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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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

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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, FORESTRY AND LIFE SCIENCES

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

Charles Privette, interim............................... Agricultural Sciences
James R Strickland........................................... Animal and Veterinary Sciences
E Jeffery Rhodhame................................. Food, Nutrition, and Packaging Sciences
Greg K Yarrow......................................... Forestry and Environmental Conservation
Greg Reighard, interim............... 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 Schwennen.................................................. School of Architecture
Greg W Shelnutt....................................................... Art
Roger W Liska ................... Construction Science and Management
Lee J Morrissey....................................................... English
James M Burns................................. Landscape Architecture
Mary G Padua ..................................................... Languages
Salvador A Oropesa .............................................. Performing Arts
David J Hartmann................ Philosophy and Religion
Charles Starkey, interim............... City Planning and Real Estate
James H Spencer, interim........... City and Regional Planning

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 for Undergraduate Studies

Eileen T Kraemer................................. School of Computing
Zoran S Filipi................................. Automotive Engineering

COLLEGE OF COMMERCE

Cindy M Lee ....................... Engineering and Science Education
David L Freedman......................... Environmental Engineering and Earth Sciences
R Joe Watkins......................... General Engineering
J Cole Smith............................. Industrial Engineering
Rajendra “Raj” Bordia........... Materials Science and Engineering
Richard Figliola, interim.......... Mechanical Engineering

COLLEGE OF BUSINESS, 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 Small............................... Youth, Family 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.................. Genetics and Biochemistry
Christopher L Cox, interim........... Mathematical Sciences
Terry M Tritt, interim...................... Physics and Astronomy
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 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.


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.
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 Ewing ................................................................. Lilburn, GA
B.B.A., Georgia State University; M.S., Clemson University
Dissertation: The Impact of Socioeconomic Status on 30-day Hospital Readmissions in South Carolina
Advisor: Dr. D Hughes

Food Technology

Jermaine J Shaw ................................................................. Sumter, 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 ......................................................... Campobello, SC
B.S., M.S., Clemson University
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.
Kuo-Pei Tsai ................................................................. Tainan, Taiwan  
B.S., Tunghai University; M.S., National Chiao Tung 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 Guan ................................................................. Henan, China  
B.S., HenanNormal 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

Dina Septiani S Basuki ................................................................. Surabaya, Indonesia  
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 Canlas ................................................................. Quezon 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.

Adrian L Carson ................................................................. Decatur, IL  
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.

Katherine Rose Hanzalik ............................................................... Syracuse, NY
B.A., Ithaca College; M.A., Dartmouth College; M.F.A., Savannah College of Art and Design
Dissertation: Rewriting the Rules: Economic Inequality, Writing Classes, and the Value of Electracy
Advisor: Dr. C Haynes
Kate has six peer-reviewed publications 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

James Nathaniel Salley ............................................................... Pendleton, SC
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

Kristen Suzanne Jennings ............................................................. Galax, VA
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 Organizational Commitment, Job Involvement, and
Generativity to Interest in Mentoring Among Retirees
Advisor: Dr. M Taylor
Miranda won the Doctoral Degree Candidate Teaching Award for the College of
Behavioral, Social and Health Sciences and plans to work in Orlando, Florida.

International Family and Community Studies

Laura Suzanne Bogardus ......................................................... Greer, SC
B.A., Miami University; M.A., Columbia College
Dissertation: Suicidal Behaviors Among College Students: Are Transfer Students at
Greater Risk?
Advisor: Dr. M Small
Laura received the 2017 Graduate Student Government Excellence in Engagement and
Social Advocacy Award, the 2016 Kimbrough and Melton Parents Award, and the 2015
Graduate Student Award of Excellence.

Hy V Huynh ................................................................. Endicott, NY
B.A., Ithaca College
Dissertation: Factors Affecting the Psychosocial Well-being of Orphan and Separated
Children in Five Low- and Middle-income Countries: Which is More Important,
Quality or Form of Care?
Advisor: Dr. S Limber
During his doctoral studies, Hy created a leadership program for orphaned children in
Vietnam, started a humanitarian photography business, and traveled the world alone for
a year.

Athena Katharina Ramos ......................................................... Bellevue, NE
B.S., M.S., M.B.A., University of Nebraska
Model of Migrant Farmworker Health in the Midwest
Advisor: Dr. J McDonell
Athena has 12 peer-reviewed publications, and received the Graduate Student Award of
Excellence in 2016 and the Institute on Family and Neighborhood Life Outstanding Flash
Talk presentation in 2015 and 2016.

Parks, Recreation and Tourism Management

Joseph Christopher Crosby ......................................................... Spartanburg, SC
B.S., M.S., Clemson University
Dissertation: Crossing The Black Line: An Examination of the Process of Transitioning
from Non-swimmer to Swimmer and a Program Evaluation of an Adult Swim Lesson
Program Focusing on People with Aquaphobia
Advisor: Dr. E Baldwin
Joseph has been working as an assistant professor of recreation and sport management at
Southern Wesleyan University since 2015.
Kellie Amanda Walters ................................................................. Roseville, CA
  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 Adamson .............................................................. Sherwood Park, Canada
  B.A., Pacific Lutheran University
  Dissertation: The Economics of Political Violence
  Advisor: Dr. P Warren

Timothy Jay Bacon ............................................................ Marlborough, 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 Kerr ............................................................ Seattle, 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 Kitashima ................................................... Hilton 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 Lorenz ............................................................ Bowie, MD
  B.S., Towson University
  Dissertation: Strategic Interaction in the Private and Public Sectors: Empirical and
  Theoretical Approaches
  Advisor: Dr. M Lewis
Abir Mandal .................................................. New Delhi, India
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 .............................................. West Allis, WI
B.S., Wisconsin Lutheran College; J.D., Marquette University Law School
Advisor: Dr. A Hanssen

Gang Wang ...................................................................... Lanzhou, 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 Higdon .................................................. Greenville, 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 Lyons .................................................. Greenville, 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 Byrd .................................................. Laurens, 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 ......................................................... Woodbridge, VA
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 ................................................................. Marion, SC
B.S., Winthrop University; M.Ed., University of South Carolina
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.

DeShawn Calvin Preston .................................................... Atlanta, GA
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 Biron ..................................................... Tehran, Iran
B.S., Tehran University; M.S., K. N. Toosi University of Technology
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 Alzuwayer .......................................................... Al Ahmady, Kuwait
B.Sc., Kuwait University; M.Sc., Lawrence Technological University
Advisors: Dr. R Prucka and Dr. I Haque
Zifan Liu...........................................................................................................Nanchang, 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.................................................................Oviedo, Spain
B.S., M.S., University of Valladolid
Dissertation: A Voice and Pointing Gesture Interaction System for Supporting Human
Spontaneous Decisions in Autonomous Cars
Advisor: Dr. P Pisu
Pablo was awarded the Douglas and Lynn Smith Fellowship in 2017.

Darui Zhang..............................................................................................Shiyan, 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..................................................................................Seoul, South Korea
B.S., The University of Suwon; M.S., Hanyang University
Dissertation: Antifibrotic Effects of Vibratory Stimulation
Advisor: Dr. K Webb

Christopher Patrick deBorde..............................................Longwood, 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 ...................................................Campinas, Brazil
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 .........................................................Madkai, India
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 ...................................................Swannanoa, NC
B.S., M.S., Clemson University
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 ........................................................... West Palm Beach, FL
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 ..................................................................................... Hefei, China
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 .............................................................Rocky Hill, CT
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 .................................................................Melbourne, FL
B.S., Clemson University
Dissertation: Purification, Fractionation, and Characterization of Lignin from Kraft Black
Liquor for Use as a Renewable Biomaterial
Advisor: Dr. M Thies

Civil Engineering

Md Nasimul Hoque Chowdhury ..................................................Chittagong, Bangladesh
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 ................................. Smoaks, SC
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 Nikou .......................................................... Tehran, 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 Izard ........................................... Aiken, 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 ........................................ Honolulu, HI
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 ............................................. Dhaka, Bangladesh
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 ............................ Jorhat, India
B.Tech., National Institute of Technology Rourkela
Dissertation: Network Coding for Packet Radio Networks
Advisor: Dr. M Pursley

Indumathi Raghu Srimathi ............................... Chennai, India
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 Venayagamoorthy

Gaurav Kumar Singh ........................................................ Pune, India
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 Wang ................................................................. Xi’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.

Environment and Science Education

Rachel K Anderson ....................................................... Painesville, OH
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. J 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

Myrtede Christie Alfred................................................................. Miami, FL
  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

James Austin Townsend.......................................................... Temple Terrace, FL
  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 Alabama
Dissertation: Examining Homologous Recombination through the Biochemical Characterization of Eukaryotic Recombinases and Accessory Proteins
Advisor: Dr. M Sehorn
Drew has five peer-reviewed publications, was named Outstanding Graduate Researcher in biochemistry for 2017, and has accepted a postdoctoral fellowship at the City of Hope.

Biological Sciences

Eric Alexander Riddell ............................................................. Atlanta, GA
B.S., Sewanee: University of the South
Dissertation: Ecological Consequences of Water Loss Under Climate Change in Small Ectotherms
Advisor: Dr. M Sears
Eric has two peer-reviewed publications, two best-presentation awards, a National Science Foundation Doctoral Dissertation Improvement Grant, and is headed to University of 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: Turtles as Models for Understanding Morphological Evolution
Advisor: Dr. R Blob
Vanessa has four peer-reviewed papers, was named Clemson’s Outstanding Graduate Teaching Assistant in 2014, and has accepted a faculty position at Saint Mary’s College in Indiana.

Chemistry

Emmanuel Amoah .................................................................. Takoradi, Ghana
B.Sc., University of Ghana; M.S., Eastern New Mexico University
Dissertation: Conjugate Addition of Grignard Reagents to Dienones and Thioldienoates, 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 for Electrically and/or Thermally Conductive Materials
Advisor: Dr. Y Sun
Ankoma has three first-author publications and eight co-authored publications. He was a recipient of the South Carolina Space Grant Fellowship during his years of study.
Heeren Manoj Gordhan ......................................................... Greenville, SC
B.S., M.S., Furman University
Dissertation: A Targeted Drug Delivery Strategy for Trypanosomiasis: Towards a
Diastereoselective Boronate Ester Mediated Intramolecular Diels-Alder Cycloaddition
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 Amino Acids
for Site-specific Peptide Incorporation
Advisor: Dr. M Wetzler
Paris has five peer-reviewed publications (three published, two pending) and two patents.
He is exploring career opportunities in either forensic or medicinal chemistry.

Yamin Htet ................................................................. Yangon, Myanmar (Burma)
B.S., M.S., Furman University
Dissertation: Aerobic Aqueous Redox Catalysis by a Ruthenium-Hydride Species and
Evidence for the Reducing/Hydride Transfer Ability of Biological Oxidants
Advisor: Dr. A Tennyson

Environmental Toxicology

Sarah Yin-Don Au ............................................................ Hanover, MD
B.S., University of Maryland
Dissertation: Toxicity of Microplastics to Aquatic Organisms
Advisor: Dr. C Lee
Sarah has two peer-reviewed publications and helped found the What’s in Our Water
Junior Program. She has accepted a position at the U.S. Environmental Protection Agency.

Genetics

Grace Naanyu Kisirkoi .............................................................. Nairobi, Kenya
B.S., M.A., Jomo Kenyatta University of Agriculture and Technology
Dissertation: Acetate Transport Is Essential for Survival and Virulence of Cryptococcus
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 over Abelian Number
Fields of Square-free Conductor
Advisor: Dr. K James

Brandon Grae Goodell ........................................................... Denver, CO
B.S., Colorado State University; M.S., North Dakota State University
Dissertation: Assessing Non-Atomicity in Groups of Divisibility
Advisor: Dr. J Coykendall IV
Brandon has been recognized as an Outstanding Teaching Assistant by his department.
Sherli Koshy Chenthittayil ........................................... Dubai, United Arab Emirates
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.

Drew Jared Lipman........................................................................... Columbia City, IN
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 Chen ........................................................................................ Tai’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
Dhruva Deepak Kulkarni ............................................................. Pune, India
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 Fanfars” —
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.