

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 is also interested in the interaction between emotion and motor control during the execution and learning of skills for expert and novice performers. 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

<u>Institution</u>	<u>Degree</u>	<u>Year</u>	<u>Discipline</u>	<u>Advisor</u>
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

<u>Years</u>	<u>Position</u>	<u>Department</u>	<u>Institution</u>
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
2016-2018 Adjunct Professor College of Healthcare Sciences

University of Utah
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., Kozan, K., Staudt-Willet, B. (2026). A grant of \$44,614. Neurobehavioral Markers of AI-Assisted Learning of Digital Tools: The Influence of Technology-Related Habits. Sponsored by FSU - Council on Research Creativity Spring 2026 Seed Grant.

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.

Pending Research Proposals

Higgins, T., Alwathiqbellah, I., & **DeCouto, B.S.** (Pending, 2026). A Next-Generation Multimodal Wearable Sensor Platform for Quantifying Naturalistic Human Behavior and Synchronizing with Neural Activity (U01) National Institute of Health. Role: Multiple Principal Investigator.

Unfunded Research Proposals

DeCouto, B. S., Phillips, J., & Williams, A. M. *Carbon Dioxide to Uphold Resilience in Adrenalized Grave Environments (CO₂URAGE)*. 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.

Penco, L., **DeCouto, B. S.**, & Sawicki, G. *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 (A²PEX)*. Funded by Air Force Research Laboratory. Total award: \$23,000,000. Role: Key Personnel

Research

Refereed Journal Publications

- DeCouto, B. S.**, Treacy, A., McCurdy, Z., Patterson, C. B., Johnson, M., Neubauer, C., ... & Perera, I. (2026). Tech-savviness: Predicting and measuring learning ability of novel digital platforms. *Computers in Human Behavior Reports*, 22, 101140.
- 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., Higgins, T., & Fawver, B. (July 2026). *Measuring Anxiety in the Learning of High-Risk Motor Skills: A Methodological Discussion*. 18th European Conference of Sport and Exercise Psychology (FEPSAC). Timisoara, Romania.

Mubeen, A., Glaaser, J., Mora, E., Odartei, E., Kapadia, A., Parsa, K., Avola, M., Cox, A., Zamir, Y., Conkin, K., & **DeCouto, B. S.** (July 2026). *The impact of individual differences on receptive to neurofeedback related to motor imagery*. 18th European Conference of Sport and Exercise Psychology (FEPSAC). Timisoara, Romania.

Glaaser, J., Mubeen, A., Zamir, Y., Sonkin, K., & **DeCouto, B.** (June 2026). *The impact of feedback schedules on brain adaptations during motor imagery neurofeedback training in competitive soccer players*. North American Society for the Psychology of Sport and Physical Activity (NASPSA). Montreal, Quebec.

DeCouto, B. S., Bilalić, M., & Williams, A. M. (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. (2026). Human-Machine Teaming in Kinesiology. Delivered at Liverpool Hope University, England, School of Health and Sport Sciences.

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

2026-present	Neuroscience in Sport Psychology (EDP6930). Lecturer . Department of Educational Psychology and Learning Systems, Florida State University
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.
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Mentorship

Current PhD/Thesis Students

- Trey Wood (2026-date). Doctoral Committee Chair. Florida State University.
- Heather DiGregorio (2026-date). Doctoral Committee Chair. Florida State University.
- Daniel Biancamano (2025-date). Master's Thesis Committee Chair. Florida State University.

- Kyle Giddes (2025-date). Doctoral Committee Member. FAMU-FSU College of Engineering.
- Arfa Mubeen (2025-date). Doctoral Committee Chair. Florida State University.
- Johanna Glaaser (2024-date). Doctoral Committee Member. Florida State University.
- Daniel Pfister (2022-date). Doctoral Committee Member. Intelligent Systems and Robotics. University of West Florida & Florida Institute for Human and Machine Cognition.

Past PhD/Thesis Students

- Jake DeAngelo (2026), Doctoral Committee Member. Florida State University.
 - Dissertation Title: *Intervening on group fitness to enhance flourishing*
- Alec Treacy (2026). Doctoral Committee Member. Florida State University.
 - Dissertation Title: *Changing the tune on music performance anxiety: effects of an act-based writing intervention on music performance anxiety and performance.*
- Eli Zemach (2025-2026). Thesis Committee Member. Florida State University.
 - Dissertation Title: *Conversations with coaches: a qualitative study examining high-school athletic coaches' sensitivities to student-athlete well-being and the dual career.*
- Joseph Hashem (2024-2025). Elective Science Program. Byram High School, Armonk, NY.
 - Research Title: *Flow, Flips, and Fright: The use of pre-performance routines to alleviate competitive anxiety and enhance flow state in freestyle mogul skiing.*
- Trey Wood (2024-2026). Master's Thesis Co-Advisor. Florida State University.
 - Thesis Title: *An investigation of the relationship between personality, self-talk, and quiet eye in target performance.*

Supervision of Student Research Not Related to Thesis or Dissertation

Edgar Mora (2025–present).

Cooper Garrard (2025–present).

Jarred Kirk (2025–present).

Janos Bjoernvig (2025–2026).

Kara Cousino (2025–2026).

Allison Cox (2025–2026).

Anjali Kapadia (2025–2026).

Elita Odartei (2025–2026).

Keanu Parsa (2025–2026).

Moon Jeong Kang (2024–25).

Jakob Tweedel (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

EPLS Department Rep, CEHHS Technology committee (2026–present).

Member, Foundation Committee (2025–present).

Alternate for the EPLS Department Rep, CEHHS Technology committee (2024–2026).

Ad hoc reviewer

- *Sensors*
- *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 (2024–2025).