisor/Contributing Author to Cassie Shortsleeve in the Article “5 Signs You Have a Weak Core - Plus, the one move that will firm up your midsection in no time.” August 2017 WeightWatchers online Newsletter - www.weightwatchers.com/us/article/5-signs-you-have-weak-core

Technical Advisor/Contributing Author to Cassie Shortsleeve in the Article "Why Weightlifting Is a Sport for \*Every\* Body" from August 6, 2016, online edition of Shape Magazine.

http://www.shape.com/fitness/training-plans/morghan-king-proves-weightlifting-sport-everybody

Technical Advisor/Contributing Author to Cassie Shortsleeve in the Article "The 6 Signs of a Good Workout" from the November 30, 2015 “Furthermore” Equinox’s online editorial website.

https://furthermore.equinox.com/articles/2015/11/signs-of-a-good-workout

Technical Advisor/Contributing Author to Cassie Shortsleeve in the Article "8 Bizarre Side Effects That Happen to Your Body during Exercise" from the July 2015 online edition of Men’s Health Magazine.

www.menshealth.com/fitness/weird-effects-of-exercising

Technical Advisor/Contributing Author to Cassie Shortsleeve in the Article "How Much Am I Supposed to Sweat During a Workout?" from the June 2015 Outside Online Magazine.

www.outsideonline.com/1986896/how-much-am-i-supposed-sweat-during-workout

Technical Advisor/Contributing Author to Cassie Shortsleeve in the Article " 8 SURPRISING COOL-DOWN HACKS" from the May 2015 “Q” Equinox’s online editorial website.

furthermore.equinox.com/articles/2015/05/cool-down-hacks

Technical Advisor/Contributing Author to Cassie Shortsleeve in the Article “CHANGE YOUR (WORKOUT) SURFACE, CHANGE YOUR BODY” from the April 2015 “Q” Equinox’s online editorial website.

furthermore.equinox.com/articles/2015/04/surface-workout

Technical Advisor/Contributing Author to Cindy Kuzma in the Article "Soft Landings" from the June 2013 edition of Runner’s World Magazine.

http://www.runnersworld.co.za/training/soft-landings/

Technical Advisor/Contributing Author to Cindy Kuzma in the Article "Splish-Splash Speed" from the November 2012 edition of Women’s Health Magazine.

LABORATORY PROFICIENCIES

**Human:**

Athlete Monitoring

VO2 max & sub-max Testing

Running Economy

Blood Lactate Levels

Blood Glucose

Body Composition Testing

Measuring Core Body Temperature

1-RM testing

Flexibility Testing

Cardiac Rehabilitation (Phase 2 & 3):

 Exercise Prescription

 EKG

 HR & Blood Pressure

**Live Animal**:

Small animal surgery (Birds & Rodents)

Surgical implantation

Dietary Supplementation

*In vivo* Neural Activation

*In vivo* Muscle Function Analyses (Dynometer)

Establishment and Maintenance of Transgenic Mice Colonels

**Cell Culture**:

C2C12 myoblasts

Fluorescence-activated cell sorting (FACS)

Bacteria (Cloning and Isolation)

**Molecular Biology:**

Immunoblot analysis

Total and Sub-cellular protein isolation

Immunoprecipitation

Immunohistochemistry

DNA & RNA isolation

Primer design

RT- PCR

Enzyme Activity Assay

Genotyping