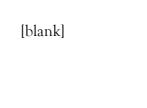
CLEMSON UNIVERSITY

Doctoral Hooding Ceremony

MAY 11, 2017





DOCTORAL HOODING CEREMONY

Thursday, May 11, 2017 7:00 pm

Brooks Center for the Performing Arts

Order of Ceremonies

PROCESSIONAL

(Please stand for the processional and the National Anthem)

NATIONAL ANTHEM

Opening of Ceremony University Marshal Deborah M Switzer

REFLECTION

Peter Mkumbo PhD candidate in Parks, Recreation and Tourism Management

WELCOME AND INTRODUCTIONS

Associate Provost and Dean of the Graduate School
Jason W Osborne
and
Executive Vice President for Academic Affairs and Provost
Robert H Jones

RECOGNITION OF OUTSTANDING GRADUATE RESEARCHERS AND GRADUATE TEACHING ASSISTANTS

Fellowship and Awards Committee Chair Joseph D Culin

Conferring of Degrees, Delivery of Diplomas, and Hooding President James P Clements

ALMA MATER

RECESSIONAL

Music by the Clemson University Brass Quintet Selections and credits on page 20

Today's ceremony is being streamed live with captioning at tv.clemson.edu/live. The recording will be posted at tv.clemson.edu/live/archive when available.

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Leon J Hendrix, Jr	Kiawah Island, SC
Harold D Kingsmore	Clemson, SC
Thomas B McTeer, Jr	Columbia, SC
D Leslie Tindal	Pinewood, SC
Allen P Wood	Florence, SC

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Angela E Leidinger

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Almeda R Jacks Vice President for Student Affairs

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Dan Radakovich, Jr Director of Athletics

Michelle T Piekutowski Chief Human Resources Officer

Brian J O'Rourke Vice President for Development and Alumni Relations

THE GRADUATE SCHOOL

Jason W Osborne Associate Provost and Dean

> Frankie O Felder Senior Associate Dean

William G Ferrell Associate Dean

David S Fleming Associate Dean

Tia N Dumas Assistant Dean for Professional Development and Inclusive Excellence

COLLEGIATE DEANS

George R Askew, Jr Dean of College of Agriculture, Forestry and Life Sciences

Richard E Goodstein Dean of College of Architecture, Arts and Humanities

Brett A Wright
Dean of College of Behavioral, Social and Health Sciences

Robert E McCormick Dean of College of Business

Anand K Gramopadhye Dean of College of Engineering, Computing and Applied Sciences

> George J Petersen Dean of College of Education

Mark D Leising Interim Dean of College of Science

> Maggie Farrell Dean of Libraries

GRADUATE STUDENT GOVERNMENT

Courtney Allen President

Aury Kangelos Vice President

Special Thanks to Graduate Program Directors and Staff

Although there are too many to list, the graduate program coordinators, the administrative contacts, and the student services coordinators for each graduate degree program are essential to the success of graduate education at Clemson University. We hope you take great pride in seeing today's graduates walk across the stage, because this would not have been possible without you. Thank you.

Associate Deans and Department Chairs

College of Agriculture, 1	Forestry and
LIFE SCIENCES	

Joseph D Culin Associate Dean for Research and Graduate Studies Jean Bertrand Associate Dean for Academic Affairs

James R Strickland	Animal and Veterinary Sciences
E Jeffery Rhodehamel	Food, Nutrition, and Packaging Sciences
,	and Environmental Conservation
Greg Reighard, interimF	Plant and Environmental Sciences

College of Architecture, Arts and Humanities

Constancio K Nakuma Senior Associate Dean for Academic Affairs and Undergraduate Studies

James H Spencer Associate Dean for Research and Graduate Studies

Katherine L Schwennsen	School of Architecture
Greg W Shelnutt	Art
Roger W LiskaConstruction	on Science and Management
Lee J Morrissey	English
James M Burns	
Mary G Padua	Landscape Architecture
Salvador A Oropesa	
David J Hartmann	Performing Arts
Charles Starkey, interim	Philosophy and Religion
James H Spencer, interim	ity Planning and Real Estate
	Development

College of Business

Gregory M Pickett
Senior Associate Dean and Director of MBA Programs
Douglas "Kinly" Sturkie
Associate Dean for Academic Affairs
Eric R Muth
Interim Associate Dean for Research

Jeffrey J McMillan	School of Accountancy
Scott L Baier	Economics
Angela G Morgan	Finance
Charles "Chip" Tonkin	Graphic Communications
"Sri" V Sridharan	Management
Jesse N Moore, interim	Marketing

College of Engineering, Computing and Applied Sciences

Douglas E Hirt Associate Dean for Research and Graduate Studies Bradley J Putman Interim Associate Dean of Undergraduate Studies

Eileen T Kraemer	School of Computing
Zoran S Filipi	Automotive Engineering

Martine LaBerge	Bioengineering
	Chemical and Biomolecular
	Engineering
	Civil Engineering
Daniel L Noneaker	Electrical and Computer
	Engineering
	Engineering and Science Education
David L Freedman	Environmental Engineering and
	Earth Sciences
	General Engineering
J Cole Smith	Industrial Engineering
Rajendra "Raj" Bordia	Materials Science and Engineering
Richard Figliola, interim	Mechanical Engineering

College of Behavioral, Social and Health Sciences

Eric R Muth Associate Dean for Research and Graduate Studies Denise M Anderson Associate Dean for Undergraduate Studies

Kathleen L Valentine	School of Nursing
Bryan E Denham	Communication Studies
Francis A McGuire, interim	Parks, Recreation and
	Tourism Management
Jeffrey S Peake	Political Science
Patrick H Raymark	Psychology
Ronald W Gimbel	Public Health Sciences
Douglas "Kinly" Sturkie	Sociology and Anthropology
Mark A SmallYouth, Far	mily and Community Studies

COLLEGE OF EDUCATION

Kathy N Headley Senior Associate Dean of the Division of Collaborative Academic Services

David E Barrett Associate Dean of Academic Affairs and Research Suzanne N Rosenblith Associate Dean for Undergraduate Programs

Deborah M Switzer	Education and Human Development
Robert C Knoeppel	Educational and Organizational
••	Leadership Development
Jeff Marshall	Teaching and Learning

COLLEGE OF SCIENCE

Lesly A Temesvari Interim Associate Dean for Research

Brian N Dominy Interim Associate Dean for Academic Affairs

Robert S Cohen	Biological Sciences
R Karl Dieter	Chemistry
William R Marcotte, Jr	,
Christopher L Cox, interim	Mathematical Sciences
Terry M Tritt, interim	

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 Clemson¹

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 Hobson of Sandy Springs, South Carolina, earned the first master's degree awarded at Clemson, and used his degree in vocational education to serve as 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 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, programs, 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 1955. Today the Graduate School proudly enrolls 4,712 graduate students and — including today's graduation — has awarded 37,201 master's degrees, 535 education specialist degrees, and 4,682 doctoral degrees.

- 1. Holmes, A, and GR Sherrill. Thomas Green Clemson: His Life and Work. 1937, p. 129.
- 2. Clemson University Library System archives. Minutes of the Committee on Graduate Instruction, 1945-1953, p. 7.

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" 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 successful research and education journey.

Outstanding Graduate Researcher Award

Adam Klett Chemical Engineering

Madeline Dowling
Plant and Environmental Sciences

OUTSTANDING GRADUATE TEACHING ASSISTANT AWARD

Eric Stephens Rhetorics, Communication, and Information Design

> Andrea Gaertner Chemistry

CANDIDATES FOR THE DOCTORAL DEGREE

Jason W Osborne, Dean, Graduate School

College of Agriculture, Forestry and Life Sciences Doctor of Philosophy

Applied Economics

Joseph Alexander EwingLilburn, GA
B.B.A., Georgia State University; M.S., Clemson UniversityDissertation: The Impact of Socioeconomic Status on 30-day Hospital Readmissions in South CarolinaAdvisor: Dr. D Hughes
Food Technology
Jermaine J ShawSumter, SC
B.S., University of South Carolina; M.S., Clemson University Dissertation: Exploring School-level Factors Associated with Student Participation in the National School Lunch Program Advisor: Dr. A Fraser
Jermaine is currently the business operations supervisor for the Richland County School District 1's Student Nutrition Services department.
Forest Resources
Thomas Adam Coates
B.S., M.S., Clemson University Dissertation: Forest Management in Coastal Pine Forests: An Investigation of Prescribed Fire Behavior, Detrital Chemical Composition, and Potential Water Quality Impacts Advisor: Dr. A Chow
Adam was honored to teach five forestry courses this academic year and will be an assistant

professor of forest fire ecology and management at Virginia Tech this fall.

B.S., Tunghai University; M.S., National Chiaotung University; M.S., Harvard University Dissertation: Alterations of Disinfection Byproduct Formation Following Exposures of Algae to Wildfire Ash Solutions and Copper Algaecide Advisor: Dr. A Chow College of Architecture, Arts and Humanities DOCTOR OF PHILOSOPHY Planning, Design and the Built Environment Krista M Evans......Au Train, MI B.S., Northern Michigan University; M.S., Central Washington University Dissertation: Integrating Tiny Houses into the American Urban Fabric: A Comparative Case Study of Land Use Policy Change in the Carolinas Advisor: Dr. C Ellis Krista has accepted a position for fall 2017 as assistant professor of human geography and planning at Missouri State University. Tao GuanHenan, China B.S., Henan Normal University; M.A., Fudan University; Ph.D., Fudan University Dissertation: Income Inequality, Rapidly Rising Housing Prices and Overdevelopment of Houses in China Advisors: Dr. T Springer and Dr. E Worzala Rhetorics, Communication, and Information Design B.Comm., InHolland University; M.Comm., Hague University Dissertation: Using Social Media to Foster Identification in Indonesia's 2014 Presidential Election: An Examination of Facebook Politics from Kenneth Burke's Dramatistic Perspective Advisor: Dr. D Blakesley Dina is a Fulbright Scholar. Following graduation, she will return to her permanent position at Universitas Airlangga Indonesia as a lecturer in communications. Daphne-Tatiana P Tolentino CanlasQuezon City, Philippines B.A., M.A., University of the Philippines Dissertation: Quotidian Rhetorics: Estrangement, The Everyday, and Transitioning Filipinoness into An/Other Beginning Advisor: Dr. C Haynes Data is a Fulbright Scholar. She passed her dissertation defense with distinction, and will take up a teaching position at the University of the Philippines. B.A., Millikin University; M.A., University of Illinois Dissertation: Owning My Masters: The Rhetorics of Rhymes & Revolutions Advisor: Dr. V Vitanza A.D. passed his defense with distinction, received a Graduate Student Government Outstanding Dissertation award and has accepted a position at the University of Virginia as

a tenure-track assistant professor in hip-hop and the global South.

Kristen Nicole Gay......Tampa, FL B.A., M.A., University of South Florida; Ph.D., Clemson University Dissertation: Post-Diagnosis: A Networked Framework for Narrative Reassemblage Advisor: Dr. T May Kristen has published two peer-reviewed articles and has authored a chapter in an edited collection. B.A., Ithaca College; M.A., Dartmouth College; M.F.A., Savannah College of Art and Dissertation: Rewriting the Rules: Economic Inequality, Writing Classes, and the Value of Electracy Advisor: Dr. C Havnes Kate has six peer-reviewed publictions and has a co-edited collection about art-based writing practices forthcoming. She will be teaching in the Department of Writing Studies, Rhetoric, and Composition at Syracuse University. Mari Elena Ramler......Simpsonville, SC B.S., Bob Jones University; M.A., Columbia College; M.S., Clemson University Dissertation: The Guilty Breast: A Fleshy Semiotics Advisor: Dr. S Katz A Southern Regional Board of Education Fellow, Mari was invited to present a paper on the Rhetoric and Religious Traditions Standing Group's panel at the Conference on College Composition & Communication Convention in 2017. College of Behavioral, Social and Health Sciences DOCTOR OF PHILOSOPHY **Human Factors Psychology** B.S., M.S., Clemson University Dissertation: An Examination of Predictors of Variance in the Caloric Content of Specific Bites of Food Advisor: Dr. E Muth Industrial and Organizational Psychology B.S., M.S., Clemson University Dissertation: Stress as a Badge of Honor: Relationships with Employee Performance, Health, and Well-being Advisor: Dr. T Britt Kristen has ten peer-reviewed publications, was named Outstanding Graduate Researcher by the Graduate School in 2016, and has accepted a faculty position at the University of

Tennessee-Chattanooga.

Miranda Marie Pelkey	Melbourne, FL
B.S., M.S., University of Central Florida	
Dissertation: Relationship of Organizati Generativity to Interest in Mentorir	onal Commitment, Job Involvement, and
Advisor: Dr. M Taylor	g Among Retirees
•	lidate Teaching Award for the College of
Behavioral, Social and Health Sciences a	
International Fam	nily and Community Studies
Laura Suzanne Bogardus	Greer, SC
B.A., Miami University; M.A., Columbi	a College
Dissertation: Suicidal Behaviors Among Greater Risk? Advisor: Dr. M Small	College Students: Are Transfer Students at
	ent Government Excellence in Engagement and
	rough and Melton Parents Award, and the 2015
Hy V Huynh	Endicott, NY
B.A., Ithaca College	
	nosocial Well-being of Orphan and Separated ncome Countries: Which is More Important,
Vietnam, started a humanitarian photog	a leadership program for orphaned children in graphy business, and traveled the world alone for
a year.	
Athena Katharina Ramos	Bellevue, NE
B.S., M.S., M.B.A., University of Nebras Dissertation: Precarious Work, Invisible Model of Migrant Farmworker Heal Advisor: Dr. J McDonell	People, Unjust Livelihoods: A Social Ecological
	ns, and received the Graduate Student Award of Family and Neighborhood Life Outstanding Flash
Parks, Recreation	and Tourism Management
Joseph Christopher Crosby	Spartanburg, SC
B.S., M.S., Clemson University	
Dissertation: Crossing The Black Line: A from Non-swimmer to Swimmer and Program Focusing on People with A	An Examination of the Process of Transitioning d a Program Evaluation of an Adult Swim Lesson quaphobia
Advisor: Dr. E Baldwin	
Joseph has been working as an assistant Southern Wesleyan University since 201	professor of recreation and sport management at 5.

B.S., San Diego State University; M.S., Colorado State University

Dissertation: The Relationship Between Physical Activity and Psychosocial Health in Adolescent Girls and their Mothers

Advisor: Dr. D Anderson

Kellie won the 2015 Clemson 3-Minute Thesis competition, was awarded the Francis McGuire Graduate Teaching Award, and has accepted a faculty position at California State University, Long Beach.

College of Business Doctor of Philosophy

Economics		
Jordan M AdamsonSherwood Park, Canada		
B.A., Pacific Lutheran University Dissertation: The Economics of Political Violence Advisor: Dr. P Warren		
Timothy Jay BaconMarlborough, CT		
B.A., College of William and Mary; M.A., Clemson University Dissertation: Young Adults and the Labor Market Advisor: Dr. C Simon		
Amanda Caitlin KerrSeattle, WA		
B.S., University of Washington; M.A., Clemson University Dissertation: Essays on Gender Roles and Child Investment in Developing Countries Advisor: Dr. F Hanssen		
Amanda received the John E. Walker Department of Economics McCormick Graduate Fellowship twice during her doctoral studies and has accepted a faculty position at the University of Evansville.		
Leah Jacqueline KitashimaHilton Head Island, SC		
B.S., Georgia College and State University; M.A., Clemson University Dissertation: ADHD Medication on Child Welfare Advisor: Dr. P Warren		
Leah won the 2016 Clemson 3-Minute Thesis competition and the 2014-2015 College of Business and Behavioral Science Outstanding Graduate Teaching Assistant Award. She has accepted a position with Analysis Group.		
Peter David LorenzBowie, MD		
B.S., Towson UniversityDissertation: Strategic Interaction in the Private and Public Sectors: Empirical and Theoretical ApproachesAdvisor: Dr. M Lewis		

Abir Mandal		
B.A., Coe College; M.S., Illinois State University Dissertation: Rich State, Poor State: Essays on Economic Disparities within India Advisor: Dr. R Tamura		
Abir has been an Institute for Humane Studies Humane Fellow and has twice been awarded the Koch Dissertation Fellowship. He plans to devote his career to advancing free markets and individual liberty.		
Benjamin Joseph Schwall		
Advisor: Dr. A Hanssen		
Gang WangLanzhou, China		
B.A., Lanzhou University; M.A., University of Missouri Dissertation: Essays on Monetary Policy and Financial Markets Advisor: Dr. G Dwyer		
College of Education		
Doctor of Philosophy		
Curriculum and Instruction		
Robbie L HigdonGreenville, SC		
 B.A., Furman University; M.Ed., James Madison University Dissertation: Using Reflective Practice to Facilitate Conversations and Transform Instructional Practice for Middle School Science Teachers Advisor: Dr. M Cook 		
Renee Mary LyonsGreenville, SC		
B.S., Bob Jones University; M.A.T., Converse College Dissertation: Transformed Science: Overcoming Barriers of Inequality and Mistrust to Pursue the Agenda of Underrepresented Communities Advisor: Dr. M Cook		
With four peer-reviewed articles and two book chapters, Renee recently wrote a chapter entitled "Care-based Citizen Science: Nurturing an Ethic of Care to Support Biodiversity."		
Educational Leadership		
Lacresha R ByrdLaurens, SC		
B.A., South Carolina State University; M.Ed., Ed.S., Clemson University Dissertation: A Bridge Over Troubled Water: Induction Teachers' Perspectives Regarding Their Efficacy Towards Meeting the Needs of Diverse Populations of Students Advisor: Dr. R Knoeppel		
Lacresha has worked as an English teacher, assistant principal, and principal for 15 years. She is currently in her fourth year as principal of Sanders Middle School in Laurens, South Carolina.		

Stacey Diane Garrett	A
M.Ed., James Madison University; B.B.A., College of William and Mary	
Dissertation: A Grounded Theory Investigation of Tenured, Women of Color Faculty at	
Predominantly White, Public, Research Institutions in the Southeastern United States	
Advisor: Dr. P Havice	
Stacey has presented her research at national and international conferences, has	
co-authored her first book chapter, and has accepted a faculty position at Appalachian	
State University.	
Ashley L Isreal	С
B.S., Winthrop University; M.Ed., University of South Carolina	
Dissertation: Examining the Factors Related to How Black Master's Students Process	
Knowledge about Graduate School Utilizing Photo-Elicitation: A Grounded Theory	
Methodology Approach	
Advisor: Dr. T Cawthon	
A Gates Millennium Scholar, Ashley served as Vice President of the Black Graduate	
Student Association 2015-16 and as Deputy Chief of Staff of the Graduate Student Government 2016-17.	
Government 2010/1(.	
DeShawn Calvin Preston	A
B.A., Oakwood University; M.A., Howard University	
Dissertation: Historically Black Colleges and Universities (HBCUs) Serving as a	
Community Cultural Wealth for African Americans Who Enroll in STEM Doctoral	
Programs	
Advisor: Dr. T Cawthon	
DeShawn interned for the White House Initiative on Historically Black Colleges and	
Universities in 2015. He has taken a position as a Higher Education Research Fellow at the	
Southern Education Foundation.	
College of Engineering, Computer and Applied Sciences	
Doctor of Philosophy	
Automotive Engineering	
Zoleikha Abdollahi BironTehran, Ira	n
B.S., Tehran University; M.S., K. N. Toosi University of Technology	
Dissertation: A Resilient Control Approach for Securing Cyber Physical Systems (CPS)	
with Application on Connected Vehicles	
Advisor: Dr. P Pisu	
Zoleikha has nine peer-reviewed publications and was named the automotive engineering	
department's Outstanding Doctoral Student in 2016.	
Bashar B AlzuwayerAl Ahmady, Kuwa	it
B.Sc., Kuwait University; M.Sc., Lawrence Technological University	
Dissertation: CVT Modeling and Simulation: an Optimization Framework for Design and	
Performance Advisors: Dr. R Prucka and Dr. I Haque	

Zifan LiuNanchang, China
B.S., Jilin University
Dissertation: Battery Aging Studies Based on Real-World Driving Advisors: Dr. Z Filipi and Dr. A Ivanco
Pablo Sauras Perez
B.S., M.S., University of ValladolidDissertation: A Voice and Pointing Gesture Interaction System for Supporting HumanSpontaneous Decisions in Autonomous CarsAdvisor: Dr. P Pisu
Pablo was awarded the Douglas and Lynn Smith Fellowship in 2017.
Darui ZhangShiyan, China
B.S., University of Shanghai for Science and Technology; M.S., The State University of New York
Dissertation: Vehicle Parameters Estimation and Driver Behavior Classification for Adaptive Shift Strategy of Heavy Duty Vehicles Advisors: Dr. Z Filipi and Dr. A Ivanco
Bioengineering
Sooneon Bae
B.S., The University of Suwon; M.S., Hanyang University Dissertation: Antifibrotic Effects of Vibratory Stimulation Advisor: Dr. K Webb
Christopher Patrick deBordeLongwood, FL
B.S., University of Florida Dissertation: Development of a Tissue Engineered Mitral Valve Advisor: Dr. A Simionescu
Chris has one peer-reviewed paper, was awarded the bioengineering department's Austin T. Moore Award for Leadership, and won best presentation at the Heart Valve Society Conference in 2016.
Fernanda Delbuque Guerra
B.S., State University of Campinas; M.S., Clemson University Dissertation: Target-specific Capture of Relevant Gaseous Compounds Using Natural and Synthetic Nano and Micro Materials Advisor: Dr. F Alexis
Fernanda was awarded the Science Without Borders Scholarship (Brazil) to come to the U.S. for her Ph.D., and completed her program in less than three years with five peer-reviewed publications.
Vipul Shrihari Pai Raikar
B.Eng., Goa University; M.S., Clemson University Dissertation: Towards Computer Aided Management of Kidney Disease Advisor: Dr. D Kwartowitz
Vipul won third place in the 2015 Clemson's 3-Minute Thesis competition. He has a patent application pending and plans on working in the medical device industry.

Breanne Therese Kukla Przestrzelski		
Dissertation: In-Shoe Innovation: 3D-Printed Foot Orthoses Advisor: Dr. J DesJardins		
The student founder of The Design & Entrepreneurship Network (DEN), Bre has two patents pending, is a Stanford Innovation Fellow, and received the national 2016 K. Patricia Cross Future Leaders Award.		
Zahra Ronaghi Greensboro, NC		
M.S., West Virginia University Dissertation: Towards Real-time Remote Processing of Laparoscopic Video Advisor: Dr. D Kwartowitz		
Zahra has accepted a postdoctoral fellow position at Lawrence Berkeley National Laboratory.		
Sarah Corinne Rowlinson		
B.S., University of Miami Dissertation: The Development of an In Vitro Modular Tissue Test System for Breast Tissue Engineering and Its Exploration in Engineering Education and Science Policy Advisors: Dr. K Burg and Dr. A Simionescu		
Sarah was awarded a Clemson University Outstanding Women Award in 2016 and has accepted a faculty position at the University of Florida to teach tissue engineering.		
Yu Zhao		
B.S., Peking University Dissertation: An Integrative Approach to Elucidating the Governing Mechanisms of Particles Movement under Dielectrophoretic and Other Electrokinetic Phenomena Advisor: Dr. G Zhang		
Chemical Engineering		
Christine Elizabeth Duval		
B.S., University of Connecticut Dissertation: Uranium-selective Adsorbent Materials for Environmental Radiation Sensing Advisor: Dr. S Husson		
Christine has six peer-reviewed publications, received the American Institute of Chemical Engineers Graduate Research Award in 2016, and will join the chemical engineering faculty at Case Western Reserve University.		
Adam Scott Klett		
B.S., Clemson UniversityDissertation: Purification, Fractionation, and Characterization of Lignin from Kraft BlackLiquor for Use as a Renewable BiomaterialAdvisor: Dr. M Thies		
Civil Engineering		
Md Nasimul Hoque Chowdhury		
B.S., Bangladesh University of Engineering and Technology; M.S., Clemson University Dissertation: Investigations of Shallow Flows and Laboratory Raindrop Morphodynamics Advisor: Dr. A Khan		

Kimberly Renee Lyons
B.S., M.S., Clemson University Dissertation: The Evaluation of Long-term Draindown and Its Effect on the Raveling Susceptibility of OGFC Advisor: Dr. B. Putman
Tina NikouTehran, Iran
 B.S., Sharif University of Technology; M.S., Clemson University Dissertation: Following the User's Footsteps: A Data-Driven Framework for Measuring and Modeling Elegant Design in Engineering Advisor: Dr. L Klotz
Computer Engineering
Ryan Stacey IzardAiken, SC
B.S., Clemson University Dissertation: Data Movement Challenges and Solutions with Software Defined Networking Advisor: Dr. K Wang
Ryan has four publications, has led 36 conference talks and tutorials, and has earned a certificate in Engineering and Science Education. He is employed at Big Switch Networks.
Computer Science
Josiah David Hester
B.S., Clemson University Dissertation: Sophisticated Batteryless Sensing Advisor: Dr. J Sorber
Josiah will be joining the Electrical Engineering & Computer Science Department at Northwestern University as a tenure-track Assistant Professor of Computer Engineering in the fall.
Electrical Engineering
Amir Ahmed Asif
B.Sc., Bangladesh University of Engineering & Technology Dissertation: Manufacturing of Photovoltaic Devices, Power Electronics and Batteries for Local Direct Current Power Based Nanogrid Advisors: Dr. R Singh and Dr. G Venayagamoorthy
Siddhartha Suruj Borkotoky
B.Tech., National Institute of Technology Rourkela Dissertation: Network Coding for Packet Radio Networks Advisor: Dr. M Pursley
Indumathi Raghu Srimathi
B.Tech., Visvesvaraya National Institute of Technology Dissertation: Metaoptics for Spectral and Spatial Beam Manipulation Advisor: Dr. E Johnson

Md Ashfaqur Rahman.....Rajshahi, Bangladesh B.S., Bangladesh University of Engineering and Technology; M.S., Texas Tech University Dissertation: A Distributed Dynamic State Estimator Using Cellular Computational Network Advisor: Dr. G Venavagamoorthy B.S., University of Pune; M.S., Clemson University Dissertation: Characterizing Light Output Variations from Solid State Lighting Due to High Frequency Electromagnetic Interference Advisor: Dr. E Collins, Jr Luyang WangXi'an, China M.S., Clemson University Dissertation: Mobile Search Strategies and Detection Analysis of Nuclear Radiation Sources Advisor: Dr. C Baum Lei Yuan Harbin, China B.S., Beihang University; Ph.D., Beijing Institute of Technology Dissertation: Femtosecond Laser Micromachining of Advanced Fiber Optic Sensors and Devices Advisor: Dr. H Xiao Lei has 30 peer-reviewed publications, received the Harris Research Award for Outstanding Graduate Researcher in the Electrical and Computer Engineering department in 2016, and plans to work in the laser industry. **Engineering and Science Education** B.S., Baldwin-Wallace University; M.S., Clemson University Dissertation: Student Development as Cross-disciplinary Team Members: Real-time Observations of Student Experiences During a Team Project Advisor: Dr. I Martin Rachel assessed the award-winning Creative Inquiry program and served as a Clemson MakerSpace founding mentor. She has taken a position at Clemson's Academic Success Center. **Environmental Engineering and Science** Vijay Phanidhar Santikari......Kadapa, India M.S., Indian Institute of Technology, Kharagpur Dissertation: Evaluating Effects of Construction-related Land Use Change on Streamflow and Water Quality Advisor: Dr. L Murdoch

Industrial Engineering

B.A., B.B.A., Florida International University; M.S., Clemson University Dissertation: Evaluating the Impact of the Physical Fidelity of the Learning Environment on Skill Acquisition, Retention, and Application Advisors: Dr. D Neyens and Dr. A Gramopadhye Myrtede won three teaching assistant awards this year and the MLK Jr. Excellence in Service Award in 2016. She is a Janine Bowen Graduate Fellow and Southern Regional Education Board Scholar. Anintaya Khamkanya......Udonthani, Thailand B.S., Kasetsart University; M.Eng., Chulalongkorn University Dissertation: A Theoretical Foundation for the Development of Process Capability Indices and Process Parameters Optimization Under Truncated and Censoring Schemes Advisor: Dr. B Cho Akin Ozdemir Ordu, Turkey B.S., Kirikkale University; M.S., Rutgers University Dissertation: Development of the D-optimality-based Coordinate-Exchange Algorithm for an Irregular Design Space and the Mixed-integer Nonlinear Robust Parameter Design Optimization Advisor: Dr. B Cho Materials Science and Engineering B.S., Auburn University Dissertation: Fabrication and Characterization of Silicon Carbide Epoxy Composites Advisor: Dr. I Luzinov Mechanical Engineering Yingye Gan......Meishan, China B.S., Huazhong University of Science and Technology Dissertation: Theoretical and Experimental Investigation on Nanoparticles within 14YWT: Nanostructured Ferritic Alloys Advisor: Dr. H Zhao Yingye has four peer-reviewed publications and received the mechanical engineering department's Doctoral Award in 2016. Qing Mao......Zhengzhou, China B.S., University of Science and Technology Beijing Dissertation: Understanding the Bonding Process of Ultrasonic Additive Manufacturing Advisor: Dr. G Fadel

COLLEGE OF SCIENCE DOCTOR OF PHILOSOPHY

Biochemistry and Molecular Biology

Andrew Allen Kelso	Sylacauga, AL
B.S., University of Montevallo; M.S., University of Alabar Dissertation: Examining Homologous Recombination the Characterization of Eukaryotic Recombinases and Ac Advisor: Dr. M Sehorn	ough the Biochemical
Drew has five peer-reviewed publications, was named Out in biochemistry for 2017, and has accepted a postdoctoral	
Biological Sciences	
Eric Alexander Riddell	Atlanta, GA
B.S., Sewanee: University of the South Dissertation: Ecological Consequences of Water Loss Und Ectotherms Advisor: Dr. M Sears	der Climate Change in Small
Eric has two peer-reviewed publications, two best-presenta Foundation Doctoral Dissertation Improvement Grant, a California, Berkeley for a postdoctoral position.	
Vanessa K Hilliard Young	Washington, PA
B.S., Erskine College; M.Sc., University of Arkansas Dissertation: Secondary Land to Water Transitions: Turtl Morphological Evolution Advisor: Dr. R Blob	<u> </u>
Vanessa has four peer-reviewed papers, was named Clemso Teaching Assistant in 2014, and has accepted a faculty pos Indiana.	
Chemistry	
Emmanuel Amoah	Takoradi, Ghana
B.Sc., University of Ghana; M.S., Eastern New Mexico Un Dissertation: Conjugate Addition of Grignard Reagents to and Copper-mediated Allylic Substitutions	
Advisor: Dr. K Dieter	
Ankoma Dihon Anderson, Sr	Greenwood, SC
B.S., Lander University Dissertation: Carbon and Boron Nitride Nanocomposites Conductive Materials Advisor: Dr. Y Sun	s for Electrically and/or Thermally
Ankoma has three first-author publications and eight co-a	authored publications. He was a
recipient of the South Carolina Space Grant Fellowship d	uring his years of study.

Heeren Manoj Gordhan	Greenville, SC	
B.S., M.S., Furman University Dissertation: A Targeted Drug Delivery Strategy for Trypanosomi Diastereoselective Boronate Ester Mediated Intramolecular D Advisor: Dr. K Dieter		
Paris Lamont Hamilton	Norfolk, VA	
 B.S., James Madison University; M.S., Clemson University Dissertation: Development of Linear and Branched Pre-pegylated for Site-specific Peptide Incorporation Advisor: Dr. M Wetzler 	Amino Acids	
Paris has five peer-reviewed publications (three published, two per He is exploring career opportunities in either forensic or medicin		
Yamin HtetY	angon, Myanmar (Burma)	
B.S., M.S., Furman University Dissertation: Aerobic Aqueous Redox Catalysis by a Ruthenium-levidence for the Reducing/Hydride Transfer Ability of Biolo Advisor: Dr. A Tennyson	, .	
Environmental Toxicology		
Sarah Yin-Don Au	Hanover, MD	
Sarah has two peer-reviewed publications and helped found the V Junior Program. She has accepted a position at the U.S. Environr		
Genetics		
Grace Naanyu Kisirkoi	Nairobi, Kenya	
B.S., M.A., Jomo Kenyatta University of Agriculture and Technol Dissertation: Acetate Transport Is Essential for Survival and Viru neoformans Advisor: Dr. K Smith	· ·	
Mathematical Sciences		
Luke Martin Giberson	Cleveland, OH	
B.S., Xavier University; M.S., Clemson University Dissertation: Koblitz's Conjecture on Average for Elliptic Curves Fields of Square-free Conductor Advisor: Dr. K James	over Abelian Number	
Brandon Grae Goodell	Danvar CO	
B.S., Colorado State University; M.S., North Dakota State Unive Dissertation: Assessing Non-Atomicity in Groups of Divisibility Advisor: Dr. J Coykendall IV		
Brandon has been recognized as an Outstanding Teaching Assista	ant by his department.	

B.S., B.Ed., M.S., Mahatma Gandhi University; M.S., Clemson University Dissertation: Chaos to Permanence - Through Control Theory Advisor: Dr. E Dimitrova Sherli Koshy was the co-director of research initiatives for Graduate Student Government, won the math department's Outstanding Citizen Award in 2016 and plans to work in academia. B.S., Oakland University; M.S., University of Waterloo Dissertation: Normal Domains Arising from Graph Theory Advisor: Dr. M Burr Drew has eight peer-reviewed publications, was awarded the mathematical sciences department's Good Citizenship award in 2016, and plans to work in academia. Microbiology Zhao ChenTai'an, China B.E., M.S., Shandong Agricultural University Dissertation: Thermal Inactivation of Desiccation-adapted Salmonella enterica in Physically Heat-treated Poultry Litter Used as Biological Soil Amendments Advisor: Dr. X Jiang Zhao has published a number of abstracts, peer-reviewed articles, and book chapters. He received the University's Distinguished Graduate Fellowship in 2014. **Physics** B.S., University of Pune; M.S., Clemson University Dissertation: Metrology and Transport of Multiply Charged Ions Advisor: Dr. C Sosolik

Dhruva has six peer-reviewed publications and was named Outstanding Graduate Teaching Assistant in the College of Engineering and Applied Sciences (2016) and the physics department (2011).

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.

CEREMONIAL MUSIC

Clemson University Brass Quintet

Prelude

Various Marches and Processionals

Processional

Pomp and Circumstance - Sir Edward Elgar

National Anthem

Words by Francis Scott Key Music attributed to John Stafford Smith Closing

Clemson University Alma Mater
Words by A C Corcoran, Class of '19
Music by Hugh H McGarity and R Hawkins
Arranged by J Butler

Recessional

Rondeau from "Sinfonies de Fanfares" — Jean-Joseph Mouret

Candidates appearing in this program are not certified graduates. Likewise, academic honors designations are based upon performance prior to final grades. Both certification of graduation and honors designations must come from the Registrar of the University.



