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Brady DeCouto

Position: Assistant Professor

Workplace: Florida State University
1114 W Call St
Tallahassee, FL 32304

Department: Educational Psychology and Learning Systems

Program: Sport Psychology

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Snapshot

Dr. Brady DeCouto's research background concerns expert performance, with a particular emphasis on the cognitive mechanisms involved in skill acquisition and expert performance (e.g., attention, information processing, emotion). Given the acceleration of ubiquitous assistive technologies such as artificial intelligence, wearable sensors, and exoskeletons, Brady's current research interests are focused on how the constraints and characteristics of human cognition, psychology, and motor control impact our compatibility with technological tools, and how technological tools can best facilitate human learning (i.e., human-machine teaming). Brady has applied frameworks for expert performance in funded collaborations through National Science Foundation (NSF), Air Force Research Laboratory (AFRL), U.S. Army Combat Capabilities Development Command (DEVCOM), and United States Special Operations Command (USSOCOM).

Education

Institution	Degree	Year	Discipline	Advisor
University of Utah	Ph.D.	2018-2022	Kinesiology	Dr. A. Mark Williams
Jacksonville University	M.Sc.	2016-2018	Kinesiology	Dr. Derek T.Y. Mann
Jacksonville University	B.Sc.	2012-2016	Kinesiology	Dr. Christopher Robertson

Experience

Years	Position	Department	Institution
2024-	Assistant Professor	Educational Psychology and Learning Systems	Florida State University
2024	Research Scientist	Healthspan, Resilience, and Performance	Florida IHMC
2022-2024	Research Associate	Healthspan, Resilience, and Performance	Florida IHMC
2022	Instructor	Department of Psychology	University of Utah
2021	Lecturer	Department of Health and Kinesiology	University of Utah

2018-2021	Research Assistant	Department of Health and Kinesiology	University of Utah
2016-2018	Adjunct Professor	College of Healthcare Sciences	Jacksonville University

Grants and Contracts

Funded Research Proposals

Higgins, T., **DeCouto, B. S.**, Kousik, S., Sawicki, G., & Hubicki, C. (2025–2028). Modeling Human Motor Learning, Perception, and Skill Acquisition for Movement-Assistive Robotic Technologies. Funded by National Science Foundation. Total award $798,706. Role: Co-Principal Investigator.

DeCouto, B. S., Williams, A. M., Perera, I., & Johnson, M. (2023–2027). *Valuation of expertise with relevance for skillful adaptation of technologies with intelligent learning elements (VERSATILE).* Funded by U.S. Army Combat Capabilities Development Command. Total award: $599,461. Role: Co-Principal Investigator.

Anderson, E., Williams, A. M., & **DeCouto, B. S.** (2024–2027). *Cognitive Enhancement REsources for Battlefield Resiliency and Optimization (CEREBRO).* Funded by United States Special Operations Command (USSOCOM). Total award: $4,380,000. Role: Co-Principal Investigator.

Funded Resource Grants

DeCouto, B. S. (2026). A grant of $530. Investigating Neurofeedback Schedules for Training Mental Skills. Sponsored by FSU - UROP Research Mentor Materials Grant.

DeCouto, B. S., Kozan, K., & Caskurlu, S. (2025–2026). A grant of $61,263. No-Brainer to Brainer: Neuroimaging to Expand Teaching and Student Research. Sponsored by FSU-wide Tech Fees.

DeCouto, B. S. (2025–2026). A grant of $10,000. How Much Neurofeedback? Investigating Dose-Dependent Responses to Neurofeedback for Training Mental Skills. Sponsored by FSU – Dean's Circle Catalyst Grant.

DeCouto, B. S. (2025). A grant of $20,000. Measuring Impacts of Mild Traumatic Brain Injury on Stress Reactivity. Sponsored by FSU - First Year Assistant Professor (FYAP).

DeCouto, B. S. (2025–2027). A grant of $3,818. Expanding Biosensing Capabilities for Measuring Psychophysiology during Performance. Sponsored by FSU-wide Tech Fees.

DeCouto, B. S. (2024–2025). A grant of $2,256. Laptop Computer to Enable Instructional Capacities for Biosensing Equipment. Sponsored by FSU - CEHHS Tech Fees.

Unfunded Research Proposals

DeCouto, B. S., Phillips, J., & Williams, A. M. *Carbon Dioxide to Uphold Resilience in Adrenalized Grave Environments (CO_2URAGE).* Submitted to United States Special Operations Command (USSOCOM). Requested funding: $821,985. Role: Principal Investigator.

DeCouto, B. S., Bryan, G., Sawicki, G., & Williams, A. M. *Contributions of different variability sources for learning of exoskeleton gait.* Submitted to National Science Foundation: Science of Learning and Augmentation. Requested funding: $772,074. Role: Principal Investigator.

Williams, A. M., **DeCouto, B. S.**, Mitsopoulos, K., & Gluck, K. *Using machine learning and novel training interventions to improve accuracy in detecting and diagnosing cancer.* Submitted to National Institute of Health. Requested funding: $2,995,182. Role: Co-Principal Investigator.

DeCouto, B. S. (April 2025). *Investigating the impact of health wearables on cognitive health and interoception.* Submitted to FSU Seed Grant. Requested funding: $40,387. Role: Principal Investigator.

Proposals Under Review

Penco, L., **DeCouto, B. S.**, & Sawicki, G. (November 2024). *Collaborative Research: Dynamics preview training system: A motor learning approach for enhanced teleoperation of humanoid robots.* Submitted to National Science Foundation. Requested funding: $225,000. Role: Co-Principal Investigator.

Research Support Roles on Funded Projects

Williams, A. M., Sessoms, P., Zheng, W., Jones, D. (2021–2024). *Combat marksmanship under extremely cold environments: Assessing impacts on cognitive functions and developing data-driven countermeasures.* Funded by the Department of Defense, Joint Program Committee-5 (JPC-5). Total award: $950,000. Role: Key Personnel.

Broderick, T. (2022–2024). *Assessment and enhancement of airman and teams in operational environments.* Funded by Department of Defense, Air Force Research Laboratory (AFRL) & Infoscitex Corporation (#FA8650-20-D-6207). Total award: $200,941. Role: Key Personnel.

Stone, M., Broderick, T., Bamman, M. (2022–2024). *Assessment of prophylactic ketone administration on concussive injury in the US Army Basic Airborne Course (STAK mTBI).* Funded by Army Research Laboratory. Total award: $3,622,793. Role: Key Personnel.

Broderick, T., Phillips, J., Stone, M., Bamman, M. (2022–2027). *Assessing and augmenting performance in extreme environments (A^2PEX).* Funded by Air Force Research Laboratory. Total award: $23,000,000. Role: Key Personnel

Research

Refereed Journal Publications

Eccles, D. W., Twedell, H., & **DeCouto, B. S.** (2025). What Does Mental Rest Mean to Professional Athletes? A Study of National Football League Players. Psychology of Sport and Exercise, 103029. doi:https://doi.org/10.1016/j.psychsport.2025.103029

Cocić, D., **DeCouto, B. S.,** Fawver, B., Cowan, R. L., Hendry, D., Williams, A. M., & Bilalić, M. (2025). Grit subcomponents are differentially associated with practice trajectories underlying expertise development. Scientific Reports, 15(1), 37812. doi:https://doi.org/10.1038/s41598-025-22533-x

DeCouto, B. S., Bilalić, M., & Williams, A. M. (2024). Neuroimaging and perceptual-cognitive expertise in sport: A narrative review of research and future directions. *Neuropsychologia*, 109032. https://doi.org/10.1016/j.neuropsychologia.2024.109032

DeCouto, B.S., Fawver, B., Thomas, J. L., Williams, A.M., & Vater, C. (2023). The role of peripheral vision during decision-making in dynamic viewing sequences. *Journal of sports sciences*, 1-16. https://doi.org/10.1080/02640414.2023.2301143

DeCouto, B.S., Smeeton, N.J., & Williams, A.M. (2023). Skill and experience impact neural activity during global and local biological motion processing. *Neuropsychologia*, *191*, 108718. https://doi.org/10.1016/j.neuropsychologia.2023.108718

DeCouto, B.**S.**, Smeeton, N.J., Williams, A.M. (2023). Skilled Performers Show Right Parietal Lateralization during Anticipation of Volleyball Attacks. *Brain Sciences*, *13*(8), 1204. https://doi.org/10.3390/brainsci13081204

Fawver, B., Taylor, S., **DeCouto, B.S.**, Cowan, R.L., Lohse, K.R., Williams, A.M., & Podlog, L. (2023). Tracing burnout during adolescence to past sports experiences: A retrospective analysis of sport-specific antecedents among alpine ski racers. *Journal of Cartilage & Joint Preservation*, *3*(3), 100142. https://doi.org/10.1016/j.jcjp.2023.100142

DeCouto, B.S., Cowan, R.L., Thomas, J.L., Fawver, B., Steidl-Müller, L., & Williams, A.M. (2021). Relative age quarter influences career sport engagement in alpine ski racers attending training centers. *Psychology of Sport and Exercise*, *56*(12), 101991. https://doi.org/10.1016/j.psychsport.2021.101991

DeCouto, B.S., Williams, A.M., Lohse, K.R., Creem-Regehr, S.H., Strayer, D.L., & Fino, P.C. (2021). Anxiety does not always affect balance: the predominating role of cognitive engagement in a video gaming task. *Experimental Brain Research*. https://doi.org/10.1007/s00221-021-06104-w

DeCouto, B.S., Cowan, R.L., Fawver, B., Müller, E., Steidl-Müller, L., Pötzelsberger, B., Raschner, C., Lohse, K.R., & Williams, A.M. (2020). Nationality and sociocultural factors influence athlete development and sport outcomes: Perspectives from United States and Austrian youth alpine ski racing. *Journal of Sports Sciences, 39*(10)*,* 1153-1163. https://doi.org/10.1080/02640414.2020.1861739

DeCouto, B.S., Fawver, B., & Williams, A.M. (2020). Physical fitness is associated with better technical performance in adolescent alpine skiers after controlling for time spent in practice: A retrospective regression analysis. *Journal of Sports Science*, *39*(4), 380-387. https://doi.org/10.1080/02640414.2020.1823088

Fawver, B., Cowan, R.L., **DeCouto, B.S.,** Lohse, K.R., Williams, A.M. (2020). Psychological characteristics, sport engagement, and performance in alpine skiers. *Psychology of Sport and Exercise*, *47*, 1-10. https://doi.org/10.1016/j.psychsport.2019.101616

DeCouto, B., Lewis, D., Robertson, C.T., Mann, D. (2020). The speed of perception: the effects of over-speed video training on pitch recognition in visual search and cognitive adaptation in softball players. *Cognitive Processing, 21*, 77-93.

Book Chapters

Williams, A. M., **DeCouto, B.**, Teoldo, I., & Vater, C. (2025). Gaze Behavior and Expert Performance in Sport. In *Gaze and Visual Perception in Sport* (pp. 59-76). Routledge.

Fawver, B., **DeCouto, B.S.**, Trachik, B., Dretsch, M., & Williams, A. M. (2023). Cross-Disciplinary Innovation Within the Intelligence Community: Evidence from Research on Sport and Military Expertise. In C. W. Gruber & B. Trachik (Eds.), *Fostering Innovation in the Intelligence Community: Scientifically-Informed Solutions to Combat a Dynamic Threat Environment* (pp. 81–112). Springer International Publishing. https://doi.org/10.1007/978-3-031-29807-3_5

Manuscripts in Review/Preparation

Williams, A. M., **DeCouto, B. S.**, Gluck, K., Mitsopoulos, K., & Raab, M. (in preparation). Perceptual-Cognitive Expertise in Sport: Current Status and Future Directions. In R. Hoffman (Ed.), Cambridge Handbook of Expertise and Expert Performance. Cambridge University Press.

Conference Presentations

DeCouto, B.S., Fawver, B., Williams, A.M., & Vater, C. (July 2024). *A narrative review on research directions to expand knowledge on expert perceptual-cognitive skills.* 17th European Conference of Sport and Exercise Psychology (FEPSAC). Innsbruck, Austria.

DeCouto, B.S., Fawver, B., Williams, A.M., & Vater, C. (July 2022). *The impact of anxiety on visual search and working memory in basketball defensive scenarios.* 16th European Conference of Sport and Exercise Psychology (FEPSAC). Padova, Italy.

DeCouto, B.S., Cowan, R.L., Fawver, B., & Williams, A.M. (October 2021). *Coping style is related to time spent in different practice activities and performance outcomes among individual sport athletes.* 15th International Society of Sport Psychology (ISSP). Virtual Presentation.

DeCouto, B.S., Cowan, R.L., Thomas, J.L., Fawver, B., Steidl-Müller, L., & Williams, A.M. (June 2021). *Can additional practice counteract selection bias? The relative age effect and training time amongst adolescent alpine ski racers*. North American Society for the Psychology of Sport and Physical Activity (NASPSPA). Virtual. Slide Presentation.

DeCouto, B.S., Cowan, R.L., & Williams, A.M. (October 2020). *Psychological Health and Success in Sport: Insights from Academy Adolescent Alpine Ski Racers*. 25th Annual Congress of the European College of Sport Science. Virtual. Slide Presentation.

DeCouto, B.S., Cowan, R.L., Fawver, B., Müller, E., Steidl-Müller, L., Pötzelsberger, B., Raschner, C., Lohse, K.R., & Williams, A.M. (June 2020). *Pathways to excellence in alpine skiing: a comparison between elite United States and Austrian ski racers.* North American Society for the Psychology of Sport and Physical Activity (NASPSPA). Virtual. Slide Presentation.

Fawver, B., **DeCouto, B.S.**, Lohse, K.R., & Williams, A.M. (June 2020). An examination of physical fitness, practice time, and performance among developmental alpine skiers. North American Society for the Psychology of Sport and Physical Activity (NASPSPA), Virtual. Slide Presentation

Taylor, S., Fawver, B., **DeCouto, B.S.**, Lohse, K.R., & Williams, A.M. (February 2020). *Exploring relationships between practice history, performance, and injury risk in a sample of developmental alpine skiers.* Utah Conference on Undergraduate Research (UCUR), Utah State University, Logan, UT.

Fawver, B., **DeCouto, B.S.**, Cowan, R.L., Müller, E., Steidl-Müller, L., Lohse, K.R., & Williams, A.M. (February 2020). *A cross-cultural comparison of United States and Austrian adolescent alpine ski racers.* Sports Medicine and Sports Science Research Forum: Where Prevention Meets Performance, Park City, UT. Verbal Presentation.

Cowan. R., **DeCouto, B.**, Fawver, B., Lohse, K.R., Ford, P.R., & Williams, A.M. (June 2019). *Developmental pathways to expertise in U.S. academy alpine skiers.* North American Society for the Psychology of Sport and Physical Activity (NASPSPA), Baltimore, MD. Poster Presentation.

DeCouto, B., Cowan. R., Fawver, B., Lohse, K.R. & Williams, A.M. (June 2019). *Psychological characteristics associated with performance and injury outcomes in adolescent alpine skiers.* North American Society for the Psychology of Sport and Physical Activity (NASPSPA), Baltimore, MD. Poster Presentation

DeCouto, B., Robertson, C.T., Ph.D., Wight, J.T. (2017). Sagittal plane hip, knee, and ankle variability for distance running at a training speed. Poster presented at the *2017 Southeast American College of Sports Medicine Conference*, Greenville, South Carolina.

Paxton, R.A., **DeCouto, B.,** Robertson, C.T., Wight, J.T. (2017). Distance running sagittal plane hip and knee variability during early and late stance and swing for slow and fast speeds. Poster presented at the *2017 American Society of Biomechanics Conference*, Boulder, Colorado.

Invited Talks

DeCouto, B. S. (2024). Fitting Tech to Human Learning Systems. Delivered at Florida State University, FAMU-FSU College of Engineering.

DeCouto, B.S., Cowan, R.L. (2018). Reaching the summit: Developmental & psychological pathways for success in alpine skiers. *United States Ski and Snowboard Coaching Conference*. Copper Mountain, Utah.

Teaching and Mentorship

Lead Instructor

2025-present	Lab Skills (EDP6930). **Lecturer**. Department of Educational Psychology and Learning Systems, Florida State University
2025-present	Cognitive Processes in Sport Psychology (PET 5222); **Lecturer**. Department of Educational Psychology and Learning Systems, Florida State University.

2024-present	Motor Skill Learning (PET 5054); **Lecturer**. Department of Educational Psychology and Learning Systems, Florida State University.
2022	Environmental Psychology & Sustainability (PSY 3620); **Instructor**. Department of Psychology, College of Social and Behavioral Science, University of Utah.
2021	Applied Health and Fitness Assessment and Exercise Programing (KINES 4466); **Lecturer**, Department of Health and Kinesiology, College of Health, University of Utah.
2016-2018	Resistance Training (KIN 190); **Lecturer**, Kinesiology, Brooks Rehabilitation College of Healthcare Sciences, Jacksonville University.

Other Teaching

2021	Instrumentation and Measures in Movement Science (KINES 6770); **Guest Lecturer**. Department of Health and Kinesiology, College of Health, University of Utah.

Mentorship

PhD/Thesis Students

Arfa Mubeen (2024-date). Doctoral Committee Chair. Florida State University

Daniel Pfister (2022 to 2024). Intelligent Systems and Robotics. University of West Florida & Florida Institute for Human and Machine Cognition.

Joseph Hashem (2024-date). Elective Science Program. Byram High School, Armonk, NY.

Johanna Glaaser (2024-date). PhD Dissertation Committee. Florida State University

Trey Wood (2024-date). Master's Thesis Co-Advisor. Florida State University.

Supervision of Student Research Not Related to Thesis or Dissertation

Bjoernvig, J. (2025–present).

Cousino, K. (2025–present).

Cox, A. (2025–present).

Garrard, C. (2025–present).

Kapadia, A. (2025–present).

Mora, E. (2025–present).

Odartei, E. (2025–present).

Parsa, K. (2025–present).

Jeong Kang, M. (2024–25).

Tweedel, J. (2024–25).

Yanchuk, T. (2024–25).

Professional Skills and Services

Technical Skills

- Data Management and Analysis (R, Python)
- Experimental Design
- Experiment Programming (PsychoPy)
- Signal Processing
- Laboratory Research
- Field Research
- Survey Design
- Scientific Writing
- Grant Writing
- Data Collection
- Neuroimaging (EEG)
- Eye-Tracking
- Accelerometry
- Electrophysiology (EMG, ECG)
- 3D Motion Capture

College Service

Member, Foundation Committee (2025–present).

Alternate for the EPLS Department Rep, CEHHS Technology committee (2024–present).

Ad hoc reviewer

- *Research Quarterly for Exercise and Sport*
- *Neuropsychologia*
- *Quarterly Journal of Experimental Psychology*
- *Journal of Science in Sport and Exercise*
- *Brain Sciences*
- *International Journal of Environmental Research and Public Health*

Consultation

Florida Institute for Human and Machine Cognition. Consultant on a research grant that was generated during previous tenure at Florida IHMC (2024–2025).

Byram High School. Mentoring a student in an elective sciences program (2024–present).