

Curriculum Vitae

David A. Titcomb, PT, DPT, PhD, ACSM-EP, NASM-CES

Professor of Health Sciences
Director: Undergraduate Exercise Science Program
Director: Biomechanics & Motion Analysis Laboratory
Liberty University
Department of Allied Health Professions
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Education

Doctor of Philosophy in Health and Human Performance, 2022, Concordia University Chicago, River Forest, IL. Dissertation title: "The Effects of Postural Education or Corrective Exercise Intervention on the Craniovertebral Angle in Young Adults with Forward Head Posture"

Doctor of Physical Therapy, 2006, University of St. Augustine for Health Sciences, Institute of Physical Therapy, St. Augustine, FL, Craniofacial specialization track. Capstone Project: "State of the Art Craniofacial" course.

Master of Physical Therapy, 1997, Old Dominion University, Norfolk, VA

Bachelor of Science, 1995, Major: Exercise Science, Old Dominion University, Norfolk, VA

Teaching Experience

July 2008-present Liberty University, Lynchburg, VA
Professor of Health Sciences
Director, Undergraduate Exercise Science Program, July 2013-Present
Director, Biomechanics & Motion Analysis Laboratory 2015-Present
Practicum Coordinator, Exercise Science Major 2009-2019

2014-2017 Wingate University Doctor of Physical Therapy Program
Wingate, NC
Adjunct Faculty

2008 University of St. Augustine for Health Sciences Institute of Physical Therapy, St. Augustine, FL
Online Instructor

Clinical Experience

2019-present PRN Physical Therapist, Drayer Physical Therapy Virginia LLC, Lynchburg, VA

2014-2019 PRN Physical Therapist, Orthodontic Arts, Forest, VA

2012-2022 Part-time Physical Therapist for Liberty University Club Sports

2008-2012 Part-time Physical Therapist, First Dominion Home Health Care, Lynchburg, VA

2002-2008 Physical Therapist, Rehab Associates of Central VA, Lynchburg, VA
Site Director of Thomson Dr. Clinic 2007-2008. Provided patient care as well as oversaw the day-to-day operation of the clinic. Clinical Instructor for student internships.

1997-2002 Physical Therapist/Coordinator, Centra Health, Lynchburg, VA

Coordinator of Healthy Living Center (Centra Health) at Jamerson YMCA, Lynchburg, VA: 2002. Provided sports and orthopedic rehabilitation; oversaw day-to-day operation of the multidisciplinary health center (PT, OT, Cardiac and Pulmonary Rehabilitation, Massage therapy, Biometrics nutrition program). Clinical Instructor for student internships.

Coordinator of PT at Courtside Athletic Club (Centra Health) Lynchburg, VA, 2000-2002. Provided sports and orthopedic rehabilitation; oversaw day-to-day clinic operation. Clinical Instructor for student internships.

Physical Therapist, Centra Health, Lynchburg General Hospital and Virginia Baptist Hospital, Lynchburg, VA 1997-2000. Experience in acute care, acute rehabilitation, home health, and hospital based outpatient settings.

Licensure/Certifications

Licensed Physical Therapist, Commonwealth of Virginia, 1997-present

Certified Exercise Physiologist, American College of Sports Medicine 2011-present

FMS-level 1, Functional Movement Systems, 2014-present

Dartfish (video analysis) Certified Technologist, 2014-present

Certified Corrective Exercise Specialist, National Academy of Sports Medicine 2019-present

Courses Taught

University of St. Augustine

CF2- Intermediate Craniofacial (Online)

Liberty University

HLTH 211 Anatomy and Physiology I for Associate Programs
HLTH 212 Anatomy and Physiology II for Associate Programs
HLTH 221 Applied Human Anatomy and Physiology I
HLTH 222 Applied Human Anatomy and Physiology II
KINE 225 Weight Training and Conditioning
EXSC 310 Physiology of Exercise
EXSC 321/421 Practicum in Exercise Science
EXSC 350 Biomechanics
EXSC 351 Biomechanics Lab
EXSC 550 Advanced Biomechanical Analysis
EXSC 551 Advanced Biomechanical Analysis Lab

Courses Developed

Liberty University

EXSC 351 Biomechanics Lab
EXSC 550 Advanced Biomechanical Analysis (LU Online and Residential)
EXSC 551 Advanced Biomechanical Analysis Lab
HLTH 211 Anatomy and Physiology I for Associate Programs (LU Online)
HLTH 212 Anatomy and Physiology II for Associate Programs (LU Online)
HLTH 221 Applied Human Anatomy and Physiology I (LU Online)
HLTH 222 Applied Human Anatomy and Physiology II (LU Online)

Undergraduate Student Mentoring: Liberty University Honors Program

Honors Thesis Chairman, Evan Sebastian, *The Complexity and Origins of the Human Eye: A Brief Study on the Anatomy, Physiology, and Origin of the Eye*, 2010.

Honors Thesis Chairman, Peter Sargent, *The Effects of Pitching on the Upper Extremity*, 2010.

Honors Thesis Committee, Mark Hopely, *The Effects of Music on Exercise Training and Athletic Performance*, 2010.

Honors Thesis Committee, Beth Gillie, *ACL Injury Prevention for Female Athletes*, 2010.

Honors Thesis Chairman, Cassandra Bernhart, *A Review of Stretching Techniques and Their Effects on Exercise*, 2013.

Honors Thesis Chairman, Kimberly Dahl, *External Factors and Athletic Performance*, 2013

Honors Thesis Committee, Amy McLaughlin, *The Use and Effects of Vitamin C in Cancer Treatment*, 2013.

Honors Thesis Committee, Meghan Bowles, *The Long-Term Effects of Acute and Chronic Injuries in College Athletes*, 2014.

Honors Thesis Committee, Jeshua Spadino, *The Fenzian Unit- Applications for Physical Therapy and Beyond*, 2014.

Honors Thesis Chairman, Laura Gilbert, *The Effects of Obesity on Human Ambulation: A lower Joint Analysis*, 2014.

Honors Thesis Committee, Michael Frost, *The Impact of Alzheimer's Disease on Family Caregivers*, 2014.

Honors Thesis Chairman, Peter Horning, *A Leg to Stand on: The Development of Prosthetics in Third-World Countries*, 2014.

Honors Thesis Committee, Kaitlyn Quesinberry, *Hippotherapy in Occupational Therapy*, 2015

Honors Thesis Chairman, Victoria Ramos, *The Psychological and Physical Rehabilitation of Amputees*, 2016.

Honors Thesis Chairman, Jamie Rogers, *Comparison of Lower Extremity Joint Reaction Forces During Barefoot Running Utilizing Rearfoot vs. Forefoot Initial Strike Pattern*, 2017.

Honors Thesis Chairman, Megan Merryman, *Promoting Physical Activity as a Lifestyle through Use of Behavioral Change Theories*, 2017. *Liberty University outstanding honors thesis award 2017.

Honors Thesis Chairman, Hannah Plasterer, *Multidisciplinary Approach to the Treatment of Bariatric Patients*, 2017.

Honors Thesis Chairman, Jessica Heidebrink, *Supplemental Training and Injury Prevention in the Sport of Ultra-Running*, 2018.

Honors Thesis Chairman, Abigail Richmond, *The Links Between Motivational Techniques, Successful Physical Therapists, and Successful Rehab Clinics*, 2019.

Honors Thesis Chairman, Karle Kotze, *The Pairing of Trigger Point Dry Needling with Rehabilitation Techniques*, 2019.

Honors Thesis Chairman, Samantha Yamasaki, *A Review of the Treatment and Prevention Options for Medial Tibial Stress Syndrome*, 2019.

Honors Thesis Committee, Juliana Bouton, *The Impact of Power Training on Balance and Visual Feedback Removal*, 2019.

Honors Thesis Committee, Joseph Valentini, *Communication Patterns Between Physicians and Physician Assistants*, 2020.

Honors Thesis Chairman, Timothy Leckrone, *The Application of Biomechanical Technology in Sports*, 2021.

Honors Thesis Chairman, Jesse Redding, *Hamstring and Quadriceps Strength Ratio in Collegiate Wrestlers*, 2022.

Honors Thesis Committee, Noah Owens, *An Overview of Nerve Flossing and Critical Analysis of its Efficacy for the Lower Body*, 2022.

Graduate Student Mentoring: Master's Thesis Committee Chair

Martin, C., Titcomb, D. *A Functional Comparison of Three Forms of Exercise Utilized for Flexibility Enhancement: Reactive Neuromuscular Training vs Traditional Stretching Prescriptions*, 2017.

Feister, J., Titcomb, D. *Evaluation of FMS Performance and Injury Visibility in NCAA Division I Football Players*, 2018.

Ray, T., Titcomb, D. *The Effects of Aerobic Fatigue Testing (Beep Test) on Three-Dimensional Kinetics During Drop-Jump Landings*, 2018.

Clary, D., Titcomb, D. *The Effects of Foam Rolling on Running Gait Patterns*, 2018.

Warr, L., Titcomb, D. *Comparison of functional improvements in Parkinson's disease patients: The effects of treadmill vs. free walking intervention*, 2019.

Lowell, R., Titcomb D. *A Kinetic and Kinematic Comparison Between Two ACL injury Risk Screening Assessments: Modified LESS Test Versus Sudden Deceleration Test*, 2019.

Blackley, A., Titcomb, D. *The Effects of Rearfoot Eversion Taping on 3D Foot and Ankle Kinematics During Treadmill Running*, 2020.

McCarty, A., Titcomb, D. *Effects of Pre-Determined Barbell Hip Thrusting Surface Height on Motor Unit Recruitment and Activation Patterns*, 2021.

Martin, A.D., Titcomb, D. *The Effects of Vestibular Exercises on Kinetic Measures of Balance in a Healthy Population*, 2021.

Awards and Research Grants

1994 Academic Excellence Award in Sports Medicine, Old Dominion University Health, Physical Education, and Recreation Dept.

1995 Old Dominion University Academic Honors Research Grant (\$5,000) for Biomechanics Research: Effects of a Heel Lift on Selected Biomechanical Variables in Women with Mild Leg Length Inequalities.

2010 Liberty University, Center for Research and Scholarship Grant (\$7,100) for Biomechanics Research: Midfoot Plantar Pressure: A Comparison Between Subjects With and Without Chronic Pain.

2021 Liberty University, Center for Research and Scholarship Grant (\$660) for Biomechanics Research

Research Abstracts

Redondo, D., Graham, B., Dowling, E., & Titcomb, D. (1994). 558 Effects of a Simulated Mild Leg Length Discrepancy on Selected Kinematic and Metabolic Variables During Walking And Running. *Medicine and Science in Sports and Exercise*. 26(5), S99.

Titcomb, D., Redondo, D., Graham, B., & Dowling, E. (1995). Effects of a Heel Lift on Selected Biomechanical Variables in Women with Mild Leg Length Inequalities. *Medicine and Science in Sports and Exercise*. 27(5), S42.

Schoffstall, J., Titcomb, D., & Kilbourne, B. (2010). Electromyographic Response of the Abdominal Musculature to the Abdominal Crunch Exercise Utilizing the Hollowing Maneuver. *Medicine and Science in Sports and Exercise*, 42(5), S207.

Titcomb, D. (2011). Midfoot Plantar Pressure: A Comparison Between Subjects With and Without Chronic Pain, *Medicine and Science in Sports and Exercise* 43(5), S256.

Titcomb, D. Blais, M., & Lane, R. (2012) Use of Tekscan Matscan® to Detect Static Rearfoot Position Through Evaluation of Rearfoot Pressure. *Medicine and Science in Sports and Exercise*, 44(5), S713.

Journal Publications

Titcomb, D. A. (2022). *The Effects of Postural Education or Corrective Exercise Intervention on the Craniovertebral Angle in Young Adults with Forward Head Posture* (29066896). Available from ProQuest Dissertations & Theses Global. (2686245438).

Titcomb, D. A., Melton, B. F., Miyashita, T., & Bland, H. W. (2022). Evidence-Based Corrective Exercise Intervention for Forward Head Posture in Adolescents and Young Adults Without Musculoskeletal Pathology: A Critically Appraised Topic. *Journal of Sport Rehabilitation*, 31(5), 640-644. <https://doi.org/10.1123/jsr.2021-0381>.

Schoffstall, J. E., Titcomb, D. A., & Kilbourne, B. F. (2010). Electromyographic Response of the Abdominal Musculature to Varying Abdominal Exercises. *Journal of Strength and Conditioning Research*, 24(12), 3422-3426.

Books/Course Manuals

Titcomb, D. A. (2022). Corrective strategies for the cervical spine. In R. Fahmy (Ed.), *NASM Essentials of corrective exercise training* (2nd ed., pp. 449-479). Jones & Bartlett Learning.

Titcomb, D. A. (2016) Biomechanics Course Manual, Academx Publishing Services.
ISBN: 978-1-68284-113-6.

Titcomb, D. A. (2017) Biomechanics Course Manual (2nd ed.). Academx Publishing Services.
ISBN: 978-1-68284-278-2.

Invited Publications

Schoffstall, J.E. & Titcomb, D.A. (2020, March 27). The Making of a High-Quality Exercise Science Program. ACSM: Certification Blog. <https://www.acsm.org/all-blog-posts/certification-blog/acsm-certified-blog/2020/03/27/the-making-of-a-high-quality-exercise-science-program>

Titcomb, D. A. (2020, June 4). How to Fix Forward Head Posture. NASM Blog. <https://blog.nasm.org/fixing-forward-head-posture>

Presentations

- 1995** Biomechanics Slide Presentation: *Effects of a Heel Lift on Selected Biomechanical Variables in Women with Mild Leg Length Inequalities*, American College of Sports Medicine National Meeting, Minneapolis, MN.
- 1997** *Myofascial Release*, Virginia Physical Therapy Association – Tidewater District, Virginia Beach, VA.
- 2006** *Physical Therapy for Temporomandibular Joint Disorders*, Virginia Physical Therapy Association – Valley District Meeting. Jefferson College of Health Sciences, Roanoke, VA.
- 2010** Poster Presentation: *Electromyographic Response of the Abdominal Musculature to the Abdominal Crunch Exercise Utilizing the Hollowing Maneuver*, American College of Sports Medicine National Meeting, Baltimore, MD.
- 2011** Poster Presentation: *Midfoot Plantar Pressure: A Comparison Between Subjects With and Without Chronic Pain*, American College of Sports Medicine National Meeting, Denver, CO.
- 2011** Applied Exercise Science & Muscular Fitness/Flexibility Assessment. ACSM Exercise Physiologist Workshop. Lynchburg, VA.
- 2012** Poster Presentation: *Use of Tekscan Matscan® to Detect Static Rearfoot Position Through Evaluation of Rearfoot Pressure*, American College of Sports Medicine National Meeting, San Francisco, CA.
- 2012** Applied Exercise Science & Muscular Fitness/Flexibility Assessment. ACSM Exercise Physiologist Workshop. Lynchburg, VA.
- 2012** Human Behavior and Counseling. ACSM Exercise Physiologist Workshop. Lynchburg, VA.
- 2013** Poster Presentation: *Electromyographic Comparison of the Pushup and the Ring Pushup*, South East American College of Sports Medicine Meeting, Greenville, SC.
- 2013** Poster Presentation: *Electromyographic Comparison of the PVC Pushup and the Perfect Pushup®*, South East American College of Sports Medicine Meeting, Greenville, SC.

- 2013** Poster Presentation: *The Effects of Stretching & Warm-up on Vertical Jump*, South East American College of Sports Medicine Meeting, Greenville, SC.
- 2013** Poster Presentation: Electromyographic Comparison of the Abdominal Musculature Between the V-up and V-up Variations Using Commercially Available Equipment. American College of Sports Medicine National Meeting, Indianapolis, IN.
- 2013** Applied Exercise Science & Muscular Fitness/Flexibility Assessment. ACSM Exercise Physiologist Workshop. Lynchburg, VA.
- 2013** Program Administration, Safety, Emergency Procedures. ACSM Exercise Physiologist Workshop. Lynchburg, VA.
- 2013** Human Behavior and Counseling. ACSM Exercise Physiologist Workshop. Lynchburg, VA.
- 2014** Applied Exercise Science & Muscular Fitness/Flexibility Assessment. ACSM Exercise Physiologist Workshop. Lynchburg, VA.
- 2014** Physical Therapy for TMJ Disorders. Wingate University Doctor of Physical Therapy Program. Wingate, NC.
- 2015** Poster Presentation: A Comparison of Electromyographic Responses of the Hamstring Musculature During Seated vs. Prone Hamstring Curls. Southeast American College of Sports Medicine Meeting, Jacksonville, FL.
- 2015** Applied Exercise Science & Muscular Fitness/Flexibility Assessment. ACSM Exercise Physiologist Workshop. Lynchburg, VA.
- 2015** Physical Therapy for TMJ Disorders. Wingate University Doctor of Physical Therapy Program. Wingate, NC.
- 2016** Applied Exercise Science & Muscular Fitness/Flexibility Assessment. ACSM Exercise Physiologist Workshop. Lynchburg, VA.
- 2017** Applied Exercise Science & Muscular Fitness/Flexibility Assessment. ACSM Exercise Physiologist Workshop. Lynchburg, VA.
- 2017** Physical Therapy for TMJ Disorders. Wingate University Doctor of Physical Therapy Program. Wingate, NC.
- 2018** Applied Exercise Science & Muscular Fitness/Flexibility Assessment. ACSM Exercise Physiologist Workshop. Lynchburg, VA.
- 2018** Poster Presentation: The Effect of Barefoot Running Using Two Running Styles on Lower Extremity Joint Reaction Forces. J.M. Rogers, D.A. Titcomb. Southeast American College of Sports Medicine Meeting, Chattanooga, TN.
- 2019** Applied Exercise Science & Muscular Fitness/Flexibility Assessment. ACSM Exercise Physiologist Workshop. Lynchburg, VA.

- 2020** Applied Exercise Science & Muscular Fitness/Flexibility Assessment. ACSM Exercise Physiologist Workshop. Lynchburg, VA.
- 2021** Applied Exercise Science & Muscular Fitness/Flexibility Assessment. ACSM Exercise Physiologist Workshop. Lynchburg, VA.

Guest Lectures

- 1998** *Pathophysiology and Mechanics of the Shoulder*, Lynchburg General Hospital, Lynchburg, VA.
- 1999** *Rehabilitation of the Shoulder*, Guest Lecture with Joseph Wombwell, MD. Virginia Baptist Hospital, Lynchburg, VA.
- 2000** *Physical Rehabilitation*, Virginia Baptist Hospital, Lynchburg, VA.
- 2001** *Physical Therapy Intervention for Chronic Pain: Transcutaneous Electrical Nerve Stimulation (TENS)*, Women's Health Forum, with Physiatrist Dr. Scott Tyree, Lynchburg, VA.
- 2001** *Physical Therapy for Ankle Injuries*, Centra Health Family Practice Residency, Lynchburg, VA.
- 2001** *How to Transfer Patients Safely: Optimal Body Mechanics*, Lynchburg General Hospital, Lynchburg, VA.
- 2002** *Injury Prevention and Exercise Prescription for the Older Adult*. Courtside Athletic Club, Lynchburg, VA.
- 2005** *Physical Therapy for Temporomandibular Joint Disorders*, Lynchburg Dental Society, Oakwood Country Club, Lynchburg, VA.
- 2006** *Physical Therapy for Temporomandibular Joint Disorders*, Lynchburg Dental Hygienist Association, Lynchburg, VA.
- 2009** *Sports Nutrition for Wrestlers*, Liberty University Wrestling Team, Liberty University, Lynchburg, VA.
- 2017** *Practical Interventions for Patients with TMD and Facial Pain*. Southside Rural Dental Study Club. Farmville, VA.
- 2018** *Bridging the Gaps Between Physicians, PTs, and Fitness Professionals For Improved Patient Care*. Liberty University College of Osteopathic Medicine. Lynchburg, VA.
- 2018** *Worksite Ergonomics, Posture, and Pain Prevention*, Thomas Road Baptist Church TRFit Program, Lynchburg, VA.
- 2019** *Bridging the Gaps Between Physicians, PTs, and Fitness Professionals For Improved Patient Care*. Liberty University College of Osteopathic Medicine. Lynchburg, VA.

Conferences Attended

- 1989** Southeast American College of Sports Medicine Meeting, Norfolk, VA.
- 1990** American College of Sports Medicine National Meeting, Minneapolis, MN.
- 1997** Virginia Physical Therapy Association Annual Meeting, Lynchburg, VA.
- 1998** Virginia Physical Therapy Association Annual Meeting, Roanoke, VA.
- 2000** Virginia Physical Therapy Association Annual Meeting, Richmond, VA.
- 2007** American Academy of Orofacial Pain (AAOP) National Meeting, Philadelphia, PA.
- 2010** American College of Sports Medicine National Meeting, Baltimore, MD.
- 2011** Southeast American College of Sports Medicine Meeting, Greenville, SC
- 2011** American College of Sports Medicine National Meeting, Denver, CO
- 2012** Southeast American College of Sports Medicine Meeting, Jacksonville, FL
- 2012** American College of Sports Medicine National Meeting, San Francisco, CA
- 2013** Southeast American College of Sports Medicine Meeting, Greenville, SC
- 2013** American College of Sports Medicine National Meeting, Indianapolis, IN
- 2014** American College of Sports Medicine National Meeting, Orlando, FL
- 2014** World Congress of Biomechanics Scientific Meeting, Boston, MA
- 2015** Southeast American College of Sports Medicine Meeting, Jacksonville, FL
- 2015** American College of Sports Medicine National Meeting, San Diego, CA
- 2016** Southeast American College of Sports Medicine Meeting, Greenville, SC
- 2016** American Society of Biomechanics Annual Meeting, Raleigh, NC
- 2017** Southeast American College of Sports Medicine Meeting, Greenville, SC
- 2018** Southeast American College of Sports Medicine Meeting, Chattanooga, TN
- 2018** American Society of Biomechanics Annual Meeting, Rochester, MN
- 2019** Southeast American College of Sports Medicine Meeting, Greenville, SC
- 2020** Southeast American College of Sports Medicine Meeting, Jacksonville, FL

2021 Southeast American College of Sports Medicine, Virtual Meeting

2022 Southeast American College of Sports Medicine Meeting, Greenville, SC

Membership in Professional Organizations

American College of Sports Medicine (ACSM)

Southeast American College of Sports Medicine (SEACSM)

American Society of Biomechanics (ASB)

Christian Medical and Dental Association (CMDA)

Departmental and University Service

2010-2014 Liberty University Faculty Senate

2010-2012 Health Science Committee

2012-2014 Liberty University Faculty Senate Executive Committee- Member at Large

2012-present Physical therapist for Liberty University Club Sports Athletes

2012-2015 Development/set-up of the Biomechanics & Motion Analysis Laboratory

2014-2017 School of Health Sciences Faculty Promotion Committee member

2014 Oversaw continuing accreditation review and site visit for program accreditation: Committee on Accreditation of Allied Health Education Programs (CAAHEP)

2014 Liberty University Exercise Science Program Review (SACS)

2016-present Faculty representative for the Pre-Physical Therapy Club

2018 Faculty Shepherd, LU School of Health Sciences

2021 Liberty University Exercise Science Program Review (SACS)

Developed residential courses: EXSC 351 Biomechanics Lab, EXSC 550 Advanced Biomechanical Analysis, EXSC 551 Advanced Biomechanical Analysis Lab

Developed LUO courses: HLTH 211 Applied Anatomy and Physiology I for Associate Programs, HLTH 212 Applied Anatomy and Physiology II for Associate Programs, HLTH 221 Applied Human Anatomy and Physiology I, HLTH 222 Applied Human Anatomy and Physiology II, EXSC 550 Advanced Biomechanical Analysis

Community Involvement

- 2000-2008 Coordinator of Physical Therapy Services, Free Clinic of Central Virginia, Lynchburg, VA. Organized and developed a volunteer outpatient physical therapy program at the clinic to provide pro-bono PT services to the local community.
- 2011-2012 Volunteer, Freedom 4/24 ministries

Personal

- Intervarsity Christian Fellowship, Old Dominion University, 1993-1997
- Old Dominion University Wrestling Team, 1990-1992
- Eagle Scout, Boy Scouts of America, 1990