

# **BRENT A. ALVAR, PH.D, CSCS\*D, TSAC-F, FNCSA, FACSM**

## **Point Loma Nazarene University**

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## **EDUCATION**

### **Arizona State University: Ph.D. 2000**

#### **Curriculum and Instruction: Exercise and Wellness Education**

Dissertation: Maximal Strength Measurement of the Hamstring Musculature Using Isometric and Isokinetic Techniques.

### **Arizona State University: M.S. 1997**

#### **Exercise Science and Physical Education: Emphasis - Exercise and Wellness**

Thesis: Isometric and Isokinetic Strength Measurement: Possible Error In Criterion For Hamstring Strain Prediction.

### **Arizona State University: B.S. 1992**

#### **Exercise Science and Physical Education: Concentration**

Exercise Physiology/Biomechanics

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## **PROFESSIONAL EXPERIENCE**

### **Point Loma Nazarene University**

San Diego California: August 2017 – present

#### **Professor – Kinesiology**

Teach courses in both the graduate and undergraduate programs in Kinesiology. Primary emphasis will be research, evidence-based practice and strength & conditioning focusing on sport and tactical populations. In addition, responsibilities will center around mentoring graduate students on their research and scholarly endeavors.

### **Rocky Mountain University of Health Professions**

Provo Utah: September 2011 – August 2017

#### **Professor – Health Science**

#### **Vice President of University Research:** January 2015 – April 2016

Oversee all areas of research (scholarship of discovery) for the University with a primary emphasis on developing an Office of University Research, which oversees all faculty and student research activity. As such, the VPUR nurtures quality research, scholarship and creative activity by faculty, staff and students, supports the University's mission, and promotes and enhances the University's contribution to clinical inquiry. The VPUR provide strategic direction and oversight for the development of program scope, direction, administration, fiscal planning and resources allocation as well as sponsorship and grant opportunities

#### **Associate Dean of Research:** January 2014 – January 2015

The Director of Research assumes a central role in providing research mentoring for students and faculty as well as guidance in establishing and assisting them in meeting dissertation or research agenda expectations.

**Director of Research/Program Director – Doctor of Philosophy in Health Sciences:**

September 2011 – December 2013

Revamped the RMUoHP research program and worked to create a seamless process for students and faculty.

**Maricopa Community College – Chandler-Gilbert Community College**

Chandler, Arizona: August 2000 – December 2011

**Faculty Wellness, Sport Performance Director, Human Performance Lab Director**

Created a new academic program (Exercise Science), worked closely with Arizona State University in creating a seamless 2 + 2 curriculum for students desiring a career in Exercise and Wellness. Supervised the Pecos and Williams Fitness Center as well as Sport Performance Director for the CGCC student athletes. Hired and supervision of 40+ adjunct faculty. Directed the Human Performance Laboratory.

**Rocky Mountain University of Health Professions**

Provo Utah: January 2011 – September 2011

**Graduate Program Director/Professor of Health Promotion and Wellness**

Oversaw all areas of a multidisciplinary post-professional doctorate of philosophy program with a focus of developing leaders in the integration and practice of health promotion and wellness research and scholarship

**Arizona State University (Polytechnic Campus)**

Mesa, Arizona: July 2001 – May 2009

**Assistant Research Professor** – College of Arts and Applied Science;  
Exercise and Wellness Department

Taught a variety of classes, mentored master and doctoral graduate students, conducted and oversaw research in the area of strength measurement, exercise for the purpose of strength gain and health related benefits from strength training.

**Universidad Europea de Madrid**

Madrid Spain: July 2009 – December 2009

**Visiting Scholar** – Department of Physical Activity and Health

Participated as a visiting scholar at the Universidad Europea de Madrid (UEM) while on sabbatical in Madrid Spain, and during this time; taught, lectured and engaged in various scholarly projects in and around Spain.

**Maricopa Community College – Chandler-Gilbert Community College**

Williams Campus, Mesa, Arizona: January 1999 – August 2000

**Fitness and Wellness Coordinator** – Wellness Division

Designed and implemented fitness center and wellness programs concurrently. Planned budgeted and achieved program goals; analyzed relevant data; trained and supervised fitness staff: demonstrated and interpreted information related to physical fitness; oversaw the facility utilization and maintenance.

**Maricopa Community College-Chandler-Gilbert Community College**

Williams Campus, Mesa, Arizona: January 1997 – January 1999

**Fitness Instructor /Adjunct Faculty**

Conducted exercise testing involving body composition, cardiovascular, strength and flexibility measures. Provided exercise prescription for varying student and community populations. Taught basic health, fitness, wellness, as well as strength and conditioning classes.

**East Valley Physical Therapy and Aquatic Rehabilitation**

Mesa, Arizona: September 1988 – August 1996

**Coordinator**

Provided supervision and direction for fitness instructors and staff. Designed and implemented individual strength, cardiovascular, flexibility and work hardening programs. Addressed individual patient concern and performed general administrative duties.

## **TEACHING EXPERIENCE**

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### **Point Loma Nazarene University**

#### **KIN660 Directed Readings**

Designed and taught a course that provides advanced study in the essential research of a specific discipline in Kinesiology. Fundamental skills in reading and evaluating research will be acquired, including examining research paradigms, critically appraising study design and findings, and determining the practical relevance of the results.

#### **KIN650 Seminar in Kinesiology**

Designed and taught a course that provides students with guidance in the research process to deepen knowledge in an area of their professional interest. Students complete and present an original research project including preliminary statistical design, data collection, data analysis, and presentation of results.

#### **KIN625 Sports and Tactical Strength and Conditioning**

Designed and taught a course that exposes students to various methods and strategies in both sport and tactical strength and conditioning. Students examine research and practice of different methods currently in use in the field and discuss in the literature on selected topics and demonstrate appropriate implementation of advanced training methods. Additionally, this course refines the students' ability to construct an advanced training program designed to enhance performance in specific ways.

#### **KIN610 Evidence-Based Practice and Decision Making in Kinesiology**

Taught a course that enabled students to practice the judicious use of current best evidence in making decisions about the care of individual patients and clients. Students learned to integrate the best external evidence with their clinical expertise and patient concerns to ask a focused question to satisfy the health needs of a specific patient, find the best evidence by searching the literature, critically appraise the literature, apply the results in clinical practice, and evaluate the outcomes in patients.

#### **ATR605 Research Methods and Statistical Techniques for Clinical Decision Making in Sports Medicine**

Design and taught a course that explores the variety in research design and statistics commonly used in clinical research, further developing student analytical skills needed to support professional evidence-based practice in athletic training. Students will evaluate the merit and relevance of published research to the practice of athletic training from the perspective of experimental methodology and design. This course also provides an overview of statistics including descriptive and inferential statistics and one-way ANOVA. Students will select a topic of interest related to athletic training, conduct a review of the literature, define a research question, and prepare and present a report to their peers.

#### **EXS370 Praxis of Strength Training and Conditioning**

Taught a course on the application of concepts of exercise science in the development and practice of strength training and conditioning programs. Kinesiatrics, movement to enhance athleticism, physical efficiency, and organismic wellness, was practiced. The course also prepared student for the National Strength and Conditioning Association – Certified Strength and Conditioning Coach Certification exam

## **Rocky Mountain University of Health Professions**

**CC899B/CC833B Dissertation Phase Course - *Preparing for the Dissertation:***  
**(Ph.D./DSc. in Health Science)** Designed and implemented a course to assist students in their initial dissertation phase of their academic program. Emphasis was placed on the socialization process of the dissertation, including forming a committee, overcoming challenges and obstacles, time management and development of the dissertation prospectus/proposal.

**CC844A/CC877A Dissertation Phase Course - *Developing the Dissertation:***  
**(Ph.D./DSc. in Health Science)** Designed and implemented a course to assist students in the dissertation phase of their academic program. Emphasis was placed on the structuring and formatting the dissertation proposal as well as a discussion of writing goals for the dissertation process.

**CC844B/CC877B Dissertation Phase Course *Professional Development:***  
**(Ph.D./DSc. in Health Science)** Designed and implemented a course to assist students in the dissertation phase of their academic program. Emphasis was placed on research ethics as well as professional development and preparation for scholarly activities post-graduation.

**HS810 Dissertation Prep/Proposal Defense (DSc. in Health Science)**  
Designed and implemented a course that prepared students for the dissertation phase of the degree program. Students prepared and presented their dissertation proposal to their peers and a panel of experts. Feedback and guidance was provided to students to insure a viable and comprehensive dissertation project was in place by the conclusion of the semester.

**HS800 Proposal Writing: (Core Course for all Ph.D. and DSc. Students)**  
Designed and implemented a course that provided students with the necessary background and experience to formulate a clearly delineated, hypothesis-driven research proposal that can be used to convince funding agencies and/or doctoral committees to support the study.

**HS 712-2 Research Methods: A Quantitative Approach**  
**(core course for all DSc. CScD Students)**  
Introductory course to general research principles and research ethics. Topics included in the research process include: problem statement, question formulation, principles of measurement, basic design and methodological features, issues of reliability and validity and fundamentals of conducting a literature review.

**HP 710 Applications of Exercise Science in Tactical Fitness and Performance**  
**(DSc. In Health Science – Human and Sport Performance)**  
Designed and implemented this course to introduce students to the various methods and strategies for improving performance in military, law enforcement, and fire department venues. Topics such as injury prevention and tactical job preparation are discussed with students completing applied projects in selected tactical operations. Tactical fitness research and literature will serve as the content for developing professionals capable of supporting the tactical field with evidence-based practice.

**HP 704 Methods and Programming in Strength and Conditioning (DSc. In Health Science – Human and Sport Performance)**

Designed and implemented this course to expose students to advanced methods in various venues of strength and conditioning. Current research and practice are examined for advanced training strategies in use at different levels of competition. Students will examine different methods currently in use in the field and discussed in the literature on selected topics and demonstrate appropriate implementation of advanced training methods. Additionally, this course will refine the students' ability to construct an advanced training program designed to enhance performance in specific ways.

**HS 620 Program Design as related to Strength and Conditioning: (MSHS Sport Performance Students)**

Designed and implemented a course that examines the outcomes associated with differential resistance training regimens. Emphasis is placed on training principles centered around periodization, variation, and progression of the acute program variables of frequency, intensity, volume, and rest across cycles of training to prevent overtraining and promote optimization of performance in various areas.

**CC608 Scientific/Professional Writing: (Core Course for all Ph.D. and DSc. Students)** Designed and implemented a course that explored databases such as PubMed, Cochrane, and the cumulative index to nursing and allied health literature (CINAHL). Used the bibliographic data management program EndNote to highlight The American Medical Association (AMA) as well as The American Psychological Association (APA) guidelines for preparation of formal papers.

**AT605/OS603.2 Applied Exercise Science: (Ph.D. in Orthopaedic and Sports Science and Athletic Training Concentrations)** Designed and taught a course using the current best evidence related to non-contact injury risk prediction/prevention research. Additional emphasized the principles of conditioning and exercise science. The course provided discussion of muscle physiology and its relationship to strength, power and endurance. Topics included progressive resistance exercise, muscle contraction types, impact loading, plyometrics, sports conditioning for the healthy individual and general principles of conditioning in rehabilitation.

**WE602 Exercise Testing & Prescription: (Ph.D. in Health Promotion and Wellness Concentration).** Designed and implemented a course centered around the principles of testing and prescribing exercise for the cardiopulmonary, musculoskeletal and neurological systems based on current evidence as related to populations with and without disability. Concepts included testing and training for aerobic and anaerobic condition; muscular strength, endurance and power; flexibility enhancement; and balance through out the lifespan.

**AG552 Exercise Interventions for Aging Adults: (Transitional Occupational Therapy Doctoral Program: Aging Track)** Designed and implemented a course an inquiry into physiological capacity of adults with particular emphasis on the role of exercise as a life prolonging intervention. Focus is on best available evidence to maintain vitality and mobility in aging adults facing problems with cardiopulmonary, musculoskeletal and nervous systems. Intervention related to aerobic and anaerobic fitness as well as strength training, flexibility and balance will be emphasized.

**Chandler Gilbert Community College: Wellness & Sport Performance**

**EXS239: Practical Applications of Personal Training Skills and Techniques Internship:** Designed and implanted an internship program at Chandler-Gilbert

Community College that encompassed work experience in both the fitness centers as well as the sports performance facility. Additionally, oversaw outside internship experiences in related facilities. Each credit was (80) hours of designated work experience.

**WED230 Kinesiology for Massage Therapy:** Designed and implemented a course to instruct a new cohort of massage therapy students in the study of kinesiology (applied anatomy).

**PED225, PED224, PED125, PED124: Sports Conditioning:** Sport Performance Director: Developed and supervised the implementation of sports and fitness conditioning programs for CGCC athletics in the areas of Volleyball, Basketball, Soccer, Golf, Baseball and Softball.

**PSY215 Sport Psychology:** Designed and implemented a course on sports psychology for our new degree program.

**WED200: Personal Wellness:** Designed and implemented a course to instruct a group of at-risk youth in the topics of personal wellness; including physical fitness cardiorespiratory endurance, muscular strength and endurance, flexibility, body composition, putting together a complete fitness program, nutrition, weight management, stress, cardiovascular health, cancer, substance use and abuse, sexually transmissible diseases, and wellness for life.

**FSC134: Fitness and Conditioning for Firefighters:** Designed the conditioning programs for students desiring entry into the fire fighter academy courses at Mesa Community College, by means of evaluating their current level of fitness specific to firefighter preparedness

**PED115: Lifetime Physical Fitness:** Taught courses in the development of a lifetime regiment of regular exercise. Students in this course received an orientation, taught about and given appropriate fitness evaluations and an appropriate program was designed and tailored to their needs. Students were educated about nutrition, body composition and various lectures on health and wellness.

**PED117: Weight Training for Wellness:** Taught courses in the development of a lifetime regiment of exercise, stress management and proper nutrition focusing on weight training.

**PED101XP: Weight Training:** Taught this introductory course designed to give students a basic understanding of weight training techniques, the proper use of equipment and knowledge of personal fitness and conditioning programs.

**HES100: Healthful Living:** Taught an interactive lecture hall of 75+ students a course on healthful living. This included topics on physical activity, nutrition, stress management, alcohol, drugs and sexually transmitted diseases to name a few.

**(Online):** developed the online curriculum for this class

**PED100: Physical Conditioning:** Designed and implemented a course to instruct a group of at-risk youth in the topic of strength training; including: exercise choice, program design, safety considerations and fitness evaluation.

**Arizona State University: Department of Exercise and Wellness**

**EXW 598 - EXW460 Resistance Training Application and Theory**

Designed and implemented a graduate/undergraduate class on the principles and theoretical background of resistance training as well as appropriate application of exercise prescription for resistance training.

**EXW534 – EXW494 Sport Performance**

Designed and implemented a course of the scientific basis of sport conditioning. This includes a needs analysis of the various contributions of each component of fitness to an individual and team sport: cardiovascular fitness, aerobic and anaerobic power, strength, flexibility and body composition as a means of directing appropriate sport specific exercise prescription modeling.

**EXW425 Exercise Prescription:** Taught this course, which is intended to help students understand the theoretical basis and practical application of general principles of physical activity and exercise prescription to various ages, fitness levels and health states.

**EXW330: Kinesiological Foundations of Movement**

Developed and taught this course which introduced students to the science of human movement. It is comprised of the practical application of how muscles function including origins, insertions, actions, innervations and applicable lifts, with the goal of having the ability to analyze any exercise or sports activity and to indicate the muscle groups being utilized.

**EXW325 Fitness For Life (Online)**

Designed and implemented the fitness for life class as an internet class. Topics of instruction included flexibility, muscular strength and power, muscular endurance, questionable exercises, sports/skill-related fitness, body mechanics, time management, wellness and healthy living, stress management and relaxation.

**Arizona State University: Department of Exercise Science and Physical Education****EPE325 Fitness For Life**

Taught this non-exercise science majors course that is meant to help develop an understanding of fitness leading to a lifetime of physical activity. Topics included: flexibility, muscular strength and power, muscular endurance, questionable exercises, sports/skill-related fitness, body mechanics, time management, wellness and healthy living, stress management and relaxation.

**EPE300 Foundations of Exercise and Wellness**

Taught this 300 level exercise science majors course on the scientific, educational, legal, economic, psycho-social and cultural impact on the health and wellness related professions/disciplines.

**EPE200 Introduction to Exercise Science and Physical Education**

Taught this course, which is intended as the introduction for students considering or just beginning a major in field of exercise science and physical education. The course identified and reviewed each of the sub disciplines that make up the cross-discipline of exercise science, and the professions also associated with the field.

**EPE 110 Movement Analysis Racquetball**

Taught his introductory course for exercise majors focusing on techniques and teaching skills for the sport of racquetball.

### **EPE 100 Introduction to Health and Wellness**

Teaching assistant for this introductory course on stress management, nutrition, and physical fitness. Lead and supervised collaborative activities.

### **Research Assistant: Arizona State University**

#### **Hispanic Tobacco Grant: Arizona Department of Health and Human Services**

August 1995 – May 1996

Assisted with the development of a Hispanic Peer Leadership Program in tobacco prevention for grades three through eight, developed a workbook to assist in education and prevention of adolescent tobacco use, and conducted research on validity and efficacy of the program.

## **PROGRAM AND CURRICULUM DEVELOPMENT**

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### **Rocky Mountain University of Health Professions**

**Doctor of Science in Health Science (Concentration Human and Sport Performance):** Instrumental in the creation and implementation of the post-professional program in the science of human and sport performance. This program offers expanded study in the advanced skills of applied sport science, human performance evaluation, strength and conditioning methods, training program design for various populations, the use of advanced coaching theories and strategies, advanced nutrition, and the development and use of technology in various areas of sport and occupational performance.

**Master of Science in Health Science:** Was instrumental in writing the curriculum and designing the overall degree program, which is for bachelors prepared individuals who are employed as strength coaches personal trainers, certified athletic trainers, military personnel, coaches and physical educators who are interested in pursuing an advanced degree related to their respective professions.

**Doctor of Science in Health Science:** Was instrumental in the writing and oversight of the curriculum relative to biostatistics, research methods, scientific/professional and proposal writing. The courses are designed to expand scientific inquiry and advance knowledge of the professorate.

### **Maricopa County Community College District/Arizona State University**

**EXS 218 Cardiorespiratory Exercises and Activities:** Instructional Comp. Lab Fundamental methods of instructing and leading fitness activities including cardiorespiratory exercises and activities. Course addresses core competencies identified by professional certification agencies.

**EXS 216 Muscular Strength and Conditioning: Instructional Competency Lab** Fundamental methods of instructing and leading fitness activities including resistance training activities. Course addresses core competencies identified by professional certification agencies

**EXS 214 Flexibility and Mind-Body Exercises: Instructional Competency Lab** Fundamental methods of instructing and leading fitness activities including aerobic, resistance and flexibility activities. Course addresses core competencies identified by professional certification agencies



## Arizona State University

### **EXW598 Resistance Training Application and Theory**

Fosters critical thinking as it applies to resistance training theory.

### **EXW494 Sport and Fitness Conditioning**

Bases of sports and fitness conditioning, including aerobic and anaerobic power, strength, flexibility and analysis of conditioning components for sports and fitness.

### **EXW330 Kinesiological Foundation of Movement**

Study and consideration of human movement with emphasis on kinesiology principles and their application to movement and fitness.

### **EXW325 Fitness for Life (Online)**

Physical fitness and benefits of exercise with emphasis on self-evaluation and personalized program planning for a lifetime.

## Chandler-Gilbert Community College

### **PED124 (Basic), PED125 (Intermediate), PED224 (Advanced), PED225 (Elite) Strength and Conditioning for Sport Performance**

Designed and implemented a two year curriculum based on the principles and training techniques of strength and conditioning for sport performance. Emphasis is placed on instructional techniques and safety of Olympic lifts; plyometrics; muscular endurance, strength and power development; anaerobic and aerobic capacity; and injury prevention.

### **PED 101 (Basic), PED201 (Intermediate), PED201 (Advanced), PED202 (Elite)**

Designed and implemented a two year curriculum for physical activity courses including: BA Baseball; BB Basketball; FB Football; GO Golf; SB Softball; SO Soccer; ST Strength Training; TE Tennis; TF Track and Field; VB Volleyball; & WT Weight for students to engage and perform the fundamental skills of the chosen activity with special regard to body mechanics, health and safety.

## **RESEARCH/SCHOLARSHIP**

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## **BOOK CHAPTERS**

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**Alvar, B.A.** (2018). Resistance Training Programs. In: ACSM'S RESOURCES FOR THE PERSONAL TRAINER, 5TH ED. Philadelphia, PA. Lippincott Williams and Wilkins.

**Alvar, B.A.,** Sell, K. Deuster, P. (2017). Introduction to Tactical Strength and Conditioning. In: ESSENTIALS OF TACTICAL STRENGTH AND CONDITIONING. Champaign: Human Kinetics. Anticipated publication 2017.

Rhea, M.R, **Alvar, B.A.** (2017). Aerobic Endurance Exercise Techniques and Programming. In: ESSENTIALS OF TACTICAL STRENGTH AND CONDITIONING. Champaign: Human Kinetics.

**Alvar, B.A.**, Peterson, M., Schoenfeld, B. Progressive Resistance Training. In D.P. Schoenfelder (Series Ed.), SERIES ON EVIDENCE-BASED PRACTICE GUIDELINES, Iowa City, IA: The University of Iowa College of Nursing John A. Hartford Foundation Center of Geriatric Nursing Excellence. (projected 2015)

**Alvar, B.A.** Peterson, M.D., Dodd, D.J. (2015). Fundamentals of Study Design. In: ACSM'S RESEARCH METHODS. Lippincott Williams and Wilkins, Philadelphia, PA.

**Alvar, B.A.** Revisions to Kraemer, W.J., Vingren, J.L., Hatfield, D.L., Spiering, B.A., & Fragala, M.S. (2013). Resistance Training Programs. In: ACSM'S RESOURCES FOR THE PERSONAL TRAINER, 4TH ED. Lippincott Williams and Wilkins, Philadelphia, PA.

**Alvar, B.A.** How and Why We Should Develop Resistance Training Programs to Improve Health Status. Progression Models in Resistance Training Exercise for Healthy Adults. Cosejería De Deportes Comunidad de Madrid, Spain.

**Alvar, B.A.** & Jimenez A. (2010). Exercise Testing and Prescription. In: Entrenamiento deportivo Fundamentos y aplicaciones en diferentes deportes. Medica Panamericana, Málaga, Spain.

**Alvar, B.A.**, Rhea, M.R., Peterson, M. D. & Dodd, D.J. (2008). Dose-Response To Strength Training. In: Nuevas dimensiones en el entrenamiento de la fuerza: Aplicación de nuevos métodos, recursos y tecnologías. INDE Publishers, Barcelona, Spain.

Dodd, D.J. & **Alvar, B.A.** (2008). Strength Training Health Benefits. In: Understanding Fitness: How Exercise Fuels Health and Fights Disease. Westport CT. Praeger Publishers..

**Alvar, B.A.** (2007). Resistance Training: Health Related Benefits and Exercise Prescription Guidelines. In: Avances en Ciencias de la Actividad Fisica y el Deporte. Madrid Spain, AdemasComunicación, s.I.

**Alvar, B.A.** (2006). Health Related Benefits of Resistance Training. In: Actas De Las Jornadas Internacionales De Actividad Fisica Y Salud Gana Salud. Cosejería De Deportes Comunidad de Madrid, Spain.

### **BOOK EDITOR/JOURNAL SPECIAL EDITION/REVIEWER**

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**ALVAR, B.A.**, SELL, K. & DEUSTER, P. ESSENTIALS OF TACTICAL STRENGTH AND CONDITIONING. (2017). National Strength and Conditioning Association. Champaign: Human Kinetics. 2017. Lead Editor.

**Alvar, B.A.** *Strength and Conditioning Journal*, 37(4) SPECIAL TOPIC ISSUE: TACTICAL STRENGTH AND CONDITIONING. August 2015. Journal Associate Editor and Reviewer.

Ratamess, N. ACSM'S INTRODUCTION TO STRENGTH AND CONDITIONING. Lippincott Williams and Wilkins. Book Reviewer.

Chandler, J.T., & Brown, L.E. CONDITIONING FOR STRENGTH AND HUMAN PERFORMANCE. Lippincott Williams and Wilkins. Book Reviewer.

De Anda, M.E., Proescholdbell, R.J., Rivera, N. & **Alvar, B.A.** (1997). A WORKBOOK FOR TOBACCO-FREE LIFESTYLES. Arizona Department of Health Services. Phoenix, Arizona.

**Alvar, B.A.** (2000). Review of the Book: EXERCISE AGING, PHYSICAL ACTIVITY AND HEALTH. Champaign: Human Kinetics. *The Journal of Aging and Physical Activity* 8, 80-81.

## **ARTICLES**

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Johnson, Q.R., Goatcher, J.D., Diehl, C., Lockie, R.G., Orr, R.M., **Alvar, B.**, Smith, D.B., Dawes, J.J. (2020). Heart Rate Responses during Simulated Fire Ground Scenarios among Full-Time Firefighters. *International Journal of Exercise Science* 12, (2), 374-382.

Fisher, L.R., **Alvar, B.A.**, Maher, S.F., Cleland, J.A. (2020). Short-term Effects of Thoracic Spine Thrust Manipulation, Exercise, and Education in Individuals with Low Back Pain: A Randomized Controlled Trial. *Journal of Orthopaedic & Sports Physical Therapy* 50,(1), 24-32.

Laslovich, S., **Alvar, B.A.**, Allison, M., Rauh, M.J. (2020). Effects of Lifestyle Physical Activity on Vascular Function in Asymptomatic Peripheral Arterial Disease. *Medicine & Science in Sports & Exercise* 52, (1), 8-15.

Howard, R., Bos, A., **Alvar, B.**, Mike, J. (2017). Strongman-Style Training for the Tactical Athlete. *TSAC Report* 45, 20 – 29

Schoenfeld, B.J., Ogborn, D., Contreras, B., Cappaert, T., Ribeiro, A.S., **Alvar, B.A.**, Vigotsky, A.D. (2016). A Comparison of Increases in Volume Load Over 8 Weeks of Low- Versus High Load Resistance Training. *Asian Journal of Sports Medicine* 7, (2): e29247

Nindl, B.C., **Alvar, B.A.**, Dudley, J., Favre, M.W., Nartin, G.J., Sharp, M.A., Warr, B.J., Stephenson, M.D., Kraemer, W.J. (2015). Executive Summary From the National Strength and Conditioning Association's Second Blue Ribbon Panel on Military Physical Readiness: Military Physical Performance Testing. *Journal of Strength and Conditioning Research* 29, (11s), S216-s220.

Lloyd R.S., Oliver J.L., Faigenbaum A.D., Howard R., De Ste Croix M., Williams C.A., Best T.M., **Alvar B.A.**, Micheli L.J., Thomas D.P., Hatfield D., Cronin J.B., Myer G.D. (2015). Long Term Athletic Development – Part 2: Barriers to Success and Potential Solutions. *Journal of Strength and Conditioning Research* 29, (5), 1451-1464

Kelly S.B., Brown L.E., Hooker S.P., Swan P.D., Buman M.P., **Alvar B.A.**, Black L.E. (2015). Comparison of Concentric and Eccentric Bench Press Repetitions to Failure. *Journal of Strength and Conditioning Research* 29, (4). 1027-1032.

Lloyd R.S., Oliver J.L., Faigenbaum A.D., Howard R., De Ste Croix M., Williams C.A., Best T.M., **Alvar B.A.**, Micheli L.J., Thomas D.P., Hatfield D., Cronin J.B., Myer G.D. (2015). Long Term Athletic Development – Part 1: A Pathway for all Youth. *Journal of Strength and Conditioning Research* 29,(5), 1439-1450.

**Alvar, B.A.** (2015). Editor's Note: Tactical Strength and Conditioning. *Strength and Conditioning Journal*, 37, (4), 1

Lloyd R.S., Faigenbaum A.D., Stone M.H., Oliver J.L., Jeffreys I., Moody J.A., Brewer C., Pierce K.C., McCambridge T.M., Howard R., Herrington L., Hainline B., Micheli L.J., Jaques R., Kraemer W.J., McBride M.G., Best T.M., Chu D.A., **Alvar B.A.**, Myer G.D. (2014).

- Posicionamiento sobre el entrenamiento de fuerza en jóvenes. Consenso Internacional de 2014. *Archivos de Medicina del Deporte* 31, (2), 111-124.
- Schoenfeld B.J., Ratamess N.A., Peterson M.D., Contreras B., Sonmez G.T., **Alvar B.A.** (2014). Effects of different volume-equated resistance training loading strategies on muscular adaptations in well-trained men. *Journal of Strength and Conditioning Research* 28, (10), 2909-2918.
- Lloyd R.S., Faigenbaum A.D., Stone M.H., Oliver J.L., Jeffreys I., Moody J.A., Brewer C., Pierce K.C., McCambridge T.M., Howard R., Herrington L., Hainline B., Micheli L.J., Jaques R., Kraemer W.J., McBride M.G., Best T.M., Chu D.A., **Alvar B.A.**, Myer G.D. (2014). Position statement on youth resistance training: the 2014 International Consensus. *British Association of Sport and Medicine* 48, (7), 498-505.
- National Strength and Conditioning Association 2<sup>nd</sup> Blue Ribbon Panel on Military Physical Readiness: Military Physical Performance Testing. Executive summary writing group. (2013).  
<https://www.nscs.com/Education/Articles/Second-TSAC-Blue-Ribbon-Panel/>
- Weiler, A. A., Alvar, B.A. (2013). Cardiovascular Disease: Societal Trends and the Role of the Exercise Professional. *Strength and Conditioning Journal* 35, (4), 2-10.
- Warr, B.J., Scofield, D.E., Spiering, B.A., Alvar, B.A. (2013). Influence of Training Frequency on Fitness Levels and Perceived Health Status in Deployed National Guard Soldiers, *Journal of Strength and Conditioning Research* 27, (2), 315-322.
- Warr, B.J., Heumann, K.J., Dodd, D.J., Swan, P.D., & Alvar, B.A. (2012). Injuries, Changes in Fitness and Medical Demands in Deployed National Guard Soldiers. *Military Medicine* 177, (10), 1136-1142.
- Bergamin, M., Zanuso, S., Alvar, B.A., Ermolao, A., Zaccaria, M. (2012). Is water-based exercise training sufficient to improve physical fitness in the elderly. *European Review of Aging and Physical Activity* 9, (2) 1 – 13.
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- Burkett, L.N. Phillips, W.T. & **Alvar, B.A.** (1998). The Effect of Electrical Stimulation Combined with Dynamic Strength Training on Healthy Individuals. *Isokinetics and Exercise Science* 7, 101 – 106.
- Burkett, L.N. & **Alvar, B.A.** (1998). Comparing Maximal Torque Produced Isometrically and Isokinetically Potential Problems Making Hamstring Strain Predictions with Isokinetic Measures. *European Journal of Physical Medicine and Rehabilitation* 8, 71-73.

## **GRANTS AND OTHER FUNDING**

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2018 – **GymAware.** Gym Aware online access (estimated value \$1,000).

2018 – Vibration Platform

2018 – **Velocity Based Resistance Training.** Point Loma Sports Club – Use of facilities for Navy EOD research study (estimated value \$3,000).

2015 – **Human Performance Laboratory.** (requested (\$100,000; funded \$40,000): Zions Bank. Objective: Begin equipping a fully functional research laboratory.

2014 – **Zamu Gold.** (Requested: \$35.625; funded \$35.625): Trivita Incorporated. Objective: Determine whether Zamu Gold, a commercially produced product of TriVita, Inc. will affect positive changes in immune system functioning (PI – with Troy Adams)

2010 – **United State Army Research Institute of Environmental Medicine.** Occupational Preparedness Study of Arizona National Guard units pre and post deployment to Afghanistan. (requested \$17,000; funded \$17,000). (Co-PI with Brad Warr).

2010 – **American College of Sports Medicine – Doctoral Student Research Grant - Evaluating the Effects of Long Term Combat Deployment on Physical Fitness in the Military.** (requested \$4820; funded \$4820). (Co-Investigator with Brad Warr (PI), Pam Swan, Chong Lee).

2009 – **CGCC Summer Project - Research Methods and Statistical Analysis in Sport Performance.** (requested \$3,500; funded \$3,500) MCCCCD Faculty Professional Growth.

2009 – **American College of Sports Medicine – Foundation Student Research Grant – Interdisciplinary Community-Based Fall Prevention Program.** (requested \$5,000; funded \$5,000). (Co-Investigator with Melanie Mitros (PI), Cheryl Der Ananian, Barbara Ainsworth, Chong Lee, and Pamela Swan)

2008 – **Sabbatical: Physical Activity and Public Health in the Madrid Community: Advances in Research, Academics and Professional Skills.** (requested \$114,000; funded \$114,000) One year sabbatical with a full time replacement at both CGCC and ASU.

2008 – **CGCC Summer Project - Enhancements in Sports Performance.** (requested \$3,370.08; funded \$3,370.08) MCCCCD Faculty Professional Growth.

2007 – **The Impact of Nutritional Supplement on Glucose in a Pre-Diabetic Sample.** (requested \$20,000; funded \$20,000). Trivita Incorporated. Test if an oral daily dietary supplement will decrease blood glucose levels on a population of pre-diabetics.

2007 – **American College of Sports Medicine - Paffenbarger-Blair Endowment for Epidemiological Research on Physical Activity - Evaluation of PA Measures in Middle-Aged Women.** (requested \$10,000; funded \$10,000). (Co-Investigator with Kelley Pettee (PI), Barbara Ainsworth, Chong Lee, and Pamela Swan )

2007 – **CGCC Summer Project - Sport Performance.** (requested \$2,453.97; funded \$2,543.97) MCCCCD Faculty Professional Growth.

2006 – **An Evaluation of Optimal-4 on Golf Performance.** (requested \$55,000; funded \$55,000). Trivita Incorporated. Objective: To test if an oral daily dietary supplement will decrease golf scores by means of increasing mental acuity.

2006 – **CGCC Summer Project.** (requested \$2,371.20; funded \$2,371.20) MCCCCD Faculty Professional Growth. Keeping CGCC in the Sport Performance Forefront – NSCA National Conference and Olympic Collaboration

2005 - **An Evaluation of the impact of Vital-4 on homocysteine reduction.** (Requested: \$75,000; funded \$75,000): Trivita Incorporated. Objective: Test if a Vitamin B complex is effective on the reduction of the cardiovascular marker homocystiene

2005 – **CGCC Summer Project.** (requested \$1,960.69 ; funded \$1,960.69) MCCCCD Faculty Professional Growth. 2005 NSCA National Conference, Invited Presentation, and Educator of the Year Nomination

2004 - **An Evaluation of the Versa Climber and Versa Pulley for Improvements in Fire Fighter Performance** (requested: \$10,000; funded: \$10,000); Heart Rate Incorporated. Objective: compare improvements in fire fighter job performance with training on the Versa Climber and Versa Pulley and treadmill running. Role: Primary investigator.

2004 – **CGCC Summer Project.** (requested \$2,080.09; funded \$2,080.09); MCCCCD Faculty Professional Growth. Chandler-Gilbert Strength and Conditioning Programs – Research, Dissemination, Application

2003- **Travel Grant** (requested: \$2,100; funded \$2,100); Arizona State University, Chandler-Gilbert Community College. Travel to the World Congress on Sports Science Conference in Athens, Greece to present research, October 2003.

2003- **Validation of the Gerkin Protocol for Estimating the VO<sub>2</sub>max of firefighters.** (Requested: \$2,000, funded \$2,000). Cardio2Tech. Objective: validate the accuracy of the sub-maximal treadmill protocol and the Gerkin prediction equation for exercise testing of professional firefighters. Role: Co-investigator.

2003- **Determining the Effectiveness of a Fitness and Wellness Program for Firefighters.** (Requested: \$3,200, funded: \$3,200). Phoenix Fire Department. Objective: Identify the monetary cost to benefit ratio for implementing a health and wellness intervention in the fire service. Role: Co-investigator.

2003- **A Comparison of Various Conditioning Programs for Firefighter Recruit Training** (Requested: \$4,800; funded: \$4,800); Chandler-Gilbert Community College. Objective: Examine the effects of various exercise programs on fitness and job performance among recruit firefighters. Role: Co-investigator.

2003- **Maricopa Learning Grants 2001-2002** (Requested \$5,000; Funded \$4,740.80)  
**Alvar, B.A.** Graci, M. Underwood, J., & Rhea, M.  
Virtual Simulation for Various Kinesthetic Movement Patterns  
Investigated using a virtual reality simulation demonstrating kinesthetic movement patterns.

2003 – **CGCC Summer Project.** (requested \$755.00; funded \$755.00 ). Strength and Conditioning Improvements

2002- **Arizona State University/Motorola Greater Communities Capacity Building Grant 2001-2002**  
(Requested \$75,000 Funded 0)  
**Alvar, B.A.** Rhea, M Chandler Fire Department. Objective: Develop and disseminate health and wellness education to firefighters.

### **SERVICE PRESENTATIONS/WORKSHOPS**

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**Alvar, B.** National Strength and Conditioning Association – Missouri State Clinic. Strength and Conditioning: The Next Decade. May 13, 2019.

**Alvar, B.** Howard, R., Lunkel, R. National Strength and Conditioning Association – Idaho State Clinic. Round Table Career Discussion. April 21, 2018.

**Alvar, B.** Rocky Mountain Chapter of the American College of Sports Medicine Regional Conference. Applications of Exercise Science in Tactical Fitness and Performance. Colorado Springs, Colorado, April 7, 2018

**Alvar, B.** Rocky Mountain Chapter of the American College of Sports Medicine Regional Conference. Does-Response of Resistance Training – A Historical Perspective. Colorado Springs, Colorado, April 6, 2018 – **Keynote Speech**

**Alvar, B.** National Strength and Conditioning Association – Tactical Strength and Conditioning Leaders Course. Periodization – Theory to Practice. October 12, 2017



- Alvar, B.,** Hoffman, J., Christiansen, T. National Strength and Conditioning Association National Conference. Tactical Strength and Conditioning Panel Discussion – State of the Profession. Las Vegas, Nevada. July 14, 2017
- Alvar, B.** Introduction to the National Strength and Conditioning Association – Tactical Strength and Conditioning Practitioners Course. NATO Special Operation Forces Medicine Research Workshop: Human Performance Program in Special Operations Forces. January 25, 2017
- Alvar, B.** The Inaugural JuzPlay Elevate Dominate Performance Training Summit. Personal Training: An Evidence-Base Approach. Shanghai, China. November 11, 2016.
- Alvar, B.** The Inaugural JuzPlay Elevate Dominate Performance Training Summit. Resistance Training for Aging Adults: An Evidence-Based Approach Shanghai, China. November 12, 2016.
- Alvar, B.** The Inaugural JuzPlay Elevate Dominate Performance Training Summit. Undulating Periodization: Theory to Practice. Shanghai, China. November 13, 2016.
- Alvar, B.** National Strength and Conditioning Association Japan Strength & Conditioning Conference. Resistance Training for Aging Adults: An Evidence-Based Approach. Tokyo, Japan. December 5, 2015.
- Alvar, B.** National Strength and Conditioning Association Japan Strength & Conditioning Conference. Physical Preparation and Fitness Necessities for Tactical Athletes. Tokyo, Japan. December 6, 2015.
- Alvar, B.** Kokushikan University, Faculty of Sport and Medical Science. Physical Preparation and Fitness Necessities for Tactical Athletes. Tokyo, Japan. December 6, 2015.
- Alvar, B.** National Strength and Conditioning Arizona State Clinic. Tactical Strength and Conditioning. Chandler, Arizona. November 7, 2015
- Alvar, B.** Sino-U.S. Physical Fitness Training and Exercise Rehabilitation Seminar. Evidence Based Resistance Training for Youth to the Older Adult. Hangzhou, China. August 12, 2015
- Alvar, B.** Sino-U.S. Physical Fitness Training and Exercise Rehabilitation Seminar. Applications of Resistance Training Progression and Programming. Hangzhou, China. August 13, 2015
- Alvar, B.** National Strength and Conditioning Association – Tactical Strength and Conditioning Conference. How to Design and Implement a Legally Defensible Tactical Fitness Test. Orlando, Florida. April 7, 2015
- Alvar, B.** Shanghai Police Academy. Overview of Tactical Strength and Conditioning for Law Enforcement Officers. Shanghai, China. October 14, 2014
- Alvar, B.** Shanghai Police Academy. The Science and Application of the Dynamic Warm-Up: An Occupation Specific Warm-up/Flexibility Program (Hands-on). Shanghai, China. October 14, 2014

- Alvar, B.** National Strength and Conditioning Association Shanghai, Instructor Training Symposium. New Directions for Personal Trainers: An Evidence-Based Approach. Shanghai, China. October 13, 2014
- Alvar, B.** National Strength and Conditioning Association Shanghai, Instructor Training Symposium. The National Strength and Conditioning Association: History, Overview and Finding a Place in the Profession. Shanghai, China. October 13, 2014
- Alvar, B.** National Strength and Conditioning Association – Tactical Strength and Conditioning Conference. Conducting a Task Analysis: Examples from the Military and Fire Service. San Diego, California. April 17, 2014.
- Alvar, B.** National Strength and Conditioning Association – Rocky Mountain Regional Conference. Resistance Training for the Differential Populations: An Evidence-Based Approach. Denver, Colorado. February 9, 2014
- Alvar, B.** National Strength and Conditioning Association Shanghai, Instructor Training Symposium. Introduction and Overview of the National Strength and Conditioning Association. Shanghai, China. September 12, 2013
- Alvar, B.** National Strength and Conditioning Association Shanghai, Instructor Training Symposium. Introduction and Overview of Tactical Strength and Conditioning. Shanghai, China. September 13, 2013
- Alvar, B.** National Strength and Conditioning Association New Mexico State Clinic. Evidence Based Dosing of Resistance Training. Albuquerque, New Mexico. June 8, 2013.
- Alvar, B.** American College of Sports Medicine, Annual Meeting. Highlighted Symposium Synthesizing Resistance Training Research: Using Science to Optimize Results. With Eric Rawson, Michael Stone and John McCarthy. Training to Maximize Strength. Indianapolis, Indiana. May 29, 2013.
- Alvar, B.** National Strength and Conditioning Association Tactical Strength and Conditioning Conference. Occupational Preparedness: Research and Practice. Norfolk, Virginia. April 16, 2013.
- Alvar, B.** National Strength and Conditioning Association, Personal Trainers Conference. Resistance Training for the Aging Adult: An Evidence Based Approach. Las Vegas, Nevada. March 9, 2013.
- Alvar, B.** Conference on Physical Conditioning. Dosing of Exercise: An Evidence-Based Approach. Zagreb, Croatia. February 22, 2013.
- Alvar, B.** University of Zagreb. Kinesiology Department Invited Lecture. Occupational Preparedness. Zagreb, Croatia. February 23, 2013.
- Alvar, B.** American College of Sports Medicine Southwest Regional Meeting. Evidence-Based Guidelines for Exercise Prescription using the American College of Sports Medicine Position Stand on Progression Models in Resistance Training for Health Adults. Fullerton, California. October, 2012.
- Alvar, B.** National Strength and Conditioning Association, Personal Trainers Conference. Dosing of exercise: An evidence-based approach. Las Vegas, Nevada. April 14, 2012.

- Alvar, B.** Mesa Community College. SOS – Student Opportunities for Success program. Time Management for Health and Wellness. Mesa, Arizona. September 29, 2011.
- Alvar, B.** Air Force Research Laboratory’s Warfighter Readiness Research Division. Physical Fitness Training and Occupational Wellness Lecture Series. Mesa Arizona. Multiple lectures: July 2010 – July 2011.
- Alvar, B.** American College of Sports Medicine Annual Meeting. Tutorial Lecture: Research Supporting Progression Models in Resistance Training. Denver, Colorado. June 3, 2011.
- Alvar, B.** National Strength and Conditioning Association Rocky Mountain Regional Clinic. Occupational Preparedness – Research and Practice. Chandler, Arizona. November 13, 2010.
- Alvar, B.** National Strength and Conditioning Association Arizona State Clinic. What Research Tells Us About Strength Training for Baseball Players. Phoenix, Arizona. January 16, 2010.
- Alvar, B.** Chandler Gilbert Community College - Wellness Maricopa Lecture Series. How to design your own personal physical activity program. Chandler, Arizona October 8, 2009.
- Alvar, B.** Progression and Periodization – Theory and Practice for Designing Resistance Training Programs. 2<sup>nd</sup> Annual Arizona High School Strength and Conditioning Coaches Association Clinic. Phoenix, Arizona. May 16, 2009.
- Alvar, B.** How and Why We Should Develop Resistance Training Programs to Improve Health Status. Progression Models in Resistance Training Exercise for Healthy Adults. WinHealth Forum First Annual Meeting, Madrid, Spain. January 30, 2009.
- Alvar, B.** Dose-Response Relationship of Resistance Training and Strength Improvement. Universidad Politecnica de Madrid. Madrid, Spain. December 12, 2008.
- Alvar, B.** Current Advances in Resistance Training Research. Alicante University, Alicante, Spain. November 19, 2008.
- Alvar, B.** Health Benefits of Strength Training. NSCA-UEM International Clinic en España. Madrid Spain. November 13, 2008.
- Alvar, B.** National Strength and Conditioning Association-Universidad Europea de Madrid - International Clinic en España. Co-Host with Dr. Lee Brown President of the NSCA and Dr. Alfonso Jimenez. Madrid Spain. November 13-14, 2008.
- Alvar, B.** Proper Hydration and Heat Acclimatization and Prevention of Heat Illness. Universidad Europea de Madrid. Madrid, Spain. October 17, 2008.
- Alvar, B.** Olympic Lifting Technique. Universidad Europea de Madrid, Madrid, Spain. September 12, 2008.
- Alvar, B.** Update on Research Relative to the ACSM Position Stand on Progression Models in Resistance Training. American College of Sports Medicine 55<sup>th</sup> Annual Meeting. ACSM - NSCA Special Interest Group. May 28, 2008.

- Alvar, B.** From the Inside Looking Out: Kinetics of Exercise Training Adaptations. Rome Italy. The Metabolic Syndrome: An Update on Exercise Training and Metabolic Health. A Course Organized By Metabolic Fitness Associations and U.O.C Diabetes, Obesity and Metabolism. Univeristy of Rome "La Sapienza" April 3, 2008.
- Alvar, B.** Strength Training: Can Resistance Training Modify Metabolic Risk? Rome Italy. The Metabolic Syndrome: An Update on Exercise Training and Metabolic Health. A Course Organized By Metabolic Fitness Associations and U.O.C Diabetes, Obesity and Metabolism, University of Rome "La Sapienza" April 4, 2008.
- Alvar, B.,** Jiménez, A., & Brown, L. Advances in Resistance Training Research Symposium. Symposium Moderator. San Diego California. Southwest American College of Sports Medicine. Regional Conference, November 2007.
- Alvar, B.** Advances in Resistance Training Research Symposium. Health Benefit and Occupational necessity for Resistance Training. San Diego California. Southwest American College of Sports Medicine. Regional Conference, November 2007.
- Alvar, B.** Resistance Training: Health related benefits and exercise prescription guidelines. Madrid, Spain, NSCA-Certification Commission International Clinic en España. May 4, 2007.
- Alvar, B.** Practical Application Session: The Dynamic Warm-Up. Madrid, Spain, NSCA Certification Commission International Clinic en España. May 5, 2007.
- Alvar, B.** The Health Related Benefits of Resistance Training. Madrid Spain. International Conference on Physical Activity and Health. November, 2006.
- Alvar, B.** Chandler Gilbert Community College - Wellness Maricopa Lecture Series. Resistance Training: Is it for me? Chandler, Arizona October 6, 2006.
- Alvar, B.** Sports Supplements. Mesa, Arizona. Central Chapter – Arizona Dietetics Association. Annual Meeting. May, 2006.
- Alvar, B.** Current Research at Arizona State University. Madrid, Spain. Universidad Europea De Madrid. May, 2006.
- Alvar, B.** The Science and Application of the Dynamic Warm-up. A Sport Specific Warm-up/Flexibility Program. Madrid, Spain. Universidad Europea De Madrid. May, 2006.
- Alvar, B.** The Dose-Response for Strength Development: Scientific Evidence and Practical Applications. Madrid, Spain. Universidad Europea De Madrid. May, 2006.
- Alvar, B.** Firefighter Readiness Conditioning: Undulation Training and Transference to Job Related Physiological Demands. Madrid, Spain. Universidad Europea De Madrid. May, 2006.
- Alvar, B.,** Tomberlin, J. & Russell, A. Panel Presentation/Discussion: Rehabilitation/Exercise Programs for Post Surgical Procedure – After a Live Video Telecast of an Orthopedic Surgery. Mesa, Arizona. Southwest Sports Medicine Conference. March, 2006.
- Alvar, B.** The Science and Application of the Dynamic Warm-up (A Sport Specific Warm-Up/Flexibility Program). Southwest Sports Medicine Conference. March, 2006.

- Alvar, B.,** & Rhea, M. Symposium. Examining the ACSM Position Stand on Resistance Exercise Utilizing the Dose Response Literature. Las Vegas, Nevada. Southwest American College of Sports Medicine. Regional Conference. November, 2005
- Alvar, B.** & Rhea, M. Symposium. Research Update: Exercise Assessment and Prescription for NBA officials. Las Vegas, Nevada. Southwest American College of Sports Medicine. Regional Conference. November, 2005
- Alvar, B.** Research Session: Point/Counterpoint - Single vs. Multiple Sets for Resistance Training. Moderated by Lee Brown. Las Vegas, Nevada, NSCA National Conference and Exhibition. July, 2005
- Alvar, B.** Invited Lecture. Meta-analytic Research Relative to Resistance Training. College Station, Texas. Texas A & M University. June, 2005
- Rhea, M., **Alvar, B.,** & Peterson, M. Main Session Presentation: Scientific Evidence for Dose Response for Strength Development. Minneapolis, Minnesota, NSCA National Conference and Exhibition, July, 2004
- Alvar, B.A.,** Peterson, M.P. & Dodd, D. Exercise programming for Firefighters. Apache Junction Fire Department, Apache Junction, Arizona. August 4, 2004
- Alvar, B.A.,** Burkett, L.N. & Phillips, W.T. Exercise and Cardiovascular Disease Series: Resistive Training Through the Life Span. Invited Lecture. Sponsored by: APS American Heart Association - Halle Heart Center, Tempe, Arizona. April 14, 2003.
- Alvar, B.A.** Heart Saver AED Training. Arizona Heart Institute Employees. American Heart Association - Halle Heart Center, Tempe, Arizona. October 19, 2002.
- Alvar, B.A.** Prioritization. Invited lecture. PED 200 class. Chandler Gilbert Community College. September 24, 2002
- Alvar, B.A.** Heart Saver AED Training. Maricopa Community College and Arizona State University, Exercise and Wellness Instructors. American Heart Association - Halle Heart Center, Tempe, Arizona. September 7, 2002.
- Alvar, B.A.** Disease and Risk Identification and Prevention among Firefighters. Chandler Fire Department, Health and Wellness Committee Seminar, December 7, 2001.
- Alvar, B.A.** Keeping First Things First. Chandler Gilbert Community College. November, 2001.
- Alvar, B.A.** Strength Training: Is One Set Enough? Chandler Gilbert Community College. October 31, 2000.
- Alvar, B.A.** Careers in Exercise Science and Physical Education: Gilbert High School AIMES Program, Gilbert, Arizona. May 12, 1999.
- Alvar, B.A.** Careers in Exercise Science and Physical Education: Chandler High School AIMES Program, Chandler, Arizona. May 10, 1999.
- Alvar, B.A.** Careers in Exercise Science and Physical Education: Highland High School AIMES Program, Gilbert, Arizona. May 14, 1999.

**Alvar, B.A.** Stress: Keeping First Things First. Chandler- Gilbert Community College. March 30, 1998.

**Alvar, B.A.** Strength training: Is it for you? Madison Meadows Junior High School, Phoenix, AZ. Jan. 27 & 29, 1997.

**Alvar, B.A.** Exercise, Flexibility and Care of the Back. University Wellness Program, ASU Main. April 30, 1997.

## **POSTER/ORAL PRESENTATIONS**

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2020 Denver, CO. APTA Combined Section Meeting, Platform Presentation: The Functional Arch Score: A Novel Measure of Foot Morphology

2019 Washington, DC. NSCA National Conference and Exhibition, Abstract: Changes in Fitness Over An 11-Week Training Program Among Firefighter Trainees.

2019 Washington, DC. NSCA National Conference and Exhibition, Abstract: Heart Rate Responses During Simulated Fire Ground Scenarios Among Full-Time Firefighters.

2019 Washington, DC. APTA Combined Section Meeting. Short-Term Effects of Thoracic Spine Manipulation on Individuals with Low Back Pain: A Randomized Controlled Trial.

2019 Washington, DC. APTA Combined Section Meeting. Effects of Resistance Training on Smoking Abstinence Self-Efficacy in Sedentary Smokers

2014 Las Vegas, NV. NSCA National Conference and Exhibition. Predicting eccentric 1RM from concentric 1RM in the bench press.

2013 Newport Beach CA. Southwest American College of Sports Medicine. Regional Conference, Abstract: Comparison of 1-repetition maximum in concentric and eccentric bench press

2013 Indianapolis, In. American College of Sports Medicine Annual Meeting. Thematic Poster Chair. Novel methods of performance assessment.

2013 Las Vegas, NV. NSCA National Conference and Exhibition. The indices of bone in response to exercise.

2012 Providenc RI. NSCA National Conference and Exhibition. Effects of vibration training versus jump training on muscle strength and power.

2012 San Francisco CA. American College of Sports Medicine Annual Meeting. Abstract: Self reported exercise during deployment correlates with measured fitness outcomes.

2011 Jyväskylä, Finland. 2<sup>nd</sup> International Congress on Soldiers' Physical Performance. An evaluation of physical fitness changes in deployed Arizona National Guardsmen and the relationship of fitness to utilization of medical resources for non-combat injury and illness.

2011 Denver CO. American College of Sports Medicine Annual Meeting. Oral Abstract: Evaluation of a community-based, multifactorial falls prevention program.

2011 Denver CO. American College of Sports Medicine Annual Meeting. Oral Abstract: How does combat effect fitness? An evaluation of deployed Arizona National Guardsman.

2010 Baltimore MD. American College of Sports Medicine Annual Meeting. Oral Abstract: Effectiveness of interval training in small ability groups to improve cardiovascular fitness.

2009 Las Vegas NV. NSCA National Conference and Exhibition, Abstract: The effect of single versus multiple sets: Carryover to untrained speeds.

2009 Las Vegas NV. NSCA National Conference and Exhibition, Abstract: Comparison of muscular strength gains utilizing eccentric, standard and concentric resistance training protocols.

2009 Las Vegas NV. NSCA National Conference and Exhibition, Abstract: Rate of velocity development for knee extensors: Crossover to untrained speeds.

2009 Las Vegas NV. NSCA National Conference and Exhibition, Abstract: Job satisfaction of Division I-AA collegiate strength and conditioning coaches.

2009 Las Vegas NV. NSCA National Conference and Exhibition, Abstract: 1RM prediction from the linear velocity and the rate of perceived exertion in the bench press and parallel squat.

2009 Las Vegas NV. NSCA National Conference and Exhibition, Abstract: Application of the GPS technology to assess the demands in soccer competition at the college aged level.

2009 Las Vegas NV. NSCA National Conference and Exhibition, Abstract: The effect of daily undulated periodization as compared to linear periodization in strength gains of collegiate athletes.

2008 Colorado Springs CO. 6<sup>th</sup> International Conference on Strength Training, Abstract: Comparison of muscular strength gains utilizing eccentric, standard and concentric resistance training protocols

2008 Colorado Springs CO. 6<sup>th</sup> International Conference on Strength Training, Abstract: Progressive resistance training for strength and lean body mass in elderly men and women: A meta-analysis

2008 Las Vegas NV. NSCA National Conference and Exhibition, Abstract: The influence of various measure of fitness on boxing performance.

2008 Las Vegas NV. NSCA National Conference and Exhibition, Abstract: The effects of a dietary metabolic supplement on various performance measures in golfers.

2008 Las Vegas NV. NSCA National Conference and Exhibition, Abstract: The effect of warmup with whole body vibration versus cycle ergometry.

2007 San Diego, California. Southwest American College of Sports Medicine. Regional Conference, Abstract: The association of hand grip strength and baseball swing velocity.

2007 San Diego, California. Southwest American College of Sports Medicine. Regional Conference, Abstract: Is physical activity reported by questionnaire related to musculoskeletal fitness values in a group of Spanish active women?

2007 San Diego, California. Southwest American College of Sports Medicine. Regional

Conference, Abstract: Acute effects of whole body vibration at different frequencies on Sit and Reach test.

2007 Atlanta, GA, NSCA National Conference and Exhibition, Abstract: Effects of 8-weeks upper body linear classical periodization training program versus a non-linear periodization training program in the value of strength at the maximal speed (SMS) on a middle-aged women group.

2007 Atlanta, GA, NSCA National Conference and Exhibition, Abstract: Firefighter preparedness: A comparison of two periodized training models to increase strength and hypertrophy.

2007 Atlanta, GA, NSCA National Conference and Exhibition, Abstract: Clinical benefits after 16 sessions of a lumbar extension resistance training program in patients with chronic low back pain.

2007 Atlanta, GA, NSCA National Conference and Exhibition, Abstract: Effects on lumbar extension torque production after a 12 week resistance training program on patients with chronic low back pain.

2007 Atlanta, GA, NSCA National Conference and Exhibition, Abstract: Where is the optimal load in squat and bench press exercises in a group of young women taekwondist?

2007 Atlanta, GA, NSCA National Conference and Exhibition, Abstract: The relationship between anxiety and psychophysical responses of firefighters across two firefighting training drills.

2007 Atlanta, GA, NSCA National Conference and Exhibition, Abstract: The efficacy of single versus multiple set resistance training on acute insulin sensitivity in individuals with impaired fasting glucose.

2007 Atlanta, GA, NSCA National Conference and Exhibition, Abstract: Transfer of strength training to firefighter performance measures.

2007 Atlanta, GA, NSCA National Conference and Exhibition, Abstract: Musculoskeletal fitness levels in Spanish physically active women: The age effect.

2006 University of Southern Denmark. Strength Training for Sport, Health, Aging and Rehabilitation. 5<sup>th</sup> International Conference on Strength Training. Abstract: Undulating training for development of hierarchical fitness and improved job-specific testing performance: A firefighter readiness initiative and recommendation.

2006 Denver, CO, ACSM 53th Annual Meeting. Abstract: Physical activity parameters for walking golf participation: An analysis of volume and intensity.

2006 Washington, DC, NSCA National Conference and Exhibition. Abstract: Resistance training for muscular hypertrophy: A meta-analysis to determine the dose-response.

2006 Washington, DC, NSCA National Conference and Exhibition. Abstract: Movement analysis of NBA referees.

2006 Washington, DC, NSCA National Conference and Exhibition. Abstract: The heart rate response in elite waling golfers to variable ambient temperatures.

2006 Washington, DC, NSCA National Conference and Exhibition. Abstract: Effects of pre-event routines on the performance measures used at the NFL combine.



2006 Washington, DC, NSCA National Conference and Exhibition. Abstract: The difference in single vs. multiple-set resistance training on measures of strength and functional performance in highly trained individuals.

2005 Las Vegas, Nevada, NSCA National Conference and Exhibition. Abstract: Firefighter job performance immediately following a simulated on-duty exercise session.

2005 Las Vegas, Nevada, NSCA National Conference and Exhibition. Abstract: Acute effects of 3 different warm-ups on athletic performance measures.

2005 Las Vegas, Nevada, NSCA National Conference and Exhibition. Abstract: Complex training: Combining heavy resistance training and plyometrics to improve leg power and speed in collegiate-level baseball players.

2005 Las Vegas, Nevada, NSCA National Conference and Exhibition. Abstract: The effect of Versapulleys on firefighter specific performance.

2005 Las Vegas, Nevada, NSCA National Conference and Exhibition. Abstract: Cardiovascular response in firefighter recruits during three modes of exercise.

2005 Las Vegas, Nevada, NSCA National Conference and Exhibition. Abstract: The relationship between fitness, anthropometry, and driving ability among elite golfers.

2005 Las Vegas, Nevada, NSCA National Conference and Exhibition. Abstract: Fitness Correlates to golf performance in collegiate golfers.

2004 Minneapolis, Minnesota, NSCA National Conference and Exhibition. Abstract: Effect of dynamic vs. general warm-up on vertical jump power and sprint speed in collegiate volleyball players

2004 Minneapolis, Minnesota, NSCA National Conference and Exhibition. Abstract: Complex vs. strength training: A 4-week study on leg power and speed development.

2004 Minneapolis, Minnesota, NSCA National Conference and Exhibition. Abstract: Magnitude of detraining effect on explosive power in female collegiate athletes over the holiday break

2004 Minneapolis, Minnesota, NSCA National Conference and Exhibition. Abstract: Determining the relationships between various muscular fitness components and performance measures, in college athletes

2004 Las Vegas, Nevada. Southwest American College of Sports Medicine Conference. Abstract: Contribution of Muscular Strength Capacities to Performance in Collegiate Female Volleyball Players.

2003 Athens, Greece, International Olympic Committees VII World Congress on Sport Sciences. The Dose-Response for Strength Development.

2003 Reno, Nevada. Southwest District of the American Alliance of Health, Physical Education, Recreation and Dance Conference. Abstract: A review of research investigating different models of periodized resistance training.

2003 Reno, Nevada. Southwest District of the American Alliance of Health, Physical Education, Recreation and Dance Conference. Abstract: Physical fitness and job performance of firefighters: Correlations and predictions.

2003 Reno, Nevada. Southwest District of the American Alliance of Health, Physical Education, Recreation and Dance Conference. Abstract: Strength training program design based on the dose-response relationship

2003 Indianapolis Indiana, NSCA National Conference and Exhibition. Abstract: Maximizing strength development in athletes: A meta-analysis to determine the dose-response relationship.

2002 Las Vegas, Nevada, NSCA National Conference and Exhibition. Abstract: The dose-response relationship for strength development: Volume, intensity and frequency of training.

2002 Las Vegas, Nevada, NSCA National Conference and Exhibition. Abstract: Multiple sets elicit greater strength increases than single sets in trained individuals.

2002 Las Vegas, Nevada. Southwest American College of Sports Medicine Conference. Slide Presentation. A meta-analysis to determine the dose-response for strength development.

2002 Las Vegas, Nevada. A Comparison of the Affects of Cardiovascular and Resistance Exercise on Fasting Glucose and Blood Pressure in Firefighters.

2002 San Diego, California. American Alliance for Health, Physical Education, Recreation, and Dance. National Conference. Abstract: Single versus multiple sets for strength: A meta-analysis to resolve the controversy.

## **SUPERVISED RESEARCH/GRADUATE STUDENT FUNDING**

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### **Research Grant. Mark Peterson**

(Requested \$5000; Funded \$5000). Genetic Potential Inc., Tampa, FL. Personal grant for VertiMax training equipment to use during doctoral research. January 2006

### **Research Grant. Mark Peterson**

(Requested \$2000, Funded \$990) NSCA Graduate Student Research Grant. Muscular Hypertrophy: A Meta-Analysis to Determine the Necessary Training Stimulus for Maximum Adaptation. July 2005

### **Research Grant. Kelby Klosterman**

(Requested \$4586; Funded \$2475) Premier Nutrition, Inc. The Effects of Protein Bar Supplementation on Sport Performance of Female Collegiate Athletes Immediately Following an Exercise Session. Objective: Examine the effect of post-exercise energy consumption on sport specific measures such as muscular strength, muscular power, muscular endurance, speed, agility, and body composition. September 2004.

### **Research Grant. Kelby Klosterman**

(Requested \$5470; Funded \$5470) National Football Foundation and College Hall of Fame – Thesis Grant. Acute Testosterone Response To Single Versus Multiple-Set Resistance Training. Objective: Investigate experimentally the hormonal response of testosterone to specific volumes for resistance training in recreationally trained male subjects. May 2004.

**Conference Travel Grant. Mark Peterson.**

(Requested \$500; Funded \$500) Chandler-Gilbert Community College, Adjunct Faculty Development. Travel to and present at the National Strength and Conditioning Association National Conference, Minneapolis, Minnesota. July 2004.

**Conference Travel Grant. Kelby Klosterman.**

(Requested \$500; Funded \$500) Chandler-Gilbert Community College, Adjunct Faculty Development. Travel to and present at the National Strength and Conditioning Association National Conference, Minneapolis, Minnesota. July 2004.

**Conference Travel Grant. Ben Brown.**

(Requested \$500; Funded \$500) Chandler-Gilbert Community College, Adjunct Faculty Development. Travel to and present at the National Strength and Conditioning Association National Conference, Minneapolis, Minnesota. July 2004.

**Conference Travel Grant. Mark Peterson.**

(Requested \$500; Funded \$500) Chandler-Gilbert Community College, Adjunct Faculty Development. Travel to and present at the National Strength and Conditioning Association National Conference, Las Vegas Nevada. July 2005.

**Research Grant. Matt Rhea**

(Requested \$2500, Funded \$2500) EAS Graduate Research Grant. The Effects of Creatine Supplementation on Fitness and Job Performance of Firefighters Following a Simulated "On-Duty" Exercise Workout. Objective: examine the effectiveness of creatine supplementation on maintaining job performance following an exercise workout. January 2003.

**Research Grant. Matt Rhea.**

(Requested: \$750; Funded \$750) Arizona State University Graduate College. Occupational Health Risk among Firefighters Objective: identify current occupational and health hazards related to physical fitness among firefighters. July, 2002.

**Conference Travel Grant. Matt Rhea.**

(Requested \$500; Funded \$500) Chandler-Gilbert Community College, Adjunct Faculty Development. Travel to and present at the National Strength and Conditioning Association National Conference, Las Vegas Nevada. July 2002.

**Conference Travel Grant. Mark Peterson**

(Requested \$500; Funded \$500) Chandler-Gilbert Community College, Adjunct Faculty Development. Travel to the National Strength and Conditioning Association National Conference, Las Vegas Nevada. July 2002.

**Research Grant Matt Rhea**

(Requested \$2500; Funded \$2500); Powerlung Inc. The Effects of Respiratory Resistance Training on Aerobic Capacity and Performance. Objective: examine the influence of resisted breathing training on aerobic fitness.

**Conference Travel Grant. Matt Rhea.**

(Requested \$300; Funded \$300) Arizona State University. Travel to the National AAPERD conference to present two research posters, April 9-13.

**Conference Travel Grant. Matt Rhea.**

(Requested \$500; Funded \$500) Chandler-Gilbert Community College, Adjunct Faculty Development. Travel to present at the Southwest American College of Sports Medicine conference to present a research poster, November 16-17, 2001.

## **PROFESSIONAL WORKSHOPS/CERTIFICATION HELD**

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### **National Strength and Conditioning Association**

**Tactical Strength and Conditioning Practitioners Course: Host/Facilitator:**  
**Point Loma Nazarene University.** Point Loma, California. July 29 – Aug 1, 2019

**Tactical Strength and Conditioning Practitioners Course: Facilitator:**  
**US Army – Fort Drum Army Base.** Jefferson County, New York. June 17-21, 2019

**Tactical Strength and Conditioning Practitioners Course: Facilitator:**  
**US Army – Fort Hood Army Base.** Kayleen, Texas. June 3 - 7, 2019

**Tactical Strength and Conditioning Practitioners Course: Facilitator:**  
**US Army – Fort Polk Army Base.** Vernon Parish, Louisiana. May 13- 17, 2019

**Tactical Strength and Conditioning Practitioners Course: Host/Facilitator:**  
**Point Loma Nazarene University.** Point Loma, California. March 4-8, 2019

**Tactical Strength and Conditioning Practitioners Course: Host/Facilitator:**  
**Point Loma Nazarene University.** Point Loma, California. May 14 - 17, 2018

**Tactical Strength and Conditioning Practitioners Course: Facilitator:**  
**Anaheim Fire and Rescue.** Anaheim, California. June 4 – 7, 2018

**Tactical Strength and Conditioning Practitioners Course: Facilitator:**  
**Royal Netherlands Army and Special Forces.** Amsterdam, Netherlands.  
February 19 – 24, 2018.

**Tactical Strength and Conditioning Practitioners Course: Facilitator:**  
**US Army – Fort Polk Army Base.** Vernon Parish, Louisiana.  
January 29 – February 1, 2018

**Tactical Strength and Conditioning Practitioners Course: Facilitator:**  
**US Army – Fort Bragg Army Base.** Fort Bragg North Carolina. May 21 - 26, 2017

**Tactical Strength and Conditioning Practitioners Course: Facilitator:**  
**US Army – Fort Bliss Army Base.** El Paso, Texas. April 30 – May 5, 2017

**Tactical Strength and Conditioning Practitioners Course: Facilitator:**  
**US Army – Joint Base Lewis McChord (JBLM).** Pierce County, Washington.  
April 16 – 21, 2017

**2<sup>nd</sup> Blue Ribbon Panel on Military Physical Readiness: Military Physical Performance Testing: Facilitator.** Norfolk, Virginia. April 16, 2013.

**Rocky Mountain Regional Clinic Host at Chandler-Gilbert Community College**  
November 13 - 14, 2010

**Chandler-Gilbert Community College Certified Strength and Conditioning Specialist Exam:** Chandler, Arizona, 2005

### **American College of Sports Medicine**

Developed and implemented **Workshop and Certification** for each of these two certifications at Chandler-Gilbert Community College

#### **ACSM Exercise Specialist: 2000 - 2005**

Taught: Prevention and Treatment of Musculoskeletal Injuries; Human Behavior/Psychology; Theory and Application of Resistance Training; Practical Session on Exercise Testing and Prescription

#### **ACSM Health Fitness Instructor: 2000 - 2005**

Taught: Program Administration; Functional Anatomy and Biomechanics; Practical Session on Skinfold Measurement; Common Injuries and Prevention; Practical Session on Exercise Prescription

### **PROFESSIONAL MEMBERSHIPS/AFFILIATIONS**

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National Strength and Conditioning Association 1996 – present

American College of Sports Medicine 1998 – present

Southwest American College of Sports Medicine 1998 – present

### **Fellowships/CERTIFICATIONS/REGISTRATIONS/AWARDS**

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NSCA Tactical Strength and Conditioning Practitioner of the Year – National Strength and Conditioning Association. August 2020

NSCA Journal of Strength and Conditioning Research – Editorial Excellence Award. National Strength and Conditioning Association. July 2017

NSCA Educator of the Year. National Strength and Conditioning Association. July 2016

American College of Sports Medicine, Fellow (FACSM) – June 2012

National Strength and Conditioning Association, Tactical Strength and Conditioning Facilitator (TSAC-F) 2019 - present

National Strength and Conditioning Association, Registered Strength and Conditioning Coach (RSCC) 2011 – 2018  
With Distinction (RSCC \*D) 2011 – 2018

National Strength and Conditioning Association, Fellow (FNCSA). July, 2009

Community College Certificate, Regular A.1.a: Physical Education and Psychology

National Strength and Conditioning Association, Certified Strength and Conditioning Specialist (C.S.C.S.) 1996 – present  
With Distinction (C.S.C.S.\*D) – 2006 – present

## **STUDENT ADVISING**

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### **Doctoral Students: Chair - Rocky Mountain University of Health Professions**

1. Scott Richardson, 2011 – 2017. Effects of Resistance Training on Smoking Behavior and Self-Efficacy
2. Josh Wludyga, 2013 – 2017. Exercise Knowledge and Behavior: Former Athletes Compared to the General Population.
3. Rich Ramirez, 2007 – 2016. Beliefs and Behaviors of Strength and Conditioning Coaches at the NCAA Division I Level: An Investigation of Evidence Based Practice Concepts
4. Nicklaas Winkelman. 2012 – 2016. The Effect of Attentional Focus on Sprint Performance. March 2016.
5. Brad Shoenfeld. 2011 – 2014. Effects of Different Volume-Equated Resistance Training Loading Strategies on Muscular Adaptations in Well-Trained Men. April 2014.
6. Curtis, Thomas. 2000 – 2002. The lateral scapular slide test: A reliability study of subjects with and without shoulder pathology. May 2002.

### **Doctoral Students: Committee Member - Rocky Mountain University of Health Professions**

1. Rick Howard, 2013 – present.
2. Eddie Gammill, 2010 – 2016. The Effects of Synchronized Music on Heart Rate, Distance, Rate of Perceived Exertion, and Motivation During 30 Minutes of Two Different Types of Physical Activity: A Prospective Community Fitness Center Intervention Study

### **Doctoral Students: Chair – Arizona State University**

1. Bradley War – 2008 – present. Physical Fitness in Army National Guard Soldiers and its Relationship on Utilization of Medical Resources during Combat. December 2011
2. Steve Kelly. 2006 – 2013. Comparison of 1-Repetition Maximum in Concentric and Eccentric Bench Press. May 2012
3. Peterson, Mark. 2004 – 2008. Progressive Resistance Training for Strength and Lean Body Mass in Elderly Men and Women: A Meta-Analysis. December 2008.
4. Dodd, Daniel. 2005 – 2008. Comparison of Psychological and Physiological Response in Firefighters. May 2008
5. Rhea, Matt. 2001 – 2004. Applications of Exercise Research to Fire Fighter Health and Fitness. May 2004.  
**Awards:** Dr. Chris Wells' Outstanding Graduating Researcher Award.

### **Doctoral Students: Committee Member – Arizona State University**

1. Kristin Heumann. 2008 – 2011. The Acute Response of Ultrasound and Oseocalcin to Exercise.
2. Melanie Mitros. 2006 – 2009. Stay in Balance Falls Prevention Program. May 2010.
3. Corey Huck. 2005 – 2008. Vitamin C and Fuel Metabolism in Overweight Men. May 2008
4. Teresa Araas. 2005 – 2008. Associations of Mindfulness and Perceived Stress in Health Behaviors in College Freshman. May 2008
5. Jake Havenar. 2004 – 2007. First Time Marathon Runners: A Longitudinal Study Examining Changes in Motivations across the Exercise Lifecycle. May 2007
6. Benton, Melissa. 2003 – 2006. Effect of Post-Exercise Protein on Energy Expenditure and Substrate Utilization in Middle Aged Women. May 2006
7. Trone, Greg. 2001 – 2005. The Effects of 6 weeks of Strength Training on Lean Body Mass in Women Undergoing Treatment for Breast Cancer. May 2005  
Chandler-Gilbert Community College.
8. Cowen, Virginia. 2002 – 2005. A Comparative Study of Thai Massage and Swedish Massage. May 2005
9. Willardson, Jeff. 2002 – 2005. The Effect of Rest Interval Length on Bench Press Performance with Heavy versus Light Loads. May 2005
10. McGee, Kimberly. 2001 – 2004. Physical Activity Habits of Former National Football league Football Players. May 2004
11. Ziuraitis, Joana. 2000 – 2003. Energy Cost of Single Set Resistance Training: Comparison Between Older and Younger Adults. May 2003
12. Alexander, Jeff. 2000 – 2003. Effect of Single Set Strength Training on Physical Function Among Patients in Pulmonary Rehabilitation. May 2003

**Masters Students: Chair - Arizona State University**

1. Nicole Scott. 2007 – 2010. Job satisfaction in Division I-A strength coaches. May 2007.
2. Denise Gonzales. 2004 – 2009. Sublingual vitamin B supplementation versus placebo in the treatment of elevated plasma total homocysteine levels. May 2009.
3. Rich Wenner. 2004 – 2009. The effect of daily undulated periodization as compared to linear periodization in strength gains of collegiate athletes. May 2009.
4. Kyle Carothers. 2006 – 2008. Comparison of muscular strength benefits utilizing eccentric and concentric resistance training protocols. May 2008.
5. Meredith Hale-Griffin. 2005 – 2007. The influence of aerobic capacity, power and strength on the performance of amateur boxers. May 2007.

6. Reidhead, Kari 2004 – 2006. Effects of rotational training in combination with resistance training on bat speed in female collegiate athletes. May 2006.
7. Wludyga, Josh. 2004 – 2006. Effects of pre-event routines on the performance measure used in the National Football League Combine.  
**Awards:** Department of Exercise and Wellness, Outstanding Graduating Scholar, Teacher, and Leader. May 2006.
8. Klosterman, Kelby. 2003 – 2005. Acute testosterone response to single vs. multiple-set resistance training. May 2005.  
**Awards:** Department of Exercise and Wellness, Outstanding Graduating Scholar, Teacher, and Leader.
9. Dodd, Daniel. 2003 – 2005. Combining heavy resistance and high-velocity training to increase power in collegiate-level baseball players. May 2005.
10. Ben Brown. 2003 – 2005. Determining the acute effects of 3 different warmups on measures of athletic performance. May 2005.
11. Peterson, Mark. 2003. Determining the relationships between muscular fitness components and sport performance in collegiate athletes. May 2004.  
**Awards:** Department of Exercise and Wellness, Outstanding Graduating Scholar, Teacher, and Leader.

**Masters Students: Committee Member - Arizona State University**

1. Laurie Black. 2005 – 2007. Acute effects of resistance exercise protocols on insulin sensitivity in individuals with elevated blood glucose. May 2007.
2. Elizabeth Scheall. 2005 – 2007. Does online personal training effect adherence in previously sedentary adults. May 2007.
3. Lindsey Johnson. 2004 – 2006. Reliability of energy expenditure during a physically interactive video game. May 2006.
4. Ivana Jourdon. 2004 – 2006. Relationship between power and functional fitness levels on independent community living older adults. May 2006.
5. Susan Girard. 2003 – 2005. The Effect of The Atkins' Diet compared to The Zone Diet on indices of exercise efficiency in overweight women and men. May 2005.
6. Heidi Weildy. 2003 – 2005. The effects of a Stott Pilates exercise intervention on low back pain and disability. May 2005.
7. Megan Todd. 2002 – 2004. Yoga and distractibility. May 2004
8. Kelly Garrett. 2002 – 2004. The effects of single-set strength training on mood states in patients enrolled in pulmonary rehabilitation. December 2004.
9. Mike Schneider. 2001 – 2003. Predicting 1RM strength in adolescents from repetitions-to-volitional fatigue. May 2003

**Doctoral Student: Committee Member - Universidad Europe de Madrid**



1. Marin Cabezuelo, Pedro. 2007 – 2008. Efectos neurofisiologicos y de rendimiento de una feire de intervenciones con eftimulcion neuromuscular mecanica. December 2008.

## **Service**

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**Search Committee Chair: Point Loma Nazarene University. Physician Assistant Program Director (2019).**

**Search Committee Chair: Point Loma Nazarene University. Graduate Faculty positions in Kinesiology (2018).** Master of Science in Kinesiology and Integrated Wellness Program Director.

**Research Advisory Committee (Chair): Rocky Mountain University of Health Professions** 2016 – 2017. Create and establish a guiding body to monitor and evaluate the scholarship of discovery at RMUofHP

**Student Poster Presentation Reviewer  
Student Scholar Award Reviewer**

**Research Visioning Conference (Facilitator): Rocky Mountain University of Health Professions:** October 22-23, 2015. Facilitated a strategic planning session to create a guiding document for the RMUoHP Office of University Research and RMUofHP Research Enterprise.

**Gross Anatomy Laboratory/Human Performance Laboratory Manager** search committee 2015

**Physician Assistant Faculty Search Committee: Rocky Mountain University of Health Professions** 2014 - 2015

**Physician Assistant Advisory Committee including Accreditation Team -** Accreditation Review Commission on Education for the Physician Assistant (ARC-PA): Rocky Mountain University of Health Professions 2013 - present

**Rocky Mountain University of Health Professions – Accreditation Team for University Accreditation** Northwest Commission for Colleges and Universities (NWCCU): 2011 - present

**Rocky Mountain University of Health Professions Physical Therapy Accreditation Team –** Commission on Accreditation in Physical Therapy Education (CAPTE): 2011 -present

**Planning Task Force (PTF): Rocky Mountain University of Health Professions** 2014 – 2018 Comprehensive Strategic Planning process. Summer – Fall 2013

**Curriculum Committee (Chair): Rocky Mountain University of Health Professions** 2013 – 2016

**Search Committee Chair: Rocky Mountain University of Health Professions Associate Vice-President Enrollment Management/Director of Student Services** Spring 2013

**Promotion and Tenure Committee (Chair): Rocky Mountain University of Health Professions** 2012 – present

**Peer Observation/Reviewer - Rocky Mountain University of Health Professions**

Fall 2012 - present

**Search Committee Chair: Rocky Mountain University of Health Professions**

**Vice-Provost/Academic Dean** Fall 2012

**Search Committee Chair: Rocky Mountain University of Health Professions**

**Biostatistics Faculty** Winter 2011

**Coyote Athletic Center – Chandler-Gilbert Community College**

Design Team - Part of the design team for a 24 million dollar facility that will encompass gymnasiums, sport performance center for strength and conditioning and physical education/therapeutic massage and physical activity courses, as well as a sports medicine facility.

**21<sup>st</sup> Century Maricopa Faculty/Student Ratio Work Team – Maricopa Community College District**

Made recommendation to Maricopa leadership on district wide data on class size, adjunct faculty and best practices for enrollment efficiency and scheduling.

**TechnoGym – International Scientific Advisory Board**

International scientific body has the goal of supporting Technogym in the development of new solutions to improve the population's health. Includes: Steve Blair (chair), Barbara Ainsworth, Andre Biscardi, Lee Brown, Tim Church, Ken Fox, Jay Hoffman, Massimo Massarini & Marc Narici

**Gana Salud/WinHelath Forum International Scientific Advisory Committee**

GanaSalud Forum aims to become a bridge of communication and action among the different fields and contexts involved in the Promotion of Physical Activity and Public Health for the community of Madrid, Spain – Includes: Valentin Fuster, Luis Rojas Marcos, Steve Blair, Barbara Ainsworth, I-Min Lee, Bess Marcus, Alejandro Lucia Mulas, Avery Faigenbaum & Stefano Balducci

**Exchange program – Arizona State University, Chandler-Gilbert Community College and Universidad Europea de Madrid**

Accomplishment – developed and initiated an exchange program – 2007 – present  
Students from Arizona State University and Universidad Europea de Madrid spend one of their senior semesters abroad at the sister institution focusing on the professional development of the Exercise Science degree program.

**National Strength and Conditioning Association**

**Board of Directors: President Elect**

2020 – 2021

**Education Committee: 2017 – present**

**Vice Chair – 2018 – 2019**

Writing group member for the original Accreditation Standards for the CSCS

**Chair 2019 to present**

**NSCA Fellow Review Committee: 2016 – 2019**

**Board of Directors: Academician/Researcher Professional**

2012 – 2015

**Vice President:** 2013 – 2014

**NSCA Membership Committee** - Board Liaison (2012 - 2015)

**NSCA TSAC Committee** – Board Liaison (2012 - 2015)

**NSCA TSAC SIG** - Board Liaison (2012 – 2015)  
**NSCA IT Department** - Board Liaison (2012 - 2015)  
**Research & Education Committee** - Board Liaison (2012 - 2014)

**State Advisory Board Member (Arizona)**

2010 - 2017

**Journal of Strength and Conditioning Research:** Senior Associate Editor

2015 - present

**Journal of Strength and Conditioning Research:** Associate Editor

2004 – 2015

**Strength and Conditioning Journal:** Associate Editor

2014 – present

**Strength and Conditioning Journal:** Reviewer

2012 – present

**Scientific Program of the NSCA National Conference:** Abstract Reviewer

2007 – present

**Hot Topic Reviewer**

2007 – present

**Education Recognition Program**

**Strength and Conditioning Program & Graduate Studies Program - Research**

**Arizona State University - Exercise and Wellness:** Program Coordinator

2006 – 2008

**Strength and Conditioning Program**

**Point Loma Nazarene University:** Program Coordinator

2019 - present

**Ergonomics:** Reviewer

2015 - present

**Medicine and Science in Sports and Exercise:** Reviewer

2013 - present

**Journal of Sports Sciences:** Reviewer

2010 - present

**Obesity:** Reviewer

2008 – present

**Research Quarterly for Exercise and Sport:** Reviewer

2007 – present

**Journal on Human Sports & Exercise:** University of Alicante, Spain: Associate Editor-In-Chief

2006 - 2014

**International Journal of Sport Physiology and Performance:** Reviewer  
2005 – present

**Fire Science Technology Advisory Council:** Chandler-Gilbert Community College  
2006 – 2011

**Higher Learning Commission Criterion 1 Self Study Team:**  
Chandler-Gilbert Community College  
2004 – 2006

**Institutional Review Board Committee Member:** Maricopa Community College District  
2006 - 2008

Accomplishment – Part of the MCCCDC team to develop an Institutional Review Board for MCCCDC. This included the developing the standard operating procedures (SOP) for the IRB.

**Facilities Long Term Planning Committee:** Chandler-Gilbert Community College  
2004 – 2008

**President's Advisory Committee Member (PAC)** Chandler-Gilbert Community College  
2001 - 2004

**Faculty Executive Council Member (FEC)** Maricopa Community College District  
2001 - 2005

**Faculty Senate President (FS)** – Chandler-Gilbert Community College  
2004 – 2005

Accomplishment – Lead the first year of the CGCC Faculty Senate

**Campus Development Advisory Committee Member (CDAC)** FEC representative  
Maricopa Community College District  
2004 - 2005

**Faculty Association President (FA)** – Chandler-Gilbert Community College  
2003 – 2004

Accomplishments – Lead the development of a Faculty Association Constitution including the development of the CGCC Faculty Senate

**Enrollment Growth Management Team** - Chandler-Gilbert Community College  
2003 – 2005

**Honors Appeal Board Member** - Chandler-Gilbert Community College  
2003 – 2008

**Faculty Association Vice President (FA)** – Chandler-Gilbert Community College  
2001 – 2003

**Instructional Council Member (IC)** – Exercise Science, Physical Education, Wellness and Recreation – Maricopa Community College District  
2000 - present

Accomplishment - Lead the development of the Strength, Nutrition and Personal Training Certificate of Completion and Associate of Arts and Sciences degree  
2006

**Undergraduate Curriculum Committee Member (UGCC)** – Arizona State University  
Exercise and Wellness Department 2001 -2009

**Advisory Committee Chair** American Heart Association – Halle Heart Center  
2001-2005

**Advisory Committee Member** – Good Shepard Villa - Wellness Center  
2002 - 2004

**Maricopa Health Care Consortium Committee** – Maricopa Community Colleges  
2002 - 2004

Accomplishments – Part of the development team to establish a Nursing program at  
CGCC - 2004

**Committee for Advising on Sexual Harassment (CASH) Co-Chair**  
2000 – 2005

Accomplishments - Developed a program and curriculum, as well as trained/counseled  
employees at CGCC relative to sexual harassment

**United Way Co-Chair** - Chandler-Gilbert Community College  
2000 – 2002

**Williams Coordinating Council Member** - Chandler-Gilbert Community College  
1999 – 2005

## **Consulting**

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**San Diego Fire Wellness** (San Diego, California) Consultant on tactical strength and  
conditioning for firefighters.

**San Francisco Giants Baseball Strength and Conditioning** (Scottsdale, Arizona) Consultant  
on professional baseball fitness testing

**Technogym** (Cesena, Italy) – provided strength training program guidelines as well as specific  
mechanical specifications for a new line of resistance training equipment.

**Arizona Attorney General's Office** – Expert witness for the state in reference to a fitness  
center incident.

**Phoenix Fire Department** – evaluation of the Phoenix Fire Department Fitness/Wellness  
Initiative

**MED-TOX Health Services** – provided video analysis and occupational evaluation for the  
National Basketball Association (**NBA**) referees to develop medical fitness guidelines.

**Round Table Group** – Expert witness for a private gym in reference to an injury claim.