**AUBURN UNIVERSITY   
Standard Biographical Data Form**

Name: Christopher M. Wilburn

Department: School of Kinesiology College: Education

Present Rank: Associate Clinical Professor Years Completed in Rank: 1 Year

Type of Current Appointment: Non-tenured, 12 month

Graduate Faculty Status: Level 1

**Education:**

Institution Degree Major Date Awarded

Auburn University PhD Kinesiology August 2017

Auburn University MEd. Exercise Science August 2014

Morehouse College B.A. Kinesiology, Sport August 2013  
 Studies, & Physical  
 Education

**Professional Experience**

**Auburn University**Rank: Associate Clinical Professor  
Period of Appointment: October 2022-present

**Auburn University**Rank: Assistant Clinical Professor  
Period of Appointment: August 2017- October 2022 **Sport Biomechanics Laboratory, Auburn University**Rank: Assistant Director   
Period of Appointment: August 2018-present

**School of Kinesiology Master’s Advisory Committee, Auburn University**Rank: Master Student Advisor for Biomechanics Concentration   
Period of Appointment: August 2018- present

**North Carolina Central University**Rank: Adjunct Professor   
Period of Appointment: January 2023-May 2023

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Teaching** | **Research** | **Outreach** | **Service** |
| 2022-2023 | 100% | - | - | - |
| 2021-2022 | 100% | - | - | - |
| 2020-2021 | 100% | - | - | - |
| 2019-2020 | 100% | - | - | - |
| 2018-2019 | 100% | - | - | - |
| 2017-2018 | 100% | - | - | - |

**Workload Allocation**A percent breakdown of the allocation time and effort teaching, research/creative, work, outreach, and service.

**List of Honors and Awards.**

***Gerald and Emily Leischuck Undergraduate Teaching Award (recipient)***Auburn University College of Education2022

***Undergraduate Teaching Excellence Award (nominee)***Auburn University Alumni Association  
2020

***The Final Lecture Award (nominee)***Auburn University Student Government Association2020

***Outstanding Commitment to Inclusion and Diversity Award (recipient)***Auburn University College of Education2019

***College of Education Faculty Member of the Year (recipient)***Auburn University Student Government Association2018-2019

***President’s Graduate Opportunity Program (recipient)***Office of Multicultural Affairs, Auburn UniversityFunding Amount: $20,000; 2016-2017

***Diversity Travel Fellowship (recipient)***American Society of Biomechanics  
Funding Amount: $300; 2014

**Scholarly Contributions**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Semester** | **Course #** | **Course Title** | **Credits** | **Enrollment** |
| Fall 2022 | KINE 3620 (3 sections) | Biomechanical Analysis of Human Movement | 3 | 117 |
| KINE 4400 | Applied Anatomy for the Allied Health Professional | 3 | 24 |
| KINE 7910 | Practicum | 3 | 5 |
| Summer 2022 | KINE 3620 (2 sections) | Biomechanical Analysis of Human Movement | 3 | 16 |
| KINE 7910 | Practicum | 3 | 1 |
| Spring 2022 | KINE 3620 (2 sections) | Biomechanical Analysis of Human Movement | 3 | 116 |
| KINE 7430 | Dartfish II | 3 | 9 |
| Fall 2021 | KINE 3620 (3 sections) | Biomechanical Analysis of Human Movement | 3 | 103 |
| KINE 4563 | Sport Technique and Movement Analysis | 3 | 27 |
| Summer 2021 | KINE 3620 | Biomechanical Analysis of Human Movement | 3 | 33 |
| KINE 3621 | Biomechanical Analysis of Human Movement Laboratory | 3 | 34 |
| Spring 2021 | KINE 3623 (2 sections) | Biomechanical Analysis of Human Movement | 3 | 111 |
| Spring 2021 | KINE 4980 | Undergraduate Research | 3 | 3 |
| KINE 7910 | Practicum | 3 | 1 |
| Fall 2020 | KINE 3623 (2 sections) | Biomechanical Analysis of Human Movement | 3 | 119 |
| KINE 4763 | Introduction to Exercise Science Research | 3 | 35 |
| Summer 2020 | KINE 3623 | Biomechanical Analysis of Human Movement | 3 | 20 |
| KINE 3621 | Biomechanical Analysis of Human Movement Laboratory | 3 | 21 |
| Spring 2020 | KINE 3623 (2 sections) | Biomechanical Analysis of Human Movement | 3 | 105 |
| KINE 4980 | Undergraduate Research | 3 | 4 |
| KINE 7910 | Practicum | 3 | 4 |
| Fall 2019 | KINE 3620 (2 sections) | Biomechanical Analysis of Human Movement | 3 | 128 |
| KINE 7910 | Practicum | 3 | 4 |
| Summer 2019 | KINE 3620 | Biomechanical Analysis of Human Movement | 3 | 15 |
| KINE 4403 | Applied Anatomy for the Allied Health Professional | 3 | 15 |
| KINE 4980 | Undergraduate Research | 3 | 8 |
| Spring 2019 | KINE 3620 (4 sections) | Biomechanical Analysis of Human Movement | 3 | 102 |
| KINE 4760 | Undergraduate Research | 3 | 20 |
| KINE 4980 | Undergraduate Research | 3 | 4 |
| KINE 7910 | Practicum | 3 | 4 |
| Fall 2018 | KINE 3620 (3 sections) | Biomechanical Analysis of Human Movement | 3 | 112 |
| KINE 4563 | Sport Technique and Movement Analysis | 3 | 40 |
| Summer 2018 | KINE 3623 | Biomechanical Analysis of Human Movement | 3 | 21 |
| KINE 3621 | Biomechanical Analysis of Human Movement Laboratory | 3 | 21 |
| Spring 2018 | KINE 3620 (4 sections) | Biomechanical Analysis of Human Movement | 3 | 131 |
| Fall 2017 | KINE 3620 (4 sections) | Biomechanical Analysis of Human Movement | 3 | 158 |
|  |  |  | Total 162 | Total 1,691 |

**2017-2021 Average Course Evaluation Scores (574/1479 = 38.8 % Response Rate)**Question 1: I was encouraged to interact with the instructor regarding course content (electronically, during office hours, in class, etc.). Average: ***5.7 out of 6***

Question 2: I was provided opportunities to cooperate with other classmates about course  
material (electronically, inside or outside of class, etc.). Average: ***5.62 out of 6***

Question 3: I was informed of the instructor’s high expectations for my work in this  
course. Average: ***5.67 out of 6***

Question 4: I was provided with an evaluation of my academic progress at regular  
intervals during the semester. Average: ***5.5 out of 6***

Question 5: I was provided with ample opportunities to apply my learning in this course. Average: ***5.62 out of 6***

Question 6: I was prompted to think critically about the course material. Average: ***5.78 out of 6***

Question 7: I was provided an environment that supported my learning. Average: ***5.51 out of 6***

***Publications***

***Wilburn, C.,*** Decoux, B., & Weimar, W.H. (2021). Basic Biomechanics for the Pre

Clinicians and Practitioners. ISBN #: 9781644966136.

**Courses/curricula developed.**

***KINE 7970: Special Topics: Gait and Footwear***

The Gait and Footwear course was developed by Drs. Wendi Weimar, Jaimie Roper, and myself to allow graduate students to investigate healthy and pathological gait mechanics. Specifically, this course provided students the opportunity to further enhance use of biomechanical principles by examining differences in gait mechanics and influence podiatric devices have on various gait components. The course’s development inception occurred within the Fall 2017 semester, has been offered in the Summer 2018, 2021 and 2022 semesters. Overall, the course obtained 120 SCHs over the two semesters.

**GRADUATE & UNDERGRADUATE STUDENT ADVISING & MENTORING**

***Graduate Teaching Assistants***

***2018-2019***

Kaitlin Freemon

Major Professor

Master of Science (MS), Exercise Science

Post-Graduation Position: Physical Therapist Assistant Graduate, Wallace Community

College (2019-2021)

***2019-2021***

Imani Hill, Graduate Teaching Assistant

Thesis Committee Member and Major Professor

Master of Science (MS), Exercise Science (August 2021)

Post-Graduation Position: TBD

***2021-2022***

Gabrielle Hutton, Graduate Teaching Assistant

Major Professor

Master of Science (MS), Exercise Science

Post-Graduation Position: University of Alabama at Birmingham Department of Physical Therapy (SPT1)

***2022-2023***

Julia Christl, Graduate Teaching Assistant

Major Professor

Master of Science (MS), Exercise Science

Post-Graduation Position: TBD

**Guest Lectures Associated with Instruction**

**The SuperHERoes of Today: A Biomechanical Analysis on the Effects Anatomical Adaptations of Pregnancy Have on Gait (Fall 2020)***Clinical Applications of Biomechanics Graduate Course*

**The Influence of the Foot Architecture, Footwear, and Body Mechanics on Running (Spring 2019)***Industry (Orange Theory)***The Anatomy of Sneakers from a True Sneakerhead (Summer 2018)***Gait and Footwear Graduate Course*

**Sneakerhead: The Unappreciated Culture of Science and Innovation (Fall 2017)***Principles of Biomechanics in Human Movement Graduate Course*

**Research/Creative Work**While research is an unassigned workload associated with 100% my teaching allocation, I have contributed to several research projects that have results in regional, national, and international presentations, peer-reviewed journal articles, and university funded research fellowships. Overall, these opportunities have not only allowed me to enhance my teaching capabilities with relevant and pertinent information but, it has allowed students to further investigate biomechanical applications under my mentorship.

**Patent:**Super Elastic Shoe Augmentation Device and Process (in review)   
Contributors: Logan Reile Williams; David G Beale; JoEllen M. Sefton; Wendi H. Weimar; Michael Halvorson; Eric J. Bradshaw; Noah C. Cargile; Christopher M. Wilburn  
Contribution %: 10 %

***Peer Reviewed Publications (6)***

Jagodinsky, A. E., **Wilburn, C.,** Moore, N., Fox, J. W., & Weimar, W. H. (2020). Ankle Bracing Alters Coordination and Coordination Variability in Individuals With and Without Chronic Ankle Instability. *Journal of Sport Rehabilitation*, *1*(aop), 1-8,

Jagodinsky, A. E., Angles, R., **Wilburn, C**., & Weimar, W. H. (2020). Lower-Extremity Motor Synergies in Individuals With and Without Chronic Ankle Instability. *Journal of Applied Biomechanics*, 1(aop), 1-7.

Fox, J. W., Jagodinsky, A. E., **Wilburn, C.M.**, Smallwood & Weimar, W.H. (2020) Lower Extremity Joints and Their Contributions to Whole Limb Extension, *International Biomechanics*, 7:1, 1-8, DOI: 10.1080/23335432.2019.1695540

Rehm, J., Jagodinsky, A.E., **Wilburn, C.M.**, Smallwood, L.L., Windham, J., & Weimar, W.H. (2019) Measuring Trunk Stability for Wheelchair Basketball Classification: A New Field Test. *Clinical Kinesiology*

Price, S.L., Williams, R., **Wilburn, C.M.**, Williams, P.T., Wadsworth, D.D., Weimar, W.H., Russell, J.A., & Rudisill, M.E. (2017). Promoting Diversity and Inclusion: Developing Partnerships Between HBCU and PWI. *Kinesiology Review*, 6 (4), 368-374

Iso-Ahola, S.E., Dotson, C.O., Jagodinsky, A.E., Clark, L.C., Smallwood, L.L., **Wilburn, C.,** Weimar, W.H., & Miller, M.W. (2016). Improving performance by anchoring movement and "nerves." *Human Movement Science*, 49, 239-247

***Publications in Review (3)*Wilburn, C.M.,** Decoux, B.E., Fawcett, R., Williams, P.T., Fox, J.W., & Weimar, W.H. The Influence of Arch Type on Lower Extremity Kinematics and Kinetics of Jumping Tasks.

Decoux, B.E., **Wilburn, C.M.,** Aldahir, P, & Weimar, W.H. Inter-segmental Coordination Variability During Hopping and Running on Natural and Synthetic Turf Surfaces. Journal of Sports Science

Rehm, J., Jagodinsky, A.E, **Wilburn, C.M.**, Smallwood, L.L., Windam, J., Weimar, W.H. Evaluating the “Volume of Action” in Wheelchair Basketball Classification. Journal of Sports Science

***Publications in Preparation (2)***

**Wilburn, C.M*.****,*Fox, J.W., Jagodinsky, A.E., Decoux, B.E., Williams, P.T, & Weimar, W.H. Influence of Sock Type on the Center of Pressure and Parameters of Walking Gait.  
  
**Wilburn, C.M*.****,*Fox, J.W., Jagodinsky, A.E., Decoux, B.E., Williams, P.T, & Weimar, W.H. Influence of Shoe Lacing Techniques on Walking Gait Parameters **Grant Activity (6)**

Weimar, W.H., **Wilburn, C.M.**, & Decoux, B.E. (May 2019). The Influence of Artificial Turf on Head Shock Attenuation. National Operating Committee on Standards for Athletic Equipment.   
 **Funding Amount: $250,000. (Rejected); 25% Contributive Credit** Roper, J.A., Weimar, W.H., **Wilburn, C.M.**, & Angle, C,. (March 2018). The Power of Paws- Understanding to What Extent Our Four-Legged Friend Influences Gait in Healthy Aging. Human Animal Bond Research Institute.   
 **Funding Amount: $45,977. (Rejected); 25% Contributive Credit**Weimar, W.H. & **Wilburn, C.M.** (October 2015). Foot Health in Under-represented Youth. Auburn University Office of University Outreach and Engagement.   
 **Funding Amount: $16,087. (Rejected)**

Hendricks, C.S. (Principal), Poposola, S., & **Wilburn, C.M.** (May 2015). Auburn University: Taking “It” To the People Southern Style. Auburn University Office of Outreach. **Funding Amount: $10,000 (Received); 10% Contributive Credit**

Hendricks, C.S. (Principal), Poposola, S., & **Wilburn, C.M.** (October 2014). Auburn University: Taking “It” To the People Southern Style. Auburn University Office of Outreach. **Funding Amount: $10,000 (Received); 10% Contributive Credit**

Hendricks, C.S. (Principal), Poposola, S., & **Wilburn, C.M.** (October 2013). Auburn University: Taking “It” To the People Southern Style. Auburn University Office of Outreach. **Funding Amount: $10,000 (Received); 10% Contributive Credit**

**Presentations: Referred & Invited Paper Presentations & Symposia (117)**

**Wilburn, C.M.**, Decoux, B.E., & Weimar, W.H. (2023). Dip Your Toes in Our Academic Water. *Tutorial to be orally presented at the Southeastern American College of Sports Medicine Annual Conference, Greenville, SC.*

Hancock, M.E., **Wilburn, C.M.**, Decoux, B.E., Tompkins, J.E., Houde, H.H., Kosek, J.J., Adlou, B, Grace, J.L. & Weimar, W.H. (2023). Stride Length Vs. Center of Mass Location: An Exploratory Examination of Gait Patterns. *Poster to be presented at the Southeastern American College of Sports Medicine Annual Conference, Greenville, SC.*

Grace, J.L., **Wilburn, C.M.**, Decoux, B.E., Tompkins, J.E., Houde, H.H., Kosek, J.J., Adlou, B, Hancock, M.E., & Weimar, W.H. (2023). Lower Extremity Sagittal Plane Kinematics in Non-slip Socks During Gait. *Poster to be presented at the Southeastern American College of Sports Medicine Annual Conference, Greenville, SC.*

Tompkins, J.E., **Wilburn, C.M.**, Decoux, B.E., Houde, H.H., Kosek, J.J., Adlou, B, Hancock, M.E. & Weimar, W.H. (2023). Examination of Gait Parameters in Various Non-slip Socks. *Poster to be presented at the Southeastern American College of Sports Medicine Annual Conference, Greenville, SC.*

Kosek, J.J., Hill, I.N., Houde, H.H., **Wilburn,** **C.M.**, & Weimar, W.H. (2023). Influence of an Extended Preparatory Arm Swing on the Kinetics of Horizontal and Vertical Jumping. *Poster to be presented at the Southeastern American College of Sports Medicine Annual Conference, Greenville, SC.*

**Wilburn, C.M.**, Decoux, B.E., Mead, J., Williams, P.T., & Weimar, W.H. (2022). Relationship Between Arch Height, Ankle Kinetics, and Electromyography During A Lateral Hopping Task. *Poster virtually presented at the International Society of Posture & Gait Research.*

Decoux, B.E., **Wilburn, C.M** Mead, J., & Weimar, W.H. (2022). The Relationship Between Arch Height and Sagittal Plane Ankle Joint Landing Kinetics During Single-Leg Hopping in Collegiate Athletes. *Poster virtually presented at the International Society of Posture & Gait Research.*

Weimar, W.H., Decoux, B.E., Williams, P.T., Fawcett, R.T., & **Wilburn, C.M.** (2021). Does Arch Height Influence Lateral Jumping? *Poster virtually presented at the American Society of Biomechanics Annual Conference.*  
  
Houde, H, **Wilburn, C.M.**, Fox, J.W., Jagodinsky, A. E., Decoux, B.E., Hartfield, E., Carter, S., Bracher, R, Weimar, W.H. (2021). Put a Sock on It!: Investigation of Various Sock Types on Locomotive Patterns. *Poster virtually presented at the American Society of Biomechanics Annual Conference.*

Kosek, J., **Wilburn, C.M.**, Decoux, B.E., Williams, P.T., Fawcett, R.T., Hill, I.N., & Weimar, W.H. (2021). Impact of Arch Height on Ankle Kinematic During Jumping Tasks. *Poster virtually presented at the American Society of Biomechanics Annual Conference.*

**Wilburn, C.M.**, Decoux, B.E., Williams, P.T., Fawcett, R.T., & Weimar, W.H. (2020). The Effect of Arch Types on Propulsive Forces During Jumping and Hopping Tasks. *Poster virtually presented at the American Society of Biomechanics Annual Conference.*Decoux, B.E., **Wilburn, C.M.**, & Weimar, W.H. (2020). Inter-segmental Coordination Variability during Hopping and Running on Natural and Synthetic Turf Surfaces. *Poster virtually presented at the American Society of Biomechanics Annual Conference.*  
Weimar, W.H., Fox, J.W., Decoux, B.E., **Wilburn, C.M.**, & Flesig, G. (2020). Does the Fibonacci Sequences Predict Segmental Velocities of the Overhand Throw? *Poster virtually presented at the American Society of Biomechanics Annual Conference.*

**Wilburn, C.M,** Decoux, B.E, Williams, P.T., Hill, I.N., Kosek, J., Weimar, W.H., & Price, S. (2020). Taking the Best Foot Forward. *Tutorial was orally presented at the* *Southeastern American College of Sports Medicine Annual Conference*, Jacksonville, FL.   
  
Wadsworth, D.D., Weimar, W.H., **Wilburn, C.M.**, & Decoux, B.E. (2020). Musculoskeletal Fitness in Preschoolers: A Biomechanical Prespective. *Tutorial was orally presented at the* *Southeastern American College of Sports Medicine Annual Conference*, Jacksonville, FL.

Hill, I.N., Weimar, W.H., **Wilburn, C.M.**, Decoux, B.E., Moore, N.H., Kosek, J., & Wadsworth, D.D. (2020). Fitness Assessments in Preschoolers. *Poster presented at the* *Southeastern American College of Sports Medicine Annual Conference*, Jacksonville, FL.

Kosek, J.J., Wadsworth, D.D., Weimar, W.H., Wilburn, C.M., Decoux, B.E, Moore, N.H., & Hill, I.N. (2020) Power in Preschoolers. *Poster presented at the* *Southeastern American College of Sports Medicine Annual Conference*, Jacksonville, FL.

**Wilburn, C.M.**, Decoux, B.E., Fawcett, R.T., Williams, P.T., Moore, N.H., & Weimar, W.H. (2019). Effect of Arch Type on the Propulsion Mechanics of Jumping and Hopping Tasks. *Poster presented at the American College of Sports Medicine Annual Conference,* Orlando, FL.

Decoux, B.E., **Wilburn, C.M.**, Moore, N.H., & Weimar, W.H. (2019). Comparison of Single- Leg Hop Parameters Across Different Artificial Turf Systems and Natural Turfgass. *Poster presented at the American College of Sports Medicine Annual Conference,* Orlando, FL.

Weimar, W.H., Decoux, B.E., Moore, N.H., & **Wilburn, C.M.** (2019). Influence of Turf Surface on Change of Direction Parameters. *Poster presented at the American College of Sports Medicine Annual Conference,* Orlando, FL.

Sagawa, H., Jagodinsky, A.E., Zaman, M., **Wilburn, C.M.**, & Weimar, W.H. (2019). Kinetic Strategies During Single-Leg Hopping in Individuals With and Without Chronic Ankle Instability. *Poster presented at the American College of Sports Medicine Annual Conference,* Orlando, FL.

Santillian, C., Jagodinsky, A.E., Zaman, M., **Wilburn, C.M.**, & Weimar, W.H. (2019). Ankle Bracing Effects on Contributions to the Support Moment During Hopping. *Poster presented at the American College of Sports Medicine Annual Conference,* Orlando, FL.

Vasudevaraja, U., Jagodinsky, A.E., Zaman, M., **Wilburn, C.M.**, & Weimar, W.H. (2019). Support Moment Dynamics are Similar in Individuals With and Without Chronic Ankle Instability During Hopping. *Poster presented at the American College of Sports Medicine Annual Conference,* Orlando, FL.

**Wilburn**, **C.M.**, Decoux, B.E., Fawcett, R.T., Brewer, R.T., Williams, P.T., Moore, N.H., Smallwood, L.L., & Weimar, W.H. (2019). Effect of Arch Type on Center of Mass Displacement and Kinetics During Lateral Hopping. *Thematic poster presented at the Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.  
  
Weimar, W.H., **Wilburn, C.M.**, Decoux, B.E., & Roper, J.A. (2019) Walk with Us. *Oral presentation presented at the Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.

Decoux, B.E., **Wilburn, C.M.**, Moore, N.H., & Weimar, W.H. (2019). Comparison of Single- Leg Hop Parameters Across Different Artificial Turf Systems and Natural Turfgass. *Poster presented at the Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.

Fox, J.W., **Wilburn, C.M.**, Jagodinsky, A.E., Smallwood, L.L., & Weimar, W.H. (2019). Comparison of Optimal and Isometric Force in Squats. *Poster presented at the Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.

Moore, N.H., Decoux, B.E., **Wilburn, C.M.**, & Weimar, W.H. (2019). Change in Direction Task Across Direction Playing Surfaces. *Poster presented at the Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.

Jagodinsky, A. E., Angles, R., **Wilburn, C.M.**, Weimar, W. H. (2018). Altered Joint Dynamics between Individuals with and without Chronic Ankle Instability. *Poster presented at World Congress of Biomechanics*, Dublin, Ireland.   
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Weimar, W.H., Decoux, B.E., **Wilburn, C.M.**, Brewer, L.E., & Moore, N.H. (2018). It Matters What You Curl, but not to the Biceps Brachii. *Poster presented at the American Society of Biomechanics Annual Conference*, Rochester, MN.  
  
Fox, J.W., Jagodinsky, A.E., **Wilburn, C.M.**, Smallwood, L.L., & Weimar, W.H. (2018). Single-Joint Strength Curves from a Multi-Joint Task. *Poster presented at the American Society of Biomechanics Annual Conference*, Rochester, MN.

Rehm, J., Jagodinsky, A., **Wilburn, C.**,Smallwood, L., Wright, T., Windham, J, & Weimar. W. (2018). Can a novel reach test differentiate among functional groups? *North American Federation of Adapted Physical Activity 2018 Symposium*, Corvalis, Oregon.  
  
Jagodinksy, A.E., Angles, R., **Wilburn, C.M.**, & Weimar, W.H. (2018). Bracing Effects on Lower Extremity Movement Dynamics in Individuals With and Without Chronic Ankle Instability. *Poster presented at the American College of Sports Medicine Annual Conference, Minneapolis, MN.*    
  
Angles, R., Jagodinsky, A.E., **Wilburn, C.M.**, & Weimar, W.H. (2018). Altered Movement Dynamics Between Individuals With and Without Chronic Ankle Instability Before and After Bracing. *Poster presented at the American College of Sports Medicine Annual Conference, Minneapolis, MN.*    
 **Wilburn**, **C.M.**, Decoux, B.E., Fawcett, R.T., Brewer, R.T., Williams, P.T., Moore, N.H., Smallwood, L.L., & Weimar, W.H. (2018). The Influence of Arch Height on Propulsion Mechanics during Forward Hopping and Lateral Jumping Tasks. *Poster presented at Southeastern American College of Sports Medicine Annual Conference,*   
 Chattanooga, TN.

Decoux, B.E., **Wilburn**, **C.M.,**  Fawcett, R.T., Brewer, R.T., Williams, P.T., Moore, N.H., Smallwood, L.L., & Weimar, W.H. (2018). Relationship Between Arch Stiffness, Vertical Stiffness, Loading Rate, and Hopping Frequency During Unilateral Stationary Hopping Among Male Collegiate Athletes. *Oral presented Southeastern American College of Sports Medicine Annual Conference,* Chattanooga, TN.

Weimar, W.E., **Wilburn, C.M**., Decoux. B.E., Fawcett, R.T., Brewer, L.E. & Moore, N.M. ( 2018) Effect of Arch Flexibility on Propulsive Parameters of Hopping. *Orally presented at Southeastern American College of Sports Medicine Annual Conference,* Chattanooga, TN.

Fox, J.W., **Wilburn, C.M.**, Jagodinsky, A.E., Smallwood, L.L., & Weimar, W.H. (2018) Ground Reaction Force from the Hip, Knee, and Ankle in Isometric Leg Extension. *Orally presented at Southeastern American College of Sports Medicine Annual Conference,* Chattanooga, TN.

Brewer, L.E., Decoux, B.E., **Wilburn, C.M.**, Moore, N.H., Fawcett, R.T., & Weimar, W.H. (2018) Effect of Pack Load Position on Trunk Flexion During Obstacle Task. *Poster presented at Southeastern American College of Sports Medicine Annual Conference,* Chattanooga, TN.

Moore, N.H., Brewer, L.E., Decoux, B.E., **Wilburn, C.M.**, Smallwood, L.L., Williams, P.T., & Weimar, W.H. (2018). Influence of Preparatory Arm Motion on Peak Vertical Force, Resultant Horizontal Ground Reaction Force, and Propulsion Angle. *Poster presented at Southeastern American College of Sports Medicine Annual Conference,* Chattanooga, TN.

Williams, P.T., **Wilburn, C.M**., Dupiton, M.E., Morris, M.A., Mcroy, J.E., Price, S.L., & Weimar, W.H. (2017). Foot Morphology of School Aged Children in A Developmental Research School. *Poster presented at the American Society of Biomechanics Annual Conference, Boulder, CO.*

**Wilburn**, **C.M.**, Fox, J.W., Jagodinsky, A.E., Decoux, B.E., Williams, P. T., Brewer, L.E., Smallwood, L.L., Moore, N.H., Kitchens, M.W. & W.H. Weimar. (2017). The Interaction of Arch Height Stiffness and Center of Pressure Mediolateral Deviation in Different Sock Types. *Poster presented at Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.   
  
Decoux, B.E., **Wilburn**, **C.M.**, Brewer, L.E., Fox, J.W., Jagodinsky, A.E., Williams, P. T., Smallwood, L.L., Moore, N.H., Kitchens, M.W. & W.H. Weimar. (2017). Investigation of Static Versus Dynamic Arch Height Stiffness and Bilateral Symmetry During Barefoot Walking. *Poster presented at Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.   
  
Williams, P. T., **Wilburn**, **C.M.**, Dupiton, M.E., Morris, M.A., McRoy, J.E., Price, S.L., Smallwood, L.L., Kitchens, M.W., Moore, N.H., Decoux, B.E., Brewer, L.E., & Weimar, W.H. (2017). Arch Height Stiffness and Arch Height Index Across Grades. *Poster presented at Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.   
  
Kitchens, M.W., Jagodinsky, A.E., **Wilburn**, **C.M.**, Moore, N.H., Bois, K.R., Bois, & Weimar, W.H. (2017). The Influence of an Isometric Squat on Vertical Jump. *Poster presented at Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.  
  
Moore, N.H., Kitchens, M.W., Brewer, L.E., Decoux, B.E., **Wilburn**, **C.M.**, Smallwood, L.L., Williams, P. T., & Weimar, W.H. (2017). Influence of Preparatory Arm Motion on Running Acceleration. *Poster presented at Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.  
  
Smallwood, L.L., Williams, P. T., Moore, N.H., Kitchens, M.W., **Wilburn**, **C.M.**, & Weimar, W.H. (2017). Interaction of High Heel Shoe Insert During Gait. *Poster presented at Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.  
  
Price, S.L., Weimar, W. H., Wadsworth, D., **Wilburn, C.M**., Williams, P.T., & Rudisill, M.E. ( 2017). Research Collaborations between Majority and Minority Serving Institution: Auburn University and Florida A&M University makes it happen. *Orally presented at American Kinesiology Leadership Workshop*, Westlake, TX.

Rehm, J., Jagodinsky, A., **Wilburn, C.,** Smallwood, L., Wright, T., Windham, J, & Weimar. W. (2016) Measuring Trunk Stability for Wheelchair Basketball Classification, North American Federation of Adapted Physical Activity 2016 Symposium, Edmonton, Canada.

Rehm, J., Jagodinsky, A., **Wilburn, C.,** Smallwood, L., Wright, T., Windham, J, & Weimar. W. (2016) Measuring Volume of Action for Wheelchair Basketball Classification, North American Federation of Adapted Physical Activity 2016 Symposium, Edmonton, Canada.

Iso-Ahola, S. E., Jagodinsky, A. E., Clark, L. C., Smallwood, L. L., **Wilburn, C.,** Weimar, W. H., Dotson, C. O., & Miller, M. W. (2016). Improving performance by anchoring movement and “nerves”. *Poster presented at the North American Society for the Psychology of Sport and Physical Activity Annual Meeting*, Montreal, Canada.  
  
**Wilburn, C.M.,** Fox, J.W., Nabity, C.E., Javage, E.A., Jagodinsky, A.E., & Smallwood, L.L. (2016). Quantifying the Effects of Athletic Socks on Foot Function During Gait. *Orally presented at the Auburn University: This is Research Student Annual Symposium.* Auburn University.

Nabity, C.E., **Wilburn, C.M.**, Fox, J.W., Javage, E.A., Jagondinsky, A.E., & Smallwood, L.L. (2016). Influence of Sock Type on Gait Parameters. *Poster presented at the Auburn University: This is Research Student Annual Symposium.* Auburn University.

Javage, E.A., **Wilburn, C.M.,** Fox, J.W., Nabity, C.E., Jagodinsky, A.E., & Smallwood, L.L. (2016). The Effect of an Alternative Lacing Strategy on Gait Parameters. *Poster presented at the Auburn University: This is Research Student Annual Symposium.* Auburn University.

**Wilburn, C.M.,** Fox, J.W., Jagodinsky, A.E., Nabity, C.E., Javage, E.A., Smallwood, L.L., Williams, P.T., Moore, N. H., Kitchens, M.W., Bois, K.R., & Weimar, W.H. (2016). The influence of Sock Type on Foot Function During Walking Gait. *Orally presented at National Black Graduate and Professional Student Association Annual Conference. Houston, TX.*

**Wilburn, C.M.,** Fox, J.W., Jagodinsky, A.E., Smallwood, L.L., Moore, N.H., Kitchens, M.W., Bois, K. R., Williams, P.T., & Weimar, W.H. (2016) The Impact of Sock Type on the Center of Pressure and Spatio-Temporal Parameters of Gait. *Thematic poster presented at Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.

Nabity, C.E., **Wilburn, C.M**, Fox, J.W., Javage, E.A., Jagodinsky, A.E., Smallwood, L.L., & Weimar, W.H. (2016). Interaction of Arch Type and Various Socks on Center of Pressure Deviation. *Poster presented at Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.

Javage, E.A, **Wilburn, C.M.**, Fox, J.W., Nabity, C.E., Jagodinsky, A.E., Smallwood, L.L., & Weimar, W.H. (2016). The Effect of Arch Type and Sock Type During Shod Gait. *Poster presented at Southeastern American College of Sports Medicine Annual Conference,* SC.

Moore, N.H., **Wilburn, C.M.,** Fox, J.W., Jagodinsky, A.E., Smallwood, L.L., Kitchens, M.W., Bois, K. R., Williams, P.T., Brewer, J.M. & Weimar, W.H. (2016). The Impact of Athletic and Cotton Socks on Toe In and Out and Walking Velocity During Shod Gait. *Poster presented at Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.

Bois, K.R., **Wilburn, C.M.,** Fox, J.W., Jagodinsky, A.E., Smallwood, L.L., Moore, N.H., Kitchens, M.W., Bois, K. R., Williams, P.T., Brewer, J.M. & Weimar, W.H. (2016). The Impact of Sock Type on Stride Length and Stride Frequency. *Poster presented at Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.

Kitchens, M.W., **Wilburn, C.M.,** Fox, J.W., Jagodinsky, A.E., Smallwood, L.L., Moore, N.H.., Bois, K. R., Williams, P.T., Brewer, J.M. & Weimar, W.H. (2016). Influence of Arch Height and Sock Type on Toe-In and Toe-Out During Gait. *Poster presented at Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.

Williams, P.T., **Wilburn, C.M., .,** Fox, J.W., Jagodinsky, A.E., Smallwood, L.L., Moore, N.H., Kitchens, M.W., Bois, K. R., & Weimar, W.H. (Feb. 2016). The Effect of Arch Type and Sock Type During Shod Gait with a Runner’s Loop Lacing Strategy. *Poster presented at Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.

Smallwood, L.L., **Wilburn, C.M.,** Jagodinsky, A.E., Moore, N.H., Kitchens, M.W., Bois, K.R., & Weimar, W.H. (2016). Interaction of Shoe Type on Stride Parameters. *Poster presented at Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.

Fox, J.W., Jagodinsky, A.E., **Wilburn, C.M.**, Smallwood, L.L., & Weimar, W.H. (2016). Force Capacity Increases With Leg Extension. *Poster presented at Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.

Fox, J.W., Jagodinsky, A.E., Smallwood, L.L., **Wilburn, C.M.**, & Weimar, W.H. (2015). Influence of a Self- Induced Drop on Vertical Jump Performance. *Poster presented at American Society of Biomechanics Annual Conference,* Columbus, OH.

Smallwood, L.L., Jagodinsky, A.E., **Wilburn, C.M.**, & Weimar, W.H. (2015). Influence of Heel Type on Stride Length. *Poster presented at American Society of Biomechanics Annual Conference,* Columbus, OH.

Irwin, J.M, Rudisill, M.E., **Wilburn, C.M.**, & Weimar, W.H. (2015). Team Player: The Role of Balance in Development of Fundamental Motor Skills. A Pilot Study. *Orally presented at Auburn University: This is Research Student Annual Symposium.* Auburn, Alabama.

Hendricks, C.S., Popoola, S., & **Wilburn, C.M.** (2015). Taking Health Promotion Self Care to People Southern Style. *Orally presented at* *Alabama State Nurse Association Elisabeth A. Morris Annual Clinical Session.* Montgomery, AL.

Hendricks, C.S., Popoola, S., & **Wilburn, C.M.** (2015). Digital Signage Connecting Self-Care Health Promotion Outreach. *Orally presented at* *Auburn University Outreach Scholarship Annual Symposium*. Auburn, AL.

**Wilburn, C.M.,** Fox, J.W., Jagodinsky, A.E., Smallwood, L.L., & Weimar, W.H. (2015). Influence of Shoe Lacing Strategies on Center of Pressure Deviation. *Poster presented at Southeastern American College of Sports Medicine Annual Conference,* Jacksonville, FL.

Smallwood, L.L., Fox, J.W., Jagodinsky, A.E., **Wilburn, C.M.**, Weimar, W.H. (2015). Examination of Spatiotemporal Parameters Involving Shoe Lacing Strategies and Gait. *Poster presented at Southeastern American College of Sports Medicine Annual Conference,* Jacksonville, FL.

Hendricks, C.S., Popoola, S., & **Wilburn, C.M.** (2014). Using Translational Strategies & Technology to Promote healthy Lifestyles. *Orally presented at* *Biomedical Research Symposium and Phi-Zeta Research Day Annual Conference.* Tuskegee, AL.

Hendricks, C.S., Popoola, S., & **Wilburn, C.M.** (2014). Taking “It” to the People Southern Style (AU: TIPSS). *Orally presented at* *Auburn University Research Week Annual Symposium.* Auburn, AL.

Jagodinksy, A.E., Fox, J.W., Smallwood, L.L., **Wilburn, C.M.,** & Weimar, W.H. (2014). The Effect of Arch height and Stiffness on Center of Pressure Differences Between Shoe Lacing Strategies. *Poster presented at Southeastern American College of Sports Medicine Annual Conference,* Greenville, SC.

Hendricks, C.S., Popoola, S., & **Wilburn, C.M.** (2014). AU TIPSS- Enhancing Outreach with Technology. *Orally presented at* *Auburn University Outreach Scholarship Annual Symposium.* Auburn, AL.

**Mentorship Experience   
*Graduate***

***2022-present***Jared Kosek (MS)  
Doctoral Co-mentor and Dissertation Committee Member

***2021-present***Aleah Horton (MA)  
Department of Special Education, Rehabilitation, and Counseling   
Dissertation Committee Member  
  
  
***2021- present***Hannah Houde (MS)  
Doctoral Co-mentor and Dissertation Committee Member ***2019-2021***Imani Hill (MS)  
Major Advisor and Thesis Committee Member  
  
***Undergraduate***

**2020**Derrick Stephen (Undergraduate Research Fellowship)  
*Project Title: SuperHERoes of Today: A Biomechanical Analysis of the Anatomical Adaptations During Pregnancy*  
Auburn University- Office of Undergraduate Research  
**Funding Amount: $2,000  
  
2019**Kathryn Riis (Undergraduate Research Fellowship)   
*Project Title: Get a Grip: Investigation of Non-Slip Socks on Locomotive Parameters in High-Risk Populations for Falls*  
Auburn University- Office of Undergraduate Research   
**Funding Amount: $3,000**

**2019**Robert McLaughlin (Undergraduate Research Fellowship)   
Project Title: *Development of A More Convenient and Affordable Method of Measuring the Arch Height Index*  
Auburn University- Office of Undergraduate Research   
**Funding Amount: $2,000**   
  
**Outreach**

Unassigned workload associated with 100% Teaching Allocation

**Service**

***University Service***

***College of Education Diversity, Equity, and Inclusion Committee***School of Kinesiology Co-Representative  
Committee Chair: Jared Russell, PhD. School of Kinesiology   
September 2022-present

***College of Education Faculty Award Committee***

School of Kinesiology Representative

Committee Chair: Gwendolyn Williams, PhD, Department of Curriculum and Teaching

(2020-2021)

Jane Teel, PhD, Department of Educational, Foundations, Leadership, and Technology

(present)

Fall 2020-present

***Interdisciplinary Studies Faculty Advisory Committee***

College of Education Representative

Committee Chair: Robin Sexton, College of Liberal Arts

2019-present

***National Student Athlete Day***

School of Kinesiology Co-Faculty Coordinator

Coordinator: Janice Robinson, MEd., Department of Auburn Athletics

Spring 2018- present

***Graduate Advisory Committee***

Biomechanics Faculty Representative

School of Kinesiology

Coordinator: Mary Rudisill, PhD.

Fall 2018- present

***Exercise Physiology Clinical Assistant Professor Hiring Committee***

Faculty Representative

School of Kinesiology

Committee Lead: Danielle Wadsworth, PhD

2020

***Exercise Science Senior Research Presentations***

Faculty Judge

School of Kinesiology

Coordinator: JoEllen Sefton, PhD.

Fall 2019

***Future Scholars Summer Bridge Program Selection Committee***

Faculty Representative

School of Kinesiology

Coordinator: Jared Russell, PhD

Fall 2017- present

***Professional Service***

***American Society of Biomechanics Diversity Committee***

Faculty Representative

Committee Chair: Ajit Chaudhari, PhD., Ohio State University College of Medicine

Fall 2020-present

***Black Biomechanists Association Outreach Committee***

Faculty Lead

Organization Founders: Matthew McCullough, PhD, North Carolina Agricultural and

Technical State University College of Engineering; Erica Bell, PhD, Mayo Clinic

Department of Physical Medicine & Rehabilitation ; Kayla Seymore MS, University of

Delaware Department of Physical Therapy  
Fall 2021-present

***Black Biomechanists Association Organizing Committee***

Faculty Representative

Organization Founders: Matthew McCullough, PhD, North Carolina Agricultural and

Technical State University College of Engineering; Erica Bell, PhD, Mayo Clinic

Department of Physical Medicine & Rehabilitation; Kayla Seymore MS, University of

Delaware Department of Physical Therapy

Fall 2021-present

***Black Biomechanists Association Communications Committee***

Faculty Representative

Organization Founders: Matthew McCullough, PhD, North Carolina Agricultural and

Technical State University College of Engineering; Erica Bell, PhD, Mayo Clinic

Department of Physical Medicine & Rehabilitation; Kayla Seymore MS, University of

Delaware Department of Physical Therapy

Fall 2021-present

***Latinx in Biomechanics Association Social Media Committee***

Faculty Representative

Organization Founders: Jazmin Cruz, BA, Texas Tech University College of Engineering

;Jonaz Moreno, MS, University of Massachusetts Amherst School of Public Health and

Health Sciences; Lindey Trejo MS, Georgia Institute of Technology College of

Engineering

***Morehouse College Department of Kinesiology, Sports Studies and Physical Education***

***Graduate School Panel***

Auburn University Faculty Representative

Coordinator: Clade Hutto, EdD., Morehouse College Division of Life

**Guest Lectures   
Journey of the Black Academic (Fall 2021)***Black Graduate and Professional Student Association- Auburn University   
Chapter*

**Post-Doctorate Professional Development: Teaching in Academia (Summer 2021)***American Society of Biomechanics Post-Doctorate Affinity Group*

**Navigating Imposter Syndrome as a Black Male (Fall 2020)***Industry (Marshall Coaching and Mentoring)*

**The Science of Sneaks (Summer 2018)**Louisiana Tech University GEAR UP Camp (High School)