DOCTORAL HOODING CEREMONY

WEDNESDAY, DECEMBER 15, 2021
3:00 P.M.
BROOKS CENTER FOR THE PERFORMING ARTS
CLEMSON, SOUTH CAROLINA

ORDER OF CEREMONIES

PROCESSIONAL
Please stand as you are able for the processional and the National Anthem.

NATIONAL ANTHEM

WELCOME AND INTRODUCTIONS
John Lopes
Associate Provost and Dean of the Graduate School

GRADUATE ADDRESS
Jameka N. Jackson
Ph.D. Candidate: Educational Leadership
Selected by the Graduate Student and Postdoctoral Advisory Committee

REMARKS
John Lopes
Associate Provost and Dean of the Graduate School
and
Robert H. Jones
Executive Vice President for Academic Affairs and Provost

CONFERRING OF DEGREES
President James P. Clements

ALMA MATER
Please stand as you are able and remain standing for the recessional.

RECESSIONAL

Today's ceremony is being streamed live with captioning at tv.clemson.edu/live and at youtube.com/ClemsonUniversity, where it will be archived after the ceremony. Sign language interpreting available in the front right corner of theater.

Candidates appearing in this program may not be certified graduates. Certification of graduation must come from the Registrar of the University.
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EXECUTIVE OFFICERS

James P. Clements
President

Maxwell Allan
Vice President and Chief of Staff

Interim Vice President for University Relations

Robert H. Jones
Executive Vice President for Academic Affairs and Provost

John D. Grifﬁn
Senior Associate Provost

Anthony E. Wagner
Executive Vice President for Finance and Operations

George R. Askew, Jr.
Vice President for Public Service and Agriculture

L. Chris Miller
Vice President for Student Affairs and Dean of Students

Tanja Kanzard
Vice President for Research

Angie Leidinger
Vice President for External Affairs and Senior Advisor to the Board of Trustees

W.C. Hood, Jr.
Executive Secretary to the Board of Trustees

General Counsel

Brian O’Rourke
Vice President of Development and Alumni Relations

Brian Voss
Interim Vice President and CIO

Clemson Computing and Information Technology

Lee A. Gill
Chief Diversity Ofﬁcer and

Special Assistant to the President for Inclusive Excellence

Lisa Knun
Assistant Vice President and Executive Director

Ofﬁce of Instrucional Excellence

Amy Smith
Vice President for University Relations

Chief Marketing and Communications Ofﬁcer

Graham Neff
Acting Director of Athletics

Tracy Arwood
Chief Ethics and Compliance Ofﬁcer

THE GRADUATE SCHOOL

John Lopes
Associate Provost and Dean of the Graduate School

Nats h a N. Croom
Associate Dean

Brian N. Dominy
Associate Dean

William G. Ferrell
Associate Dean

ASSOCIATE DEANS AND DEPARTMENT CHAIRS

College of Agriculture, Forestry and Life Sciences

Paula Agudelo
Associate Dean of Research

Thomas Dobbins
Associate Dean of Outreach and Engagement

Charles V. Prinetto, III
Agricultural Sciences

Charles F. Rosekrans, Jr.
Animal and Veterinary Sciences

Charles R. Santerre
Food, Nutrition, and Packaging Sciences

Talid Perez
Forestry and Environmental Conservation

Carly C. Brower
Plant and Environmental Sciences

College of Architecture, Arts and Humanities

Michael LeMahieu
Interim Associate Dean for Undergraduate and Graduate Studies

Winifred E. Newman
Associate Dean for Research and Academic Affairs

James C. Stevenes, School of Architecture

Valeria A. Zimmery, Art

John A. Gaber, City Planning and Real Estate Development

N. Mike Jackson
Nieri Family Department of Construction Science and Management

William Stockton
English

Amir Beim
History

Sylvia O. Oropeza
Languages

Linda Davis
Performing Arts

Kelly C. Smith
Philosophy and Religion

Wilbur O. and Ann Powers College of Business

Gregory M. Pickett
Associate Dean, Director of M.B.A. Programs and Greenville ONE

Carl W. Hollingsworth
Associate Dean for Academic Affairs

Sally K. Wildner
School of Accountancy

Scott L. Bower
Economics

Angela G. Morris
Finance

Charles “Chip” Tonkin
Graphic Communications

Craig Wallace
Management

Joanna D. Simes
Marketing

College of Behavioral, Social and Health Sciences

Rachel M. Mayo
Associate Dean for Research and Graduate Studies

Denise M. Anderson
Associate Dean for Undergraduate Studies, Faculty Affairs and Inclusive Excellence

Kathleen L. Valentine
School of Nursing

Brian Tinker, interim

Communication

Jeffrey Hode, interim

Parisa, Recreation and Tourism Management

Jeffrey S. Peak
Political Science

Patrick H. Raymark
Psychology

Sarah F. Griffin, interim

Public Health Sciences

Katharina E. Weismüller
Sociology, Anthropology and Criminal Justice

Special Thanks to Graduate Program Directors and Staff. Although there are too many to list, the graduate program coordinators, graduate faculty, administrative contacts, and student services coordinators for each graduate degree program are essential to the success of graduate education at Clemson University. We thank each and every one of you.
**Posthumous Degree**

Ph.D. in Bioengineering Awarded Posthumously to Melissa McCullough

Today’s ceremony includes the awarding of a posthumous degree to Melissa McCullough, who was nearing completion of her Ph.D. in Bioengineering when she passed away earlier this year. In recognition of her accomplishments, dedication, perseverance, and contributions, her advisory committee, department chair, college dean, and the dean of the Graduate School unanimously supported the awarding of her degree today. Clemson University is proud to present the Ph.D. degree to Dr. Melissa McCullough. Accepting the degree on her behalf are her father, Tim McCullough, and her brother, Jason McCullough.

**Doctoral Pin**

Earning a doctoral degree is never easy. Finishing a program in the midst of a global pandemic is truly remarkable. To honor the extraordinary dedication and achievement of today’s graduates, each one will receive a lapel pin designed for our doctoral graduates.

The pin features a block “C” logo that was in use in 1955 when Clemson offered its first doctoral degree program. Across the C are three stripes like the ones graduates are wearing on their sleeves today, a feature of Clemson’s official doctoral regalia.

**Doctoral Hooding**

The doctoral hood is a symbolic honor of distinction bestowed upon scholars who have attained the highest level of formal education available in the world, representing a typical range of five to seven years of study beyond the bachelor’s degree. Clemson’s 46-inch-long doctoral hood is draped over the shoulders by the faculty member who, as chair of the advisory committee, has formally mentored and guided the student’s research and education. You will note that faculty members are wearing gowns, caps and hoods of many colors and designs. These academic costumes of medieval origin are, for faculty with degrees from U.S. institutions, specified by a uniform code maintained by the American Council on Education. Caps and hoods are usually worn over academic gowns, with black velvet or metallic thread trimming edging the hood to form the throat over the gown. The most frequently seen color is dark blue, which designates the Doctor of Philosophy (Ph.D.) degree. Finally, the color of the hood’s lining is specific to the awarding institution. The colors are displayed in combinations that are drawn from heraldry. Notice that the Clemson University hood is lined with purple through which is an orange chevron (a “V”), although many combinations are duplicated by dozens of institutions, Clemson is presently the only institution with that registered combination of purple and orange.

Earning a doctoral degree on her behalf are her father, Tim McCullough, and her brother, Jason McCullough.

**A Brief History of Graduate Education and the Graduate School at Clemson University**

[Clemson's faculty] would engage in original and important research, by which knowledge would be increased, whilst the immediate objects . . . would be the diffusion of facts on all scientific subjects. It would be vain to attempt to fix a limit to the benefits that would thus be conferred upon mankind and their effects upon society . . .

— Thomas Green Clemson

In conceptualizing a “high seminary of learning” for South Carolina, Thomas Green Clemson knowingly set the stage for graduate education to emerge as an engine of economic development in the state. Graduate education quickly became synonymous with the application of theory to improving the practices of education and agriculture. The analysis of fertilizer, a contracted activity of the chemistry department that began in the late 1930s, would help restore depleted South Carolina soils, increase agricultural production, and spur a rapid development in opportunities for students at Clemson College to study beyond the baccalaureate degree.

Graduate coursework initially responded to the needs of veterans and to the interests of teachers wanting to improve their classroom skills, but also – from its inception – attracted international students’ attention. On June 3, 1924, Patrick Holson of Sandy Springs, South Carolina, earned the first master’s degree awarded at Clemson. He used his degree in vocational education to serve as a high school principal and later as superintendent of schools in York County, South Carolina and Mitchell County, North Carolina. The third graduate degree, a master’s in textile industrial education awarded to Ko-Chia Li from Makuen, China, on June 1, 1926, initiated an enrollment trend that has catapulted China to its present status as the number-one sending country for international graduate students at Clemson. Mr. Li returned to China and taught as a professor of textile engineering at Peking University, and served as head of the construction department in LiaoBei Province.

From 1938 until 1945, all aspects of graduate education (courses, policies, procedures, admission, and graduation) developed under the auspices of the Committee on Graduate Instruction, chaired by F.H.H. Calhoun, Dean of the School of Chemistry and Geology. Twice during these years the University’s attempts to formalize graduate education were thwarted because of the challenges to the Committee to maintain the necessary standards of quality. Clemson faculty recognized early that to establish a graduate program that enabled Clemson alumni to enroll would require strengthening the undergraduate curriculum and courses to prevent knowledge gaps “between the two.”

On March 14, 1945, President Poole received the Committee’s resolution requesting the appointment of a Dean of the Graduate School. It had been ascertained by that time that 19 courses could be offered immediately by the schools of agriculture, chemistry, engineering, textiles, and arts and sciences. On July 27, 1946, the Board of Trustees approved the Committee’s proposed graduate program of study and, that fall, formally admitted the first class of students into “the Graduate School.” However, it would not be until June 15, 1951, that Herbert J. Webb, Chair of the Department of Chemistry and Toxicology, was appointed as the first Dean of the Graduate School.

Masterfully stewarded by President Poole himself and modeled initially after several prestigious southern institutions, Clemson’s graduate programs grew cautiously but steadily, introducing the first doctoral degree, in plant pathology, in 1953. Today, the Graduate School proudly enrolls more than 5,000 graduate students and is committed to continued growth at both the master’s and doctoral levels.

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Doctors' gowns are full, with bell-shaped sleeves. The front is bordered with velvet panels and the sleeves are marked by three velvet bars. While some gowns are black with black velvet, one variation is to replace black velvet with velvet in the discipline color. A second variation is a colored gown usually of the university's colors.

All hoods specify the level of degree, the type of discipline studied and the awarding institution. The width of the velvet trim conveys the degree. In addition, the degree is indicated by the color of the trim edging the hood to form the throat over the gown. The most frequently seen color is dark blue, which designates the Doctor of Philosophy (Ph.D.) degree. Finally, the color of the hood's lining is specific to the awarding institution. The colors are displayed in combinations that are drawn from heraldry. Notice that the Clemson University hood is lined with purple through which is an orange chevron (a "V"). Although many combinations are duplicated by dozens of institutions, Clemson is presently the only institution with that registered combination of purple and orange.

The officers, trustees and honored guests wear academic, ecclesiastical or military regalia as set forth by their professions. The president of Clemson University wears a purple gown with four velvet bars piped in orange and the University seal embroidered on the panels. Each trustee wears a similar gown with three velvet bars piped in orange for doctorates and an embroidered palmetto tree on each sleeve for those who do not hold doctorates. Trustee hoods are either from Clemson or from the awarding school.

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Graduate coursework initially responded to the needs of veterans and to the interests of teachers wanting to improve their classroom skills, but also — from its inception — attracted international students' attention. On June 3, 1924, Patrick Hobson of Sandy Springs, South Carolina, earned the first master's degree awarded at Clemson. He used his degree in vocational education to serve as a high school principal and later as superintendent of schools in York County, South Carolina and Mitchell County, North Carolina. The third graduate degree, a master's in textile industrial education awarded to Ko-Chia Li from Mukden, China, on June 1, 1926, initiated an enrollment trend that has catapulted China to its present status as the numberone sending country for international graduate students at Clemson. Mr. Li returned to China and taught as a professor of textile engineering at Peking University, and served as head of the construction department in LiaoBei Province.

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Masterfully stewarded by President Poole himself and modeled initially after several prestigious southern institutions, Clemson's graduate programs grew cautiously but steadily, introducing the Master of Science in Textile Engineering in 1946. The Master of Science in Textile Engineering quickly became synonymous with the application of theory to improving the practices of education and agriculture. The analysis of fertilizer, a contracted activity of the chemistry department that began in the late 1930s, would help restore depleted South Carolina soils, increase agricultural production, and spur a rapid development in opportunities for students at Clemson College to study beyond the baccalaureate degree.

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CANDIDATES FOR THE DOCTORAL DEGREE

John Lopes, Dean of the Graduate School

COLLEGE OF AGRICULTURE, FORESTRY AND LIFE SCIENCES

DOCTOR OF PHILOSOPHY

Food, Nutrition, and Packaging Sciences

Jeffrey Allen Bowles.................................................................................................Bethel, OH
B.S., College of Mount Saint Joseph; M.B.A., Xavier University; M.S., University of Iowa
Adviser: Dr. William Whiteside

Plant and Environmental Sciences

Wanfang Fu ......................................................................................................Weifang, China
B.Sc., Central South University of Forestry and Technology; M.S., Clemson University
Adviser: Dr. Ksenija Gasic
Dissertation: Enabling DNA-Informed Breeding for Disease Resistance in Peach
Dr. Fu has four peer-reviewed publications and was awarded the Wade Stackhouse Fellowship in 2018–2021 and a Doctoral Dissertation Completion Award in 2020–2021. She plans to pursue a career in academia.

Bhupinder Singh Jatana ....................................................................................Faridkot, India
B.Sc., Punjabi University; M.Sc., Punjab Agricultural University
Adviser: Dr. Nishanth Tharayil
Dissertation: Recapture and Reuse of Nitrogen and Phosphorus from Rendered Animal Materials to Enhance Nutrient Use Efficiency and Produce Quality in Agricultural Crops
Dr. Jatana has four peer reviewed publications and has accepted a postdoctoral research associate position at Cornell University.

Maria Mercedes Rossi ........................................................................Buenos Aires, Argentina
B.S., Universidad de Buenos Aires; M.S., Clemson University
Adviser: Dr. Dale Layfield
Dissertation: An Assessment of the Needs of School-Based Agricultural Educators and Other Professionals in Agricultural Service Agencies for a Professional Online Master’s Degree in Agricultural Education

Wildlife and Fisheries Biology

Jeremy S. Dertien .................................................................................................Austin, TX
B.S., Colorado State University; M.S., Colorado State University
Adviser: Dr. Robert Baldwin
Dissertation: Wetland, Avian, and Landscape Connectivity Indicators for Conservation Planning
Dr. Dertien has seven peer-reviewed publications and has accepted a postdoctoral position with Tigers United University Consortium at Clemson University researching human-tiger conflict in southern Asia.

COLLEGE OF ARCHITECTURE, ARTS AND HUMANITIES

DOCTOR OF PHILOSOPHY

Planning, Design, and the Built Environment

Sida Dai ..........................................................................................................Pingxiang, China
B.Arch., Huaqiao University; M.Arch., University of Virginia
Adviser: Dr. Michael Carlos Barrios Kleiss
Dissertation: Reinforcement Learning Based Design Methodology for Building Performance: A Case of Building Facades with Kinetic Elements

Rhetorics, Communication, and Information Design

Chelsea Megan Slack .................................................................................... New Orleans, LA
B.A., Southern Arkansas University; M.A., University of Memphis; M.A.T., Southern Arkansas University
Adviser: Dr. Bryan Denham
Dissertation: Cultivation 2.0: The Mediated Environment as Message in the 21st Century
Dr. Slack is a full-time faculty member at Southeastern Louisiana University in Hammond, LA.

COLLEGE OF BEHAVIORAL, SOCIAL AND HEALTH SCIENCES

DOCTOR OF PHILOSOPHY

Applied Health Research and Evaluation

Smith Foster Hearner-Sullivan ........................................................................Simpsonville, SC
B.S.N., M.S., Clemson University
Advisers: Dr. Sarah Griffth; Dr. Ann Blair Kennedy
Dissertation: "I Thought I was Going to War": Experiences of Health-Care Workers During the COVID-19 Pandemic – An Exploration of ProjectCOPE
Prisma Health honored Dr. Hearner with the Award for Excellence in Nursing for his leadership of initiatives in response to COVID-19. He has accepted a position as scientific director of an international research consortium and two faculty appointments. He will continue his education in a postgraduate program at Harvard Medical School.
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DOCTOR OF PHILOSOPHY

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B.Arch., Huaqiao University; M.Arch., University of Virginia
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Dissertation: Reinforcement Learning Based Design Methodology for Building Performance: A Case of Building Facades with Kinetic Elements

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Dissertation: Cultivation 2.0: The Mediated Environment as Message in the 21st Century
Dr. Slack is a full-time faculty member at Southeastern Louisiana University in Hammond, LA.

COLLEGE OF BEHAVIORAL, SOCIAL AND HEALTH SCIENCES

DOCTOR OF PHILOSOPHY

Applied Health Research and Evaluation

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B.S.N., M.S., Clemson University
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Healthcare Genetics

Megan Delaney McCoy .................................................................................... Midlothian, VA
B.S., James Madison University
Advisers: Dr. Sara Sarasua; Dr. Jane DeLuca
Dissertation: The Genetics of Kidney Disorders in Phelan-McDermid Syndrome

Industrial/Organizational Psychology

Brandon R. McIntyre ................................................................................... Myrtle Beach, SC
B.S., M.S., Clemson University
Adviser: Dr. Cynthia Pury
Dissertation: The Development of the Adaptable Self-Disclosure Scale (ASDS): A Multidimensional Approach to Disclosure Assessment

International Family and Community Studies

Lyudmila Tsykalova ............................................................................................. Clemson, SC
B.A., M.A., KROK University; M.A., University of Palermo
Adviser: Dr. Natallia Sianko
Dissertation: The Future of Humankind: Comparative Cross-Cultural Study of Youth Environmental Engagement and Environmental Outcomes

Parks, Recreation and Tourism Management

Jamie Lynn Cathey .............................................................................................. Nashville, TN
B.S., University of Tennessee; M.A., Adelphi University
Adviser: Dr. Lori Dickes
Dissertation: “You Can’t Hide Behind Being a House”: Examining the Policy Process, Design, and Implementation of Short-Term Rental Regulations, a Case Study of Nashville, TN
Dr. Cathey was a lecturer in her department for four years and currently works as a lecturer in the Leisure and Sport Management Program at Middle Tennessee State University.

WILBUR O. AND ANN POWERS COLLEGE OF BUSINESS

DOCTOR OF PHILOSOPHY

Economics

Peiyun Jin ........................................................................................................ Philadelphia, PA
B.S., Tianjin Polytechnic University; M.S., Penn State Great Valley
Adviser: Dr. Gerald Dwyer
Dissertation: Arbitrage Among Stablecoins

Yanchao Li ........................................................................................................ Qingdao, China
B.A., Fudan University
Adviser: Dr. Gerald Dwyer
Dissertation: Housing Price Fluctuation in Different Tiers of Cities in China

Education Systems Improvement Science

James Lerae Goude ........................................................................................ Summerville, SC
B.A., Clemson University; Ed.S., M.A., the Citadel
Adviser: Dr. Jane Clark Lindle
Dissertation: A Critical Analysis of the Discourse of Culturally Responsive Curriculum Within South Carolina’s Secondary U.S. History and Constitution Standards

Takara Illana Hart ............................................................................................. Charleston, SC
B.S., University of South Carolina; Ed.S., The Citadel; M.Ed., Charleston Southern University
Adviser: Dr. Reginald Wilkerson
Dissertation: Interventions to Increase Prospective Teacher Candidates’ Praxis II Content Exam Scores
Dr. Hart is a District Evaluator with the Berkeley County School District in Moncks Corner, SC.

Tiffany Erin Webb Osborne ............................................................................... Anderson, SC
B.A., Clemson University; Ed.S., M.A., Furman University
Adviser: Dr. Reginald Wilkerson
Dissertation: Impact of Interventions on Student Performance Among Eighth Graders in Algebra I

DOCTOR OF PHILOSOPHY

Educational Leadership

Lori B. Corley .......................................................................................................... Saluda, SC
M.Ed., Clemson University
Adviser: Dr. Hans Klar
Dissertation: Building Leadership Capacity in an Instructional Coach: A Principal’s Contribution to the Growth of a Leader Through the Lens of Complexity Leadership Theory

Jameka N. Jackson ............................................................................................ Aiken, SC
B.A., University of South Carolina Aiken; M.P.A., Augusta University
Adviser: Dr. Natasha Croom
Dissertation: Lifting as We Climb: A Hermeneutic Phenomenology on How Black Women Administrators Develop Their Leader Identity at Predominantly White Institutions
Healthcare Genetics

Megan Delaney McCoy .................................................................................... Midlothian, VA
B.S., James Madison University
Adviser: Dr. Sara Sarasua; Dr. Jane DeLuca
Dissertation: The Genetics of Kidney Disorders in Phelan-McDermid Syndrome

Industrial/Organizational Psychology

Brandon R. McIntyre ................................................................................... Myrtle Beach, SC
B.S., M.S., Clemson University
Adviser: Dr. Cynthia Pury
Dissertation: The Development of the Adaptable Self-Disclosure Scale (ASDS): A Multidimensional Approach to Disclosure Assessment

International Family and Community Studies

Lyudmyla Tsykalova .......................................................................................... Clemson, SC
B.A., M.A., KROK University; M.A., University of Palermo
Adviser: Dr. Natalia Sianko
Dissertation: The Future of Humankind: Comparative Cross-Cultural Study of Youth Environmental Engagement and Environmental Outcomes

Parks, Recreation and Tourism Management

Jamie Lynn Cathey .............................................................................................. Nashville, TN
B.S., University of Tennessee; M.A., Adelphi University
Adviser: Dr. Lori Dickes
Dissertation: “You Can’t Hide Behind Being a House”: Examining the Policy Process, Design, and Implementation of Short-Term Rental Regulations, a Case Study of Nashville, TN

Dr. Cathey was a lecturer in her department for four years and currently works as a lecturer in the Leisure and Sport Management Program at Middle Tennessee State University.

WILBUR O. AND ANN POWERS COLLEGE OF BUSINESS

DOCTOR OF PHILOSOPHY

Economics

Peiyun Jin ........................................................................................................ Philadelphia, PA
B.S., Tianjin Polytechnic University; M.S., Penn State Great Valley
Adviser: Dr. Gerald Dwyer
Dissertation: Arbitrage Among Stablecoins

Yanchao Li .......................................................................................................... Qingdao, China
B.A., Fudan University
Adviser: Dr. Gerald Dwyer
Dissertation: Housing Price Fluctuation in Different Tiers of Cities in China

DOCTOR OF EDUCATION

Education Systems Improvement Science

James Lerae Goude .......................................................................................... Summerville, SC
B.A., Clemson University; Ed.S., M.A., the Citadel
Adviser: Dr. Jane Clark Lindle
Dissertation: A Critical Analysis of the Discourse of Culturally Responsive Curriculum Within South Carolina’s Secondary U.S. History and Constitution Standards

Takara Illana Hart ............................................................................................. Charleston, SC
B.S., University of South Carolina; Ed.S., The Citadel; M.Ed., Charleston Southern University
Adviser: Dr. Reginald Wilkerson
Dissertation: Interventions to Increase Prospective Teacher Candidates’ Praxis II Content Exam Scores

Dr. Hart is a District Evaluator with the Berkeley County School District in Moncks Corner, SC.

Tiffany Erin Webb Osborne .................................................................................. Anderson, SC
B.A., Clemson University; Ed.S., M.A., Furman University
Adviser: Dr. Reginald Wilkerson
Dissertation: Impact of Interventions on Student Performance Among Eighth Graders in Algebra I

DOCTOR OF PHILOSOPHY

Educational Leadership

Lori B. Corley ........................................................................................................... Saluda, SC
M.Ed., Clemson University
Adviser: Dr. Hans Klar
Dissertation: Building Leadership Capacity in an Instructional Coach: A Principal’s Contribution to the Growth of a Leader Through the Lens of Complexity Leadership Theory

Jameka N. Jackson .............................................................................................. Aiken, SC
B.A., University of South Carolina Aiken; M.P.A., Augusta University
Adviser: Dr. Natasha Croom
Dissertation: Lifting as We Climb: A Hermeneutic Phenomenology on How Black Women Administrators Develop Their Leader Identity at Predominantly White Institutions
Eric T. Pernotto  ......................................................................................... Greenville, SC
B.A., Roanoke College; M.Ed., University of Notre Dame
Adviser: Dr. Michelle Boettcher
Dissertation: Embracing the Role of Educator: The Experiences of Housing and Residence Life Staff in Implementing a Curriculum Model

Dr. Yoon has eight peer-reviewed publications. He won the American Society of Mechanical Engineering’s Outstanding Ph.D. Student of the Year in 2020. He currently works in the automotive industry as a software engineer.

Altheia Lesley Richardson  ........................................................................... Anderson, SC
B.S., University of South Carolina; M.B.A., Clemson University
Adviser: Dr. Natasha Croom

Dr. Pradeep has six peer-reviewed publications and received five prestigious scholarships, including the Clemson Bioengineering Eugene M. Langan III Service Award, Austin T. Moore Leadership Award, and Omicron Delta Kappa Jerome V. Reel Award for Academic Excellence. He has accepted a position at Iovance Biotherapeutics developing T-cell therapies to treat metastatic cancers.

Myles Surrett  ............................................................................................... Greenville, SC
B.A., Furman University; M.A., George Washington University
Adviser: Dr. Michelle Boettcher
Dissertation: The Problematic Myth of Student Affairs Attrition: A Regression Analysis

Dr. Moser has eight peer-reviewed papers and has accepted a postdoctoral research position at the Clemson Composites Center.

Craig Levar Miller  .......................................................................................... Holly Hill, SC
B.S., The Citadel; M.S., Clemson University
Adviser: Dr. Jordon Gilmore
Dissertation: Development of Solution Blow Spun Nanofibers as Electrical and Whole Cell Biosensing Interfaces

Dr. Samec has two peer-reviewed publications and a provisional patent under review. He is the first Medical University of South Carolina-Hollings Cancer Center Lowseld Fellowship recipient and was awarded the Clemson Bioengineering Eugene M. Langan III Service Award, Austin T. Moore Leadership Award, and Omicron Delta Kappa Jerome V. Reel Award for Academic Excellence. He has accepted a position at Jounce Biotherapeutics developing T-cell therapies to treat metastatic cancers.

Dipasha Sinha .................................................................................................. Durgapur, India
B.Tech., M.Tech., Indian Institute of Technology Kharagpur
Adviser: Dr. Naren Vyavahare
Dissertation: Development of Tissue Engineered Scaffolds for Cardiovascular Repair and Replacement in Pediatric Patients

Ailin Wei .......................................................................................................... Clemson, SC
B.S., Shandong University; M.S., Clemson University
Adviser: Dr. Bruce Gao
Dissertation: Time-Lapse Observation of Sarcomeric Addition in Hypertrophic Models Based on a Tissue Like Cardiomyocyte Culture

Sai Aditya Pradeep.......................................................................................... Bengaluru, India
B.Tech., RM University; M.S., Clemson University
Adviser: Dr. Srikanth Pilli
Dissertation: Understanding Process-Structure-Property/Performance Relationships of Thermoplastic Olefins (TPO) Foams Through a Novel Manufacturing to Response Pathway

Dr. Pradeep has six peer-reviewed publications and received five prestigious scholarships, including the Automotive and Composites Division ACCE Scholarship and the Salvatore J. Monte Thermoplastics Materials and Foams Division Scholarship from the Society of Plastics Engineers.

Melissa A. McCullough† ............................................................................... Charleston, SC
B.S., Old Dominion University; M.S., Clemson University
Adviser: Dr. Delphine Dean
Dissertation: To Pee or Not to Pee: Device Design for Current Public Health Disparities
†Awarded posthumously

DoHyun Daniel Yoon ..................................................................................... Greenville, SC
B.S., Mercer University
Adviser: Beshah Ayalew
Dissertation: Cooperative Perception for Social Driving in Connected Vehicle Traffic

Dr. Yoon has eight peer-reviewed publications. He won the American Society of Mechanical Engineers Advanced Vehicle Technologies Best Paper Award in 2019 and was named his department’s Outstanding Ph.D. Student of the Year in 2020. He currently works in the automotive industry as a software engineer.
Eric T. Pernotto ................................................................. Greenville, SC
B.A., Roanoke College; M.Ed., University of Notre Dame
Adviser: Dr. Michelle Boettcher
Dissertation: The Role of Educator: The Experiences of Housing and Residence Life Staff in Implementing a Curriculum Model

Altheia Lesley Richardson .......................................................... Anderson, SC
B.S., University of South Carolina; M.B.A., Clemson University
Adviser: Dr. Natasha Croom

Myles Surrett ...................................................................................................... Greenville, SC
B.A., Furman University; M.A., George Washington University
Adviser: Dr. Michelle Boettcher
Dissertation: The Problematic Myth of Student Affairs Attrition: A Regression Analysis

College of Engineering, Computing and Applied Sciences
Doctor of Philosophy

Automotive Engineering

Sean Jeffery Moser .............................................................. Albuquerque, NM
B.S., Colorado State University; M.S., Clemson University
Adviser: Dr. Zoran Filipi; Dr. Laura Redmond
Dissertation: Coupled Thermal Mechanical Analysis Methodology for Thermal Performance Evaluation and Failure Mode Identification of Thermal Barrier Coatings for Heavy Duty Diesel Engines
Dr. Moser has eight peer-reviewed publications and has accepted a postdoctoral research position at Clemson University.

Sai Aditya Pradeep ................................................................. Bengaluru, India
B.Tech., SRM University; M.S., Clemson University
Adviser: Dr. Srikanth Pillia
Dissertation: Understanding Process-Structure-Property/Performance Relationships of Thermoplastic Olefins (TPO) Foams Through a Novel Manufacturing to Response Pathway
Dr. Pradeep has six peer-reviewed publications and received five prestigious scholarships, including the Automotive and Composites Division ACCE Scholarship and the Salvatore J. Monte Thermoplastics Materials and Foams Division Scholarship from the Society of Plastics Engineers. He plans to work as a manufacturing engineer specialist at the Clemson Composites Center.

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Bioengineering

Elizabeth Elaine Gianino ........................................................................... Leawood, KS
B.S., Wake Forest University
Adviser: Dr. Jordon Gilmore
Dissertation: Influencing the Inflammatory Response Through Multi-Scale Geometry, Antibiotic Release, and Fluid Management in a Textile-Based Biomaterial Wound Dressing
Dr. Gianino served as president of the Clemson Bioengineering Organization and vice president of the Clemson Circle of the Omicron Delta Kappa National Leadership Honor Society. She has two peerreview publications and plans to work in the medical device industry.

Melissa A. McCullough† ........................................................................ Charleston, SC
B.S., Old Dominion University; M.S., Clemson University
Adviser: Dr. Delphine Dean
Dissertation: To Pee or Not to Pee: Device Design for Current Public Health Disparities
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Craig Levar Miller .................................................................................. Holly Hill, SC
B.S., The Citadel; M.S., Clemson University
Adviser: Dr. Jordon Gilmore
Dissertation: Development of Solution Blow Spun Nanofibers as Electrical and Whole Cell Biosensing Interfaces

Timothy M. Samec, Jr. ........................................................................... Drums, PA
B.S., M.S., Slippery Rock University of Pennsylvania; M.S., Clemson University
Adviser: Dr. Angela Alexander-Bryant
Dr. Samec has two peer-reviewed publications and a provisional patent under review. He is the first Medical University of South Carolina-Hollings Cancer Center Lowvelo Fellowship recipient and was awarded the Clemson Bioengineering Eugene M. Langan III Service Award, Austin T. Moore Leadership Award, and Omicron Delta Kappa Jerome V. Reel Award for Academic Excellence. He has accepted a position at Jouvene Biotherapeutics developing T-cell therapies to treat metastatic cancers.

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B.Tech., M.Tech., Indian Institute of Technology Kharagpur
Adviser: Dr. Naren Vyavahare
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Dissertation: Time-Lapse Observation of Sarcomeric Addition in Hypertrophic Models Based on a Tissue Like Cardiomyocyte Culture
Farah Mahmoud Alshanik ....................................................................................Irbid, Jordan

B.S., Jordan University of Science and Technology; M.S., Clemson University
Adviser: Dr. Amy Apon
Dissertation: Enhancing the Performance of Text Mining

Benjamin Thomas Sherman Shealy ...........................................................................Irmo, SC

B.S., Virginia Polytech Institute and State University; M.Engr., University of Maryland
Adviser: Dr. Mark Blenner
Dissertation: Towards Understanding Protein Immobilization Rules Through Site-Specific Covalent Immobilization of T4 Lysozyme

Ju Lin....................................................................................................................Jining, China

B.S., Xidian University; M.S., State University of New York–Binghamton
Adviser: Dr. Linke Guo
Dissertation: Secure Data Collection and Analysis in Smart Health Monitoring
Dr. Huang has five first-author peer-reviewed publications and will be working as a research scientist in industry.

Pei Huang .........................................................................................................Nanjing, China

B.S., Xi’an Jiao Tong University; M.S., University of Jordan
Adviser: Dr. Weichiang Pang
Dissertation: Seismic Performance Assessment of Building Contents: Monetary Losses and Injuries

Dr. Majdalaweyh has four peer-reviewed journal papers and five conference papers. She was awarded an Engineering and Science Education certificate and plans to work in the catastrophe modeling and risk management industry.

Sereen Akram Majdalaweyh ............................................................................Amman, Jordan

B.S., Mu’tah University; M.S., University of Jordan
Adviser: Dr. Weichiang Pang
Dissertation: Seismic Performance Assessment of Building Contents: Monetary Losses and Injuries

Megan Elaine Fowler ............................................................................................Fair Play, SC

B.S., Clemson University; M.A.T., Clemson University
Adviser: Dr. Murali Sitaraman
Dissertation: A Human-Centric System for Symbolic Reasoning About Code

Jianan Tang ............................................................................................................Central, SC

B.S., Tsinghua University
Adviser: Dr. Hai Xiao; Dr. Fei Peng
Dissertation: Deep Learning-Guided Prediction of Material’s Microstructures and Applications to Advanced Manufacturing

Baker Andrew Martin ..............................................................................................Bristol, VA

B.S., Virginia Tech; M.S., University of Tennessee–Knoxville
Adviser: Dr. Marisa Orr
Dissertation: An Investigation of Engineering Majors: Graduates’ Enrollment Timelines and First-Year Students’ Perceptions and Exploration

Walhalla High School.

Jason William Anderson ............................................................................................Alpine, TX

B.S., Clemson University
Adviser: Dr. Amy Apon; Dr. Ken Kennedy
Dissertation: Methods and Applications of Synthetic Data Generation

Robert Raymond Underwood .............................................................................Lexington, SC

B.S., M.S., Clemson University
Adviser: Dr. Amy Apon; Dr. Jon Calhoun
Dissertation: Approachable Error Bounded Lossy Compression
Dr. Underwood has six peer-reviewed publications on data compression. He was selected to participate the U.S. Department of Energy Office of Science Graduate Student Research Program at Argonne National Laboratory, and was a National Science Foundation Resilient Infrastructure and Environmental Systems Fellow at Clemson University.

Jianan Tang .............................................................................................................Central, SC

B.S., Tsinghua University
Adviser: Dr. Hai Xiao; Dr. Fei Peng
Dissertation: Deep Learning-Guided Prediction of Material’s Microstructures and Applications to Advanced Manufacturing

Dr. Hoang has four peer-reviewed publications and has accepted a research engineer position.

Huu Phuong Hoang ...................................................................................Nghe An, Vietnam

B.S., Hanoi University of Science and Technology; M.S., Gwangju Institute of Science and Technology
Adviser: Dr. Christopher Edrington
Dissertation: Integrating Degradation Forecasting and Abatement Framework into Advanced Distribution Management System

Dr. Hoang has four peer-reviewed publications and has accepted a research engineer position.

Electrical Engineering

Huipen Evan Kwok ..............................................................................................Hong Kong, China

B.S., Tsinghua University
Adviser: Dr. Hai Xiao; Dr. Fei Peng
Dissertation: Deep Learning-Guided Prediction of Material’s Microstructures and Applications to Advanced Manufacturing

Human Centered Computing

Megan Elaine Fowler ............................................................................................Fair Play, SC

B.S., Clemson University; M.A.T., Clemson University
Adviser: Dr. Murali Sitaraman
Dissertation: A Human-Centric System for Symbolic Reasoning About Code

Dr. Fowler has four peer-reviewed publications and is currently a computer science educator at Walthalla High School.
### Chemical Engineering

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<td>Pei Huang</td>
<td>Nanjing, China</td>
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<td>Ju Lin</td>
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<td>Liaocheng University; Beijing Language and Culture University</td>
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### Civil Engineering

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### Computer Engineering

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### Computer Science

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Divine Maloney................................................................................................ Middleburg, FL
B.A., Sewanee: The University of the South
Advisers: Dr. Andrew Robb; Dr. Guo Freeman
Dissertation: A Youthful Metaverse: Towards Designing Safe, Equitable, and Emotionally
Fulfiling Social Virtual Reality Spaces for Younger Users
Dr. Maloney is a leading scientist on youth in the metaverse and broader interactivity in the
metaverse. He has over 20 peer-reviewed publications, received over $320,000 in Ph.D. fellowship
funding, and plans to join Apple as a research scientist.

Industrial Engineering
Alexey A. Bochkarev .......................................................................................... Tiksi-3, Russia
B.Sc., Moscow Institute of Physics and Technology; M.Sc., Moscow Institute of Physics and
Technology; M.A., New Economic School
Adviser: Dr. J. Cole Smith
Dissertation: Selected Topics in Network Optimization: Aligning Binary Decision
Diagrams for a Facility Location Problem and a Search Method for Dynamic Shortest
Path Interdiction

Materials Science and Engineering
Linyu Pan ........................................................................................................Nantong, China
B.S., Nanjing Tech University; M.S., Chinese Academy of Science, M.S., Clemson
University
Adviser: Dr. Luiz Jacobsohn
Dissertation: Investigation and Characterization of New Optically Stimulated
Luminescence (OSL) Dosimetric Materials

Yanting Xing .....................................................................................................Taiyuan, China
B.S., North University of China
Adviser: Dr. Feng Ding
Dissertation: Understanding and Modulating Amyloid Aggregation

Mechanical Engineering
Saheem Absar ..................................................................................................... Sylhet, Bangladesh
B.S., Bangladesh University of Engineering and Technology; M.S., Georgia Southern
University
Adviser: Dr. Hongseok Choi
Dissertation: Controlling Size and Shape of Pores During Metal Solidification for
Manufacturing of Functionally Graded Metal Foams

Priyanka Balkrishna Bhovad: ............................................................... Navi Mumbai, India
B.Tech., Indian Institute of Space Science and Technology
Adviser: Dr. Suyi Li
Dissertation: Developing Design and Analysis Framework for Hybrid Mechanical-Digital
Control of Soft Robots: from Mechanics-Based Motion Sequencing to Physical
Reservoir Computing
Dr. Bhovad has eight peer-reviewed publications in the field of origami soft robotics and currently
works for medical device company Bionaut Labs, Inc.

College of Science
DOCTOR OF PHILOSOPHY
Biochemistry and Molecular Biology
Jessica Ann Jones .................................................................................................. Medina, OH
B.A., Malone University
Adviser: Dr. James Morris
Dissertation: Exploring the Role of AMPK in Nutrient Sensing and Signaling in the
Human Parasite Trypanosoma brucei
Dr. Jones has accepted a full-time position working for the U.S. Department of Defense. She will
continue studying human parasites with the Army Public Health Center.

Chemistry
Amina Khatun ....................................................................................................... Sirajganj, Bangladesh
B.S., M.S., University of Dhaka
Adviser: Dr. Sourav Saha
Dissertation: Stimuli-Responsive and Electrically Conductive Metal-Organic Frameworks
Divine Maloney................................................................................................ Middleburg, FL  
B.A., Sewane: The University of the South  
Advisers: Dr. Andrew Robb; Dr. Guo Freeman  
Dissertation: A Youthful Metaverse: Towards Designing Safe, Equitable, and Emotionally  
Fulfilling Social Virtual Reality Spaces for Younger Users  
Dr. Maloney is a leading scientist in youth in the metaverse and broader interactivity in the  
metaverse. He has over 20 peer-reviewed publications, received over $320,000 in Ph.D. fellowship  
funding, and plans to join Apple as a research scientist.

Industrial Engineering  
Alexey A. Bochkarev ............................................................. Tiksi-3, Russia  
B.Sc., Moscow Institute of Physics and Technology; M.Sc., Moscow Institute of Physics and  
Technology; M.A., New Economic School  
Adviser: Dr. J. Cole Smith  
Dissertation: Selected Topics in Network Optimization: Aligning Binary Decision  
Diagrams for a Facility Location Problem and a Search Method for Dynamic Shortest  
Path Interdiction

Materials Science and Engineering  
Linyu Pan .................................................................................. Nantong, China  
B.S., Nanjing Tech University; M.S., Chinese Academy of Science, M.S., Clemson  
University  
Adviser: Dr. Luiz Jacobsohn  
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Anmol Kothari ........................................................................... Jaipur, India  
M.S., Indian Institute of Technology; B.Tech., Rajasthan Technical University  
Adviser: Dr. Gang Li  
Dissertation: Mechanical Interfacial Locking and Multiscalar Modeling of Reinforced  
Thermoplastic Composites for Structural Applications  
Dr. Kothari has five peer-reviewed publications and plans to work in the automotive industry.

Saiful Islam Tamim .................................................................. Dhaka, Bangladesh  
B.Sc., Bangladesh University of Engineering and Technology  
Adviser: Dr. Joshua Bostwick  
Dissertation: Capillary Driven Transport in Soft Solids  
Dr. Tamim has five peer-reviewed publications and plans to pursue a career in the field of  
fundamental research in fluid mechanics.

Mengyuan Yuan ...................................................................... Ybin, China  
B.S., University of Science and Technology China  
Adviser: Dr. Chenning Tong  
Dissertation: Investigation of Scalar Mixing in Turbulent Jets and Flames

Chao Zhang ........................................................................ Taiyuan, China  
B.S., North University of China; M.S., Harbin Institute of Technology  
Adviser: Dr. Hongseok Choi  
Dissertation: Numerical and Experimental Study of Machining Process of High Strength  
Lightweight Materials

Yanting Xing ................................................................................ Taiyuan, China  
B.S., North University of China  
Adviser: Dr. Feng Ding  
Dissertation: Understanding and Modulating Amyloid Aggregation
Environmental Toxicology

Stephanie Barbara LaPlaca ................................................................. Fairfax, VA

B.S., M.S., University of South Carolina
Adviser: Dr. Peter van den Hurk
Dissertation: Toxicity and Effects of Tire Crumb Rubber in the Aquatic Environment

Genetics

Allison Hickman ..................................................................................... Cincinnati, OH

B.S., University of South Carolina
Adviser: Dr. Alex Feltus
Dissertation: Identification of Biomarker Systems of Autism Spectrum Disorder and
Uterine Cancer

Dr. Hickman has four peer-reviewed publications and one currently in review. She earned her
department's Outstanding Graduate in Learning Award in February 2020 and plans to work in the
bioinformatics industry.

Sneha Shreekant Mokashi ................................................................. Greenwood, SC

B.S., Vellore Institute of Technology
Adviser: Dr. Robert Anholt
Dissertation: Of Single Nucleotides and Single Cells: Charting the Genotype-Phenotype
Map at High Resolution Using Drosophila melanogaster

Dr. Mokashi has three peer-reviewed publications and is currently a postdoctoral associate at the
Greenwood Genetic Center.

Mathematical Sciences

Pubudu Lakmal Wijesiri Jayasekara Merenchige ............................................. Clemson, SC

B.S., University of Peradeniya; M.S., Clemson University
Adviser: Dr. Margaret Wiecek
Dissertation: An Algorithm for Biobjective Mixed Integer Quadratic Programs

Dr. Merenchige proposed the first ever algorithm to solve biobjective mixed integer quadratic
programs.

Clemson Alma Mater

Farmer and McGarity/arr. Freeman

Where the Blue Ridge yawns its greatness,
Where the Tigers play;
Here the sons of dear Old Clemson
Reign supreme alway.

Chorus

Dear Old Clemson, we will triumph
And with all our might,
That the Tiger's roar may echo
O'er the mountain height.

We will dream of greater conquests,
For our past is grand,
And her sons have fought and conquered
Every foreign land.

Where the mountains smile in grandeur
O'er the hill and dale,
Here the Tiger lair is nestling
Swept by storm and gale.

We are brothers strong in manhood,
For we work and strive;
And our alma mater reigneth
Ever in our lives.
Environmental Toxicology
Stephanie Barbara LaPlaca ................................................................. Fairfax, VA
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