

Richard L. Cahanin IV
University of South Alabama
Physical Therapy
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Education

Ph D, Rocky Mountain University, 2018.
Major: Orthopaedic and Sports Science
Dissertation Title: Relationship between iliac crest height difference and injury among runners

Doctor of Physical Therapy, University of South Alabama, 2010.
Major: Physical Therapy - Doctorate

BS, Louisiana State University and A&M College, 2005.
Major: Marketing

Licensures and Certifications

Sakai/USA Online Certified, University of South Alabama - Innovation and Learning Center. (May 14, 2019 - Present).

Dry Needling Certification, Spinal Manipulation Institute. (December 12, 2015 - Present).

Mental Health First Aid, University of South Alabama. (September 9, 2024 - September 9, 2027).

CPR for healthcare providers, American Heart Association. (October 30, 2023 - October 31, 2025).

Physical Therapist, State of Alabama Board of Physical Therapy. (September 10, 2018 - October 1, 2025).

Physical Therapist, State of Louisiana Board of Physical Therapy. August 2010 – August 2018)

Black belt in Ji Kai Kobudo. Ji Kai Martial Arts. Completed July 2023

Black belt in Ji Kai Karate. Ji Kai Martial Arts. Completed July 2023

Black belt in Ji Kai Iaido. Ji Kai Martial Arts. Completed April 2022

Black belt in Tae Kwon Do. Chittham-Jordan Korean karate. Completed December 2017

Black belt in Shotokan Karate Do. Japanese Karate Association. Completed May 2006

Professional Memberships

American Physical Therapy Association. Orthopedic Section Member (January 2007 - Present).

Development Activities Attended

Continuing Education Program. Mental Health First Aid. National Council for Mental Wellbeing. (September 9, 2024).

Workshop, "Leveraging AI," Pat Capps Covey College of Allied Health, Mobile, USA. (July 19, 2024).

Continuing Education Program. Alabama Annual APTA Conference. Alabama Chapter of American Physical Therapy Association. Montgomery, AL. (August 23-25, 2024).

Conference Program, "Conference on Teaching and Learning," University of South Alabama, Mobile, AL, USA. (May 7, 2024).

Workshop, "Tenure and promotion," University of South Alabama, Mobile, AL, USA. (March 28, 2023).

Faculty Fellowship, "CAHP faculty recognition/Alpha Eta Honors Ceremony," USA CAHP, Mobile, AL, USA. (March 21, 2023).

Workshop, "Research and Scholarly Activity CAHP Grant Applications and Routing," University of South Alabama, Mobile, USA. (March 17, 2023).

Workshop, "General Education Meeting," University of South Alabama, Mobile, AL, USA. (February 28, 2023).

Workshop, "Active Shooter Training," University of South Alabama, Mobile, AL, USA. (February 16, 2023).

Workshop, "SOTL In Our Academic Lives," USA ILC, Mobile, AL, USA. (September 29, 2023).

Conference Attendance, "Combined Sections Meeting 2023," American Physical Therapy Association, San Diego, CA, USA. (February 22, 2023 - February 25, 2023).

Tutorial, "Leveraging the Biomedical Library for your Research Needs," University of South Alabama, Mobile, United States. (July 15, 2022).

Continuing Education. Gravano T. Orthotics and Prosthetics: Special Considerations for the Aging Adult. Medbridge. (January, 2022).

Continuing Education Program. Donatelli R. Returning the Injured Athlete to Sports: Foot, Ankle, and Orthotics. Medbridge. (August, 2021)

Continuing Education Program. Vagy J. The Movement System: Advanced Running Assessment and Treatment. Medbridge. (August, 2021).

CAHP Awards Ceremony, "CAHP Awards Ceremony," University of South Alabama, Mobile, United States. (April 15, 2021).

Workshop, "Giving Campaign Training," University of South Alabama, Mobile, United States. (February 5, 2021).

Tutorial, "Mosaic: Prevent discrimination and Harrassment Together," USA. (February 1, 2021).

Tutorial, "Mosaic: Prevent Sexual Violence Together," USA. (February 1, 2021).

Workshop, "2020-2021 RCR Training Series (4) Research Misconduct, Questionable Research Practices," University of South Alabama, Mobile, United States. (January 7, 2021).

Workshop, "Grant Proposal Development Academy," Center from Clinical and Translational Science, University of Alabama Birmingham, Mobile, United States. (October 8, 2020 - November 12, 2020).

Workshop, "Academic Integrity in Online Assessments: Respondus Lockdown Browser," Facilitated by Jack Shelley-Tremblay Ph.D., Dept. of Psychology, USA, Mobile, USA. (August 5, 2020).

Continuing Education. Professionalism Module 3: Ethical Compass. American Physical Therapy Association. (June, 2020).

Continuing Education Program. Professionalism Module 2: History of Professionalism in Physical Therapy. American Physical Therapy Association. (June, 2020).

Tutorial, "Quizzes in Panopto," Innovation in Learning Center, Mobile, AL, USA. (June 11, 2020).

Info Session, "Proctoring/Canvas Info Session," College of Allied Health Professions, Mobile, AL, USA. (June 8, 2020).

Workshop, "iClickers," Innovation in Learning Center, Mobile, United States. (May 14, 2020).

Conference Program, "Conference on Teaching and Learning," University of South Alabama, Mobile, AL, USA. (May 12, 2020).

Conference Program, "Combined Sections Meeting," American Physical Therapy Association, Denver, CO, USA. (February 13-15, 2020).

Workshop, "Canvas Fundamentals," University of South Alabama, Mobile, AL, USA. (December 12, 2019).

Workshop, "Making Assignments," Innovation and Learning Center, Mobile, AL., United States. (November 30, 2019).

Workshop, "CAHP brown bag," College of Allied Health Professions, Mobile, AL., United States. (November 2, 2018 - August 15, 2019).

Workshop, "20-minute Tuesdays," Innovation and Learning Center, Mobile, AL., United States. (October 9, 2018 - August 15, 2019).

Workshop, "New Faculty Scholars Program," University of South Alabama, Mobile, AL., United States. (August 15, 2018 - August 15, 2019).

Continuing Education Program, "Screening for Fractures: Diagnostic Imaging and Beyond," American Physical Therapy Association, Denver, CO, USA. (August 9, 2019).

Workshop, "Digital Measures," University of South Alabama, Mobile, AL., United States. (October 19, 2018 - May 6, 2019).

Seminar, "Meditation," Meditation Center of Mobile, Mobile, AL., United States. (April 22, 2019).

Faculty Mentor-Mentee program awards, University of South Alabama, Mobile, AL., United States. (April 16, 2019).

Lecture, "Happiness," Meditation Center of Mobile, Mobile, AL., United States. (April 11, 2019).

Banquet, "Alpha Eta," University of South Alabama, Mobile, AL., United States. (March 26, 2019).

Conference Attendance, "APTA's Combined Sections Meeting," Washington, DC, United States. (January 23, 2019 - January 26, 2019).

Workshop, "USA online," Innovation and Learning Center, Mobile, AL., United States. (January 4, 2019 - January 11, 2019).

Workshop, "Online Team-Based Learning," Innovation and Learning Center, Mobile, AL., United States. (December 6, 2018).

Workshop, "Designing syllabi," Innovation and Learning Center, Mobile, AL., United States. (October 26, 2018).

Workshop, "Writing effective and engaging learning outcomes," Innovation and Learning Center, Mobile, AL., United States. (October 19, 2018).

Workshop, "Tenure/Promotion," University of South Alabama, Mobile, AL., United States. (October 18, 2018).

Continuing Education Program, "Professionalism Module 1: Intro to Professionalism," American Physical Therapy Association, Alexandria, VA, United States. (October 9, 2018).

Continuing Education Program, Jurisprudence. Louisiana physical therapy board. (2012, 2013, 2016, 2017).

Continuing Education Program, Louisiana physical therapy ethics. Advantage CEUs. (2016, 2017)

Continuing Education Program, DN-2: Dry needling for lumbopelvic and lower extremity conditions: an evidenced-based approach. The spinal manipulation institute. (July, 2016).

Continuing Education Program, DN-1: Dry needling for cervicothoracic and upper extremity conditions: an evidenced-based approach. The spinal manipulation institute. (December, 2015).

Continuing Education Program, Louisiana physical therapy ethics. Innovative educational services. (2012, 2013)

Continuing Education Program, Coding and billing for therapy and rehab. Cross country education. (2013)

TEACHING

Teaching Experience

University of South Alabama

PT 505, Prosthetics & Orthotics/Lab, 1 course.
PT 600, Human Anatomy I, 2 courses.
PT 601, Human Anatomy II, 2 courses.
PT 611, Research Proposal Development, 3 courses.
PT 612, Research Project, 3 courses.
PT 613, Clinical Case Report, 3 courses.
PT 620, Clinical Kinesiology, 3 courses.
PT 621, Introductory PT Skills, 10 courses.
PT 622, Exercise Physiology, 3 courses.

PT 628, Mobility Ortho & Prosthetics, 4 courses.
PT 631, Musculoskeletal Disorders I, 4 courses.
PT 632, Musculoskeletal Disorders II, 5 courses.
PT 633, Musculoskeletal Disorders III, 5 courses.
PT 634, Musculoskeletal Disorders IV, 2 courses.
PT 675, Comprehensive Capstone, 4 courses.
PT 676, Advanced Topics in PT, 2 courses.

Non-Credit Instruction

Guest Lecture, 6 participants. (February 21, 2019 - Present).

Directed Student Learning (outside of appointed teaching responsibilities)

Supervised Research, Physical Therapy. (January 2024 - Present).
Advised: Viktor Turok, Colton Clark

Clinical Instructor, Physical Therapy. (September 1, 2021 - December 6, 2021).
Advised: Caroline Manneman

Internship Advisor, Health, Kinesiology and Sport. (September 1, 2021 - December 6, 2021).
Advised: Katelyn Green

RESEARCH

Published Intellectual Contributions

Book Chapters

McKinnis, L., Cahalan IV, R. L., Burley, T. (2020). *Integration of diagnostic imaging into physical therapy practice* (5th ed., pp. chapter 18). Philadelphia, PA: F.A. Davis. <https://www.fadavis.com/product/physical-therapy-fundamentals-musculoskeletal-imaging-4-mckinnis>

Refereed Journal Articles

Burley, T. R., Cahalan IV, R. L. (2024). Reliability of a musculoskeletal Imaging competency examination for physical therapists. *Journal of Physical Therapy Education*. 10.1097/JTE.0000000000000328

Cahalan IV, R. L., Burley, T. R., McQuiston, S., Fallavollita, A. (2023). The reliability of clinical tools with and without ultrasound guidance to measure leg-length inequality. *Ultrasound Journal*.

Cahalan IV, R. L., Esleck, B. (2021). The Development of the Butterfly Agility Test. *Physical Therapy in Sport*(52), 38-44.

Cahalan IV, R. L., Jefferson, J., Flynn, T., Goyeneche, N. (2019). Iliac crest height difference and other running-related variables' relationship with running injury. *International Journal of Sport Physical Therapy*, 14(6), 957.
<https://www.ncbi.nlm.nih.gov/libproxy.usouthal.edu/pmc/articles/PMC6878858/pdf/ijsp-14-957.pdf>

Cahalan IV, R. L., Jefferson, J., Flynn, T., Goyeneche, N. (2019). Pain and physical performance among recreational runners who receive a correction for an iliac crest height difference: a

case series. *International Journal of Sports Physical Therapy*, 14(October 2019), 794.
<https://www.ncbi.nlm.nih.gov.libproxy.usouthal.edu/pmc/articles/PMC6769274/pdf/ijspt-14-794.pdf>

Presentations Given

- Cahanin IV, R. L.**, Annual Conference 2024, "Examination and Treatment of Individuals with Chronic Knee Pain: A Biomechanical Approach," Alabama Physical Therapy Association, Montgomery, AL. (August 23, 2024).
- Cahanin IV, R. L.** (Presenter), Warren, P. P. (Presenter), Conference on Teaching and Learning (CoTL), "Student Perception of Instruction & Performance in USA's Doctor of Physical Therapy Program," University of South Alabama. (May 7, 2024).
- Burley, T. (Author & Presenter), **Cahanin IV, R. L.** (Other), Combined Sections Meeting Annual Conference, "Reliability of a musculoskeletal imaging competency examination for physical therapists," American Physical Therapy Association, Boston, MA. (February 2024).
- Burley, T. (Author & Presenter), **Cahanin IV, R. L.** (Other), Manual Physical Therapist's Annual Conference, "The effects of a self-paced musculoskeletal imaging course on musculoskeletal imaging competency among physical therapists," American Academy of Orthopedic Manual Physical Therapy Conference, St. Louis, MI. (October 2023).
- Cahanin IV, R. L.** (Presenter/corresponding), Burley, T. R. (Presenter), APTA Alabama Annual Conference, "History and Physical Examination vs. Imaging for Diagnosis of MSK Conditions," APTA, Birmingham, AL. (August 26, 2023).
- Burley, T. R. (Author), **Cahanin IV, R. L.** (Author & Presenter), American Physical Therapy Association Combined Sections Meeting, "Clinical Decision-Making Skills Concerning Musculoskeletal Imaging in Doctor of Physical Therapy Students," American Physical Therapy Association, San Diego, CA. (February 2023).
- Cahanin IV, R. L.** (Corresponding Author & Presenter), Burley, T. R. (Author & Presenter), American Physical Therapy Association Combined Sections Meeting, "The Reliability of Ultrasound-Guided Leg-Length Measurement," American Physical Therapy Association, San Diego, CA. (February 2023).
- Cahanin IV, R. L.**, gill, m. (Author), Jesswein, C. (Author), Roberts, N. (Author), Combined Sections Meeting Annual Conference, "Reliability and Optimal Number of Trials for the Butterfly Agility Test," American Physical Therapy Association, San Diego, CA. (February 2023).
- Cahanin IV, R. L.**, Alabama Physical Therapy Association's Annual Conference, "Orthopedic Special Tests for the Lower Extremities," Alabama Physical Therapy Association, Jefferson State Community College. (August 2022).
- Cahanin IV, R. L.**, Departmental CEU Course Series, "Orthopedic special tests of the lower extremities: an evidence-based approach," University of South Alabama, Mobile, AL. (September 25, 2021).
- Cahanin IV, R. L.**, Combined Sections Meeting, "The relationship between leg-length inequality and running injury," American Physical Therapy Association, Denver, CO. (February 15, 2020).

Cahanin IV, R. L., Louisiana Exercise Physiologist Association board meeting at Southeastern Louisiana University, "Running injuries: etiology, risk factors, and prevention," Hammond, LA. (March 2015).

Contracts, Grants and Sponsored Research

Sponsored Research

Funded

Strehler, K. (Principal), Hassell, M. J. (Supporting), **Cahanin IV, R. L.** (Supporting), "Validity of self-completed functional strength assessment in virtual rehabilitation practice," Sponsored by PCCCAH Collaborative Research Support, Internal to the University, \$4,516.00. (June 1, 2024 - Present).

[Strehler 2024 CORS-1.pdf](#)

[Strehler CORS Letter 2024-1.pdf](#)

Cahanin IV, R. L. (Principal), McQuiston, S. (Supporting), Fallavollita, A. (Supporting), "Collaborative Research Program," Sponsored by Pat Capps Covey College of Allied Health Professions, Internal to the University, \$5,000.00. (May 24, 2021 - December 2022).

[CahaninMcQuistonCCAHCRCSP-1.pdf](#)

[Cahanin CORS 5.24.2021-signed-1.pdf](#)

Currently Under Review

Cahanin IV, R.L. Research and Scholarship Development Grant 2024. The effects of equalizing leg-length inequality on lower-limb biomechanics among individuals with knee osteoarthritis. University of South Alabama. Internal to University, \$25,000. Pre-application submitted September 16, 2024. Awaiting invitation letter.

Not Funded

Cahanin IV, R. L. (principal), Turok, V. (supporting), Clark, C. (Supporting), Bravi, M. (Supporting), Santacaterina, F. (Supporting), "Collaborative Research Program," The validity and reliability of static measures lower limb posture and osteokinematics compared to dynamic measures using 3D kinematic analysis. Sponsored by Pat Capps Covey College of Allied Health Professions, Internal to the University, \$5,000.00. (2024).

Cahanin IV, R. L., "Research and Scholarly Development Grant," Injury prediction among high-school and collegiate athletes Sponsored by Pat Capps Covey College of Allied Health Professions, Internal to the University, \$5,000.00. (2023).

See attachment

[ResearchScholarlyDevelopmentGrantProposalCahanin2023-signed-1.pdf](#)

Cahanin R (principal), Burley T (supporting), Waldhelm A (supporting). Research and Scholarship Development Grant 2022. Development of a tool to reduce athletic injury. University of South Alabama. Internal award of \$25,000.

Awards and Honors

Golden Scalpel award for excellence in Human Anatomy course series. Department of Physical Therapy. University of South Alabama. (2010)

Research Currently in Progress

- Cahanin IV, R. L.** Waldhelm A, Burley T. Comparing the reliability of the Modified Butterfly Agility Test to other physical performance tests among soccer athletes. American Physical Therapy Association. Combined Sections Meeting. (Abstract Submitted July 2024). Event slated for February 2025.
- Cahanin IV, R.L.** The effects of artificially-induced leg-length inequality on running biomechanics. World Physiotherapy Congress. Tokyo, Japan. (Abstract Submitted September 2024). Event slated for May 2025
- Strehler K, Hassell M, **Cahanin IV, R.L.** Validity of self-completed functional strength assessment in virtual rehabilitation practice. (Collecting Data)
- Waldhelm A, **Cahanin IV, R.L.** Functional testing for athletic injuries and performance. (Collecting Data)
- Sullivan T, **Cahanin IV, R.L.** Biomechanical analysis of the glenohumeral joint during a golf swing: a critically appraised topic. (Writing Results)
- Dale RB, **Cahanin IV, R.L.** Subject characteristic prediction with multilayer perceptron analysis during squatting activities. (Writing Results)
- Burley, T., **Cahanin IV, R. L.** "Clinical decision-making skills concerning musculoskeletal imaging among doctor of physical therapy students" (Writing Results)
- Burley, T. R., **Cahanin IV, R. L.** "Clinical Decision-Making Skills Concerning Musculoskeletal Imaging in Doctor of Physical Therapy Students" (Writing Results)
The purpose of this study was to determine if physical therapy students could appropriately interpret musculoskeletal imaging to assist in making accurate clinical decisions regarding evaluation, treatment, and referral of various conditions. A secondary purpose was to determine if clinical decisions improved as students matriculate through their physical therapy education. A cross-sectional electronic survey was delivered to three consecutive cohorts from two different physical therapy programs. Students were asked to make clinical decisions regarding abnormalities seen on images with and without clinical scenarios in 16 questions. Clinical decisions involved the need for urgent outside referral, physical therapy evaluation/treatment, or additional imaging.
- Burley, T. R., **Cahanin IV, R. L.**, Vivone, H., Ainsworth, V., Hall, A., Harris, D. "Effects of a Self-Paced Musculoskeletal Imaging Course on Musculoskeletal Imaging Competency Among Physical Therapists" (Writing Results)
Knowledge of musculoskeletal (MSK) imaging can impact the diagnostic process and patient management across a variety of physical therapy practice settings. Currently, there are no studies observing the effects of MSK imaging training on competency in this area. The purpose of this study was to determine the effects of a MSK imaging training course on MSK imaging competency among physical therapists (PTs).
- Burley, T., Ross M., **Cahanin IV, R. L.** "The effects of a musculoskeletal imaging course on musculoskeletal imaging competency among student physical therapists" (Writing Results)
- Cahanin IV, R. L.** "The effects of artificially-induced leg-length discrepancy on gait and running biomechanics" (Submitted to Publisher September, 2024)
Currently being reviewed by Gait & Posture

Cahanin IV, R. L., Dale B, Farris J, Andrews, T. C., Warren, P., Patterson, J., Drake, S. M. "The relationship between academic performance measures and National Physical Therapy Examination Score 2023-2024: a multi-institutional study" (On-Going)

This is multi-institutional study analyzing a variety of variables associated with NPTE score

Cahanin IV, R. L. Waldhelm A, Burley T. "The reliability of the modified Butterfly Agility Test and performance among soccer athletes" (Writing Manuscript)

A continuation a study assessing the validity and reliability of the Butterfly Agility Test.

Planning to submit to *Int J Sport Phys Ther* in October 2024.

Cahanin IV, R. L., Turok, V., Clark, C., Bravi, M., Fabio, S. "The validity and reliability of static measures of lower limb posture and osteokinematics compared to dynamic measures using 3D kinematic analysis" (Collecting Data)

This planned bio-mechanical research study is a mentored project with two physical therapy students and a collaboration with two experienced researchers from Rome, Italy.

Cahanin IV, R. L., Burley, T. "The validity of a LASER device to measure leg-length discrepancy" (Revising Study Design)

Observational study with gold standard reference

SERVICE

Department Service

Committee Chair, PT Alumni. August 2024 – Present)

Faculty Advisor, Pre-PT Club Advisor. (January 1, 2021 - Present).

Committee Member, PT Curriculum. (May 31, 2019 - Present).

Committee Member, Continuing Education Committee. (February 2019 – May 2022).

Committee Member, Admissions committee. (August 15, 2018 – May 2024).

Committee Member, Scholarship committee. (May 2021 - Present).

Committee Member, Academic success. (January 3, 2021 - May 31, 2022).

Committee Member, Diversity sub-committee. (June 5, 2020 - June 5, 2021).

Committee Member, Academic Standards. (May 2019 - May 2021).

Committee Member, PT Alumni. (May 2019 - May 2020).

Committee Member, PT Faculty Search Committee. (May 2019 – present)

College Service

Committee Member, College Curriculum & Academic Programs Planning Committee. (August 28, 2024 - Present).

Committee Member, OT Faculty Search Committee. (December 1, 2023 - Present).

Committee Member, PA Faculty Search Committee. (February 1, 2023 - Present).

Committee Member, Research Committee. (August 2021 - Present).

Professional Service

Constable, USA PCCAHP Poverty Simulation, Mobile, AL. (September 27, 2024).

Representative of USA DPT at PT Day at the Capitol, Alabama Physical Therapy Association, Montgomery, AL. (February 28, 2024 - Present).

Workshop Organizer, What's Up. Alabama Physical Therapy Association, Mobile, AL. (February 21, 2024).

Attended, Fall Graduation, Mobile, AL. (December 14, 2023 - Present).

Constable, USA PCCAHP Poverty Simulation, Mobile, AL. (September 8, 2023).

Photographer, USA DPT class of 2023 Hooding Ceremony, Mobile, Alabama. (May 5, 2023 - Present).

Photographer, USA DPT White Coat Ceremony class of 2024, Mobile, AL. (September 18, 2023).

Attendee, Meeting, Alabama Head Injury Foundation, Mobile, AL. (June 29, 2023).

Attendee, Meeting, Interprofessional Education Homeless Simulation Workshop, Mobile, AL. (May 15, 2023 - May 16, 2023).

Attendee, Meeting, USA Day, Mobile, AL. (October 1, 2022).

Attendee, Meeting, USA Day, Mobile, AL. (November 13, 2021).

Committee Member, Dept of Physical Therapy Faculty Search, Mobile, AL. (January 2021 - May 2021).

Speaker, Alpha Epsilon Delta. Mobile, AL. (February 24, 2021).

Speaker, Alpha Epsilon Delta, Mobile, AL. (February 19, 2020).

Public Service

Martial arts instructor, Boys and Girls Club of Mobile, Mobile, AL. (August 21, 2019 - November 13, 2019).

Other Service

Other

Interviewer, Auburn University Mock Interviews. (October 12, 2020 & Fall 2024).

Laborer. PT Department Clean up. (December 13, 2021 - December 17, 2021).

Pro Bono Professional Service. Faculty PT Clinic. (October 17, 2018 - April 25, 2019).

Special Project

Presenter. Physical Therapy Practice in the United States. Universita Campus Bio-Medico.
Rome, Italy. (December 1, 2023).

Organizer/Instructor, Martial Arts Club. Mobile, AL. (January 2019 – May 2019).

Student Organization

Guest Speaker, Pre-PT Club. (March 28, 2019).

Consulting