

CLEMSON UNIVERSITY

Doctoral Hooding Ceremony

DECEMBER 17, 2015



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DOCTORAL HOODING CEREMONY

THURSDAY, DECEMBER 17, 2015

10:00 AM

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 Thomas J Overcamp

REFLECTION

Graduate Student Government Vice President
Blair Durkee

WELCOME AND INTRODUCTIONS

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

CONFERRING OF DEGREES, DELIVERY OF DIPLOMAS, AND HOODING

President James P Clements

ALMA MATER

RECESSIONAL

Music by the Clemson University Brass Quintet and vocalist Haleigh Marcolini
Selections and credits on page 16

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Assistant to the President

THE GRADUATE SCHOOL

Jason W Osborne
Associate Provost and Dean

Frankie O Felder
Senior Associate Dean

William G Ferrell
Associate Dean

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

Robert E McCormick
Interim Dean of College of Business and Behavioral Science

Anand K Gramopadhye
Dean of College of Engineering and Science

Brett A Wright
Interim Dean of College of Health, Education and
Human Development

George J Petersen
Founding Dean of Eugene T Moore School of Education

Maggie Farrell
Dean of Libraries

GRADUATE STUDENT GOVERNMENT

Guneet Bedi
President

Blair Durkee
Vice President

Chandler Cook
Vice President of the Greenville Council

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

Ted Whitwell
Associate Dean for Academic Affairs
Joseph Culin
Associate Dean for Research

Patricia A Zungoli Agricultural and Environmental Sciences
James R Strickland.....Animal and Veterinary Sciences
Robert S Cohen Biological Sciences
E Jeffery Rhodehamel..... Food, Nutrition, and Packaging Sciences
William R Marcotte, Jr Genetics and Biochemistry
Greg K Yarrow.....Forestry and Environmental Conservation

College of Architecture, Arts and Humanities

Constancio K Nakuma
Senior Associate Dean for Academic Affairs
James H Spencer
Acting Associate Dean for Research and Graduate Studies

Katherine L Schwennsen School of Architecture
Greg W Shelnuttt..... Art
Bryan E Denham, interim Communication Studies
Roger W Liska Construction Science and Management
Lee J Morrissey..... English
James M Burns.....History
Mary G Padua Landscape Architecture
Salvador A Oropesa Languages
David J HartmannPerforming Arts
Charles Starkey, interimPhilosophy and Religion
James H Spencer.....Planning, Development and Preservation

College of Business and Behavioral Science

Gregory M Pickett
Senior Associate Dean
Douglas “Kinly” Sturkie
Associate Dean for Academic Affairs
Eric R Muth
Interim Associate Dean for Research

Jeffrey J McMillian, interim..... School of Accountancy
Raymond D Sauer..... Economics
Angela G Morgan, interim Finance
Charles TonkinGraphic Communications
“Sri” V Sridharan..... Management
Gregory M Pickett, interim..... Marketing
Gregory M Pickett..... MBA and Greenville ONE
Jeffrey S Peake Political Science
Patrick H Raymark..... Psychology
Catherine Mobley, interim Sociology and Anthropology
Christopher R Mann Aerospace Studies
James Mullinax Military Leadership

College of Engineering and Science

Karen High
Associate Dean of Undergraduate Studies
Tanju Karanfil
Associate Dean for Research and Graduate Studies

Eileen T Kraemer..... School of Computing
Zoran S FilipiAutomotive Engineering
Martine LaBerge..... Bioengineering
Douglas E HirtChemical and Biomolecular Engineering
R Karl Dieter.....Chemistry
James R Martin Civil Engineering
Daniel L Noneaker Electrical and Computer Engineering
Cindy M Lee Engineering and Science Education
David L Freedman Environmental Engineering and Earth Sciences
R Joe WatkinsGeneral Engineering
J Cole Smith..... Industrial Engineering
Rajendra “Raj” Bordia.....Materials Science and Engineering
Christopher L Cox, interim..... Mathematical Sciences
Melur “Ram” Ramasubramanian Mechanical Engineering
Mark D Leising.....Physics and Astronomy

College of Health, Education and Human Development

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

Margaret A Wetsel, interim School of Nursing
Francis A McGuire, interimParks, Recreation and Tourism Management
Ronald W GimbelPublic Health Sciences
James R McDonell, interim..... Youth, Family and Community Studies

Eugene T Moore School 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

Deborah M Switzer, interim Education and Human Development
Robert C Knoeppel.....Educational and Organizational Leadership Development
Suzanne N Rosenblith..... Teaching and Learning

The Graduate School

Bruce Ransom..... Policy Studies

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.”²

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 4,682 graduate students and, including today's graduation, has awarded 36,356 master's degrees, 498 education specialist degrees, and 4,534 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.

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.

CANDIDATES FOR THE DOCTOR'S DEGREE

Jason W Osborne, Dean, Graduate School

COLLEGE OF AGRICULTURE, FORESTRY AND LIFE SCIENCES

DOCTOR OF PHILOSOPHY

Biochemistry and Molecular Biology

Ashley Dawn Zearfoss Crook..... Chesterfield, SC
B.A., Coker College; M.S., North Carolina State University
Dissertation: Interacting Partners of the SUNN Symbiotic Kinase
Advisor: Dr. J Frugoli
Ashley has three publications in preparation for peer review. She received four travel awards, a professional enrichment grant, and two graduate student fellowships.

Congyue PengShenyang, China
B.Sc., M.Sc., Southern Illinois University; M.Sc., Jinan University
Dissertation: Creating Biomaterials from Plant-Derived Recombinant Spider Silk-like Proteins
Advisor: Dr. W Marcotte
Congyue (Annie) has three publications in preparation and is an awardee of the Wade Stackhouse Fellowship and a professional enrichment grant.

Environmental Toxicology

Jui-Tung LiuTaipei, Taiwan
B.S., M.S., National Taiwan University
Dissertation: Arsenic Reduces P19 Cell Differentiation by Inhibiting the Sonic Hedgehog Signaling Pathway and Altering MicroRNA Expression
Advisor: Dr. L Bain
Ray has three peer-reviewed publications, won a traveling award for the Society of Toxicology conference, and won the 2nd place poster award at the Carolina SETAC meeting.

Food Technology

Ibtehal Albasher Alsallaiy Zawia, Libya
B.S., M.S., Clemson University
Dissertation: The NECAP Program: The Nutrition Education for Children Attending Preschool Program
Advisor: Dr. K Cason
Ibtehal won 3rd place in Clemson's Graduate Research & Discovery Symposium, has published in the *Journal of Food Safety*, and has accepted a post-doctorate position at Clemson.

Elizabeth Maria Ramirez.....North Bergen, NJ
B.S., Clemson University; M.S., Virginia Polytechnic Institute and State University
Dissertation: Development and Implementation of the Generations Eating Together Through Cooking (G.E.T.T. Cooking) Curriculum and Its Effects on an Inter-generational Population: A Pilot Study
Advisor: Dr. K Cason
Elizabeth is currently working on five manuscripts to be submitted in early 2016 and was awarded the Southern Regional Education Board Doctoral Fellowship in January 2015.

Joyce Senior Angulo..... San Jose, Costa Rica
B.S., University of Costa Rica
Dissertation: Web-based Nutrition Education Intervention for African American Women Using the Theory of Planned Behavior
Advisor: Dr. K Cason
Joyce served as the international student ambassador for the Graduate School in Costa Rica in 2014 and plans to work in the cooperative extension system.

Curtis Henry Stowe Seneca, SC
B.S., Clemson University
Dissertation: Effects of Semi-Rigid Plastic Tray Geometry on Thermal Processing and
Quality Factors in Retorted Foods
Advisor: Dr. W Whiteside

Forest Resources

Lauren Susan Pile Springfield, VA
B.S., American Military University; M.F.R., Clemson University
Dissertation: Evaluation of Invasion Success and Development of Integrated Management
for the Control of Chinese Tallow (*Triadica sebifera*)
Advisor: Dr. G Wang
Lauren has two first-author publications, has been awarded several academic fellowships,
and is currently a Presidential Management Fellows STEM semi-finalist.

Genetics

Shuangrong Yuan Tianjin, China
B.S., Beijing Forestry University; B.S., Michigan State University
Dissertation: The Role of MicroRNAs in Plant Development and Abiotic Stress Response
Advisor: Dr. H Luo
Shuangrong has three peer-reviewed publications and two patent applications. She won
3rd Place in Clemson's GRADS poster competition in 2014 and has been awarded
four travel grants.

Plant and Environmental Sciences

Saleh Mokhtar Ahmed Tripoli, Libya
B.C., M.Sc., University of Tripoli
Dissertation: Nematicidal Activity of Extracts from *Phytolacca americana* on Five Plant-
Pathogenic Nematode Species of Economic Importance
Advisor: Dr. P Agudelo

Rabia Fawzi El-Hawaz Benghazi, Libya
B.S., M.S., Garyounis University
Dissertation: Multi-Factor Models to Resolve Growth Responses In Vitro and During
Subsequent Greenhouse Growth for Turmeric (*Curcuma longa* L.)
Advisor: Dr. J Adelberg
Rabia has three published papers and one in review. She earned a minor in statistics,
and plans to continue in her academic career.

Bindu Poudel Damauli, Nepal
B.S., Tribhuvan University; M.S., University of Arkansas
Dissertation: The Detection and Characterization of Some Viruses Infecting Blackberry
and Cherry in South Carolina
Advisor: Dr. S Scott

Xin Qiao Yun Cheng, China
B.S., South China University of Technology; M.S., Clemson University
Dissertation: Developing Effective Ground and Space-based Soil Moisture Sensing
Techniques for Irrigating Cotton in Coastal Plain Soils
Advisors: Dr. A Khalilian and Dr. Y Han

Wildlife and Fisheries Biology

William C Heaton Chester, SC
B.S., M.S., Clemson University
Dissertation: Evaluation of Blue Tilapia (*Oreochromis iureus*) for Aquatic Weed Control
in South Carolina's Private Waters
Advisor: Dr. J Rodgers

COLLEGE OF ARCHITECTURE, ARTS AND HUMANITIES
DOCTOR OF PHILOSOPHY

Planning, Design and the Built Environment

Valerie Lynn HammettRock Hill, SC
B.S., Marylhurst University; M.S., American Public University
Dissertation: Risk Analysis and Disaster Recovery: A Florida LIHTC Case Study
Advisor: Dr. M Lauria
Valerie is the executive director of the non-profit Air and Water Organization and has accepted an adjunct position at the College of Charleston.

COLLEGE OF BUSINESS AND BEHAVIORAL SCIENCE
DOCTOR OF PHILOSOPHY

Applied Economics

James Michael JonesLexington, KY
B.S., Virginia Polytechnic Institute and State University; M.S., Clemson University
Dissertation: Estimating the Effect of Extended and Emergency Unemployment Benefits on the Long-term Unemployed – An Unintentional Natural Experiment in Kentucky
Advisor: Dr. C Simon

Industrial Organizational Psychology

Lauren Elizabeth Ellis St Pete Beach, FL
B.A., Elon University; M.S., Clemson University
Dissertation: Tomorrow’s Leading Ladies: How Core Self-Evaluations, Leadership Perceptions, and Social Support Influence Young Women’s Leadership Aspirations
Advisor: Dr. M Taylor
After graduation, Lauren plans on moving home to St. Petersburg, Florida, where she will use her degree to pursue a career in talent development.

Anna Christina McFaddenPittston, PA
B.A., Wilkes University; M.S., Clemson University
Dissertation: The Impact of Co-workers on Safety Outcomes: Comparing Models of Moderation, Mediation, and Incremental Effects
Advisor: Dr. T Britt
Anna was named the psychology department’s 2013 Outstanding Master’s Student and 2014 Outstanding Doctoral student, and received the CBBS Graduate Research Assistant Excellence Award.

Alec H MuncSanta Rosa, CA
B.A., University of California; M.S., San Francisco State University
Dissertation: An Examination of Psychological Climate Linking Mechanisms Across the Three Strategic Priorities of Health, Safety, and Stress
Advisor: Dr. R Sinclair

Management

James Edward Burleson Waco, TX
B.B.A., Baylor University; M.B.A., Auburn University
Dissertation: External Social Media Use in Organizations: A Tri-Level Investigation and Research Agenda
Advisor: Dr. V Grover

Jillian Theresa Watson Lebanon, IL
B.S., The Pennsylvania State University; M.B.A., Georgia College & State University
Dissertation: Essays on “Deceptive” Counterfeits in Supply Chains: A Behavioral Perspective
Advisors: Dr. A Roth and Dr. L Fredendall

EUGENE T MOORE SCHOOL OF EDUCATION

DOCTOR OF PHILOSOPHY

Curriculum and Instruction

- Reed Martin Chewning.....Spartanburg, SC
B.A., Wofford College; M.Ed., Converse College
Dissertation: Secondary English Teachers Dispositions Toward Technology Integration
in One-to-One Environments
Advisor: Dr. L Medford
Reed has accepted a position at Converse College as the program director of the MAT
Secondary and Middle Level Education Programs.
- Sheliah Gwyn Durham.....Seneca, SC
B.A., Charleston Southern University; M.Ed., Southern Wesleyan University
Dissertation: Exploring Elementary Teachers' Conceptions of Global Citizenship
Through Cross-Cultural Interaction
Advisor: Dr. M Che
- Emily Smothers Howell.....Greenville, SC
B.A., Wofford College; M.Ed., Georgia State University
Dissertation: Creating Arguments Using a Multiliteracies Approach: A Formative
Experiment
Advisor: Dr. D Reinking
- Christopher David White.....Seneca, SC
B.S., Clemson University; M.A., University of Virginia
Dissertation: The Creation and Validation of an Instrument to Measure School
STEM Culture
Advisor: Dr. J Marshall

Educational Leadership

- Jennifer Michelle Horace..... Chicago, IL
B.A., University of Illinois; M.S., Indiana University
Dissertation: Conceptions of Change: A Phenomenographical Study of the Reinvention
Initiative at the City Colleges of Chicago
Advisor: Dr. J Satterfield

COLLEGE OF ENGINEERING AND SCIENCE

DOCTOR OF PHILOSOPHY

Automotive Engineering

- Chunjian WangXintai, China
B.S., M.S., Southeast University
Dissertation: Analysis of Ring on Unilateral Elastic Foundation with Application in
Non-pneumatic Tires
Advisor: Dr. B Ayalew
- Yubin Xi Taiyuan, China
B.E., Central South Forestry University; M.S., Clemson University
Dissertation: Understanding the Automotive Pedal Usage and Foot Movement
Characteristics of Older Drivers
Advisors: Dr. P Venhovens and Dr. J Brooks

Bioengineering

- Emily Lynn Ongstad..... St Paul, MN
B.S., Michigan Technological University; M.S., Clemson University
Dissertation: Development and Validation of a Novel In Vitro Model for the Assessment
of Heterocellular Interactions Mediated by Connexin43
Advisor: Dr. M LaBerge
Emily received pre-doctoral fellowships from NIH and AHA. She was awarded a Best
Presentation prize at the Gordon Research Seminar earlier this year.
- James Pierpont Turner..... Charleston, SC
B.S., M.S., Clemson University
Dissertation: The Effects of Growth Factor Supplementation and Environmental
Conditions on Human Adipose-derived Stem Cell Differentiation Towards
Urothelial Lineage
Advisor: Dr. J Nagatomi

Chemical Engineering

- Margarita R Arcila Vélez..... Cali, Colombia
B.S., University of Valle
Dissertation: Design and Synthesis of Polymer, Carbon, and Composite Electrodes for
High Energy and High Power Supercapacitors
Advisor: Dr. M Roberts
Margarita has three peer-reviewed publications and was named the Department of
Chemical Engineering's Outstanding Graduate Researcher in 2014.
- Felipe Polo Garzón Cali, Colombia
B.S., University of Valle
Dissertation: Optimization of Pyrochlore Catalysts for the Dry Reforming of Methane
Advisor: Dr. D Bruce

Chemistry

- Lindsey Whitfield Cain.....Anderson, SC
B.S., Lander University
Dissertation: Understanding How Synthetic Organic Chemistry Graduate Students
Navigate SciFinder
Advisors: Dr. S Stuart and Dr. G Bhattacharyya
- Louis C Groff II.....Bethlehem, PA
B.S., Kutztown University
Dissertation: Picosecond Time-Resolved Studies of Multiple Energy Transfer in Conjugated
Polymer Nanoparticles
Advisor: Dr. J McNeill
- Charles N Lowe.....New Port Richey, FL
B.S., Marshall University
Dissertation: Bombardment Simulations and Intercalation Studies of Carbon Materials
Advisor: Dr. S Stuart
- Cheryl Ann Moore.....Pittsburgh, PA
B.S., University of Pittsburgh
Dissertation: Towards a Greater Understanding of Hydrothermally Grown Garnets
and Sesquioxide Crystals for Laser Applications
Advisor: Dr. J Kolis

Khanh Van Thi Nguyen.....Thai Nguyen, Vietnam
B.S., Hanoi National University of Education
Dissertation: Tracking Anisotropic Optical Tracers to Study Biophysical Processes
and Cytotoxicity
Advisor: Dr. J Anker
Van has accepted a faculty position in the Department of Chemistry and Physics at
the University of Tennessee at Martin.

Dino SulejmanovicBowling Green, KY
B.S., Western Kentucky University
Dissertation: High Temperature Synthesis and Characterization of Polyoxometalate
Salt-Inclusion Solids
Advisor: Dr. S Hwu
Dino has seven peer-reviewed publications and will start a postdoctoral appointment
at Clemson University beginning in January.

Xiaoli WangYuzhou, China
B.S., M.S., Zhejiang University
Dissertation: Development and Single Particle Spectroscopy of Conjugated Polymer
Nanoparticles
Advisor: Dr. J McNeill

Xinyan ZhangShenyang, China
B.S., Shenyang University of Chemical Technology; M.S., Murray State University
Dissertation: Development of a Miniaturized Ambient Glow Discharge Ionization Source
and its Application in Elemental and Molecular Analysis
Advisor: Dr. L Zhang
Lynn has 10 peer-reviewed publications, and was awarded the AOAC Technical Division
on Reference Materials Student Award and the FACSS Student Award in 2015.

Civil Engineering

Kaveh AfshinniaTehran, Iran
B.S., Iran University of Science and Technology; M.S., Guilan University
Dissertation: Investigation into Mechanisms and Mitigation of Alkali-Silica Reaction in
Sustainable Portland Cement Concrete Containing Recycled Glass Materials
Advisor: Dr. P Rangaraju

Md Nasimul Hoque ChowdhuryDhaka, Bangladesh
B.S., Bangladesh University of Engineering and Technology; M.S., Clemson University
Dissertation: Investigation on Shallow Water Flow
Advisors: Dr. A Khan and Dr. F Testik

Sara Khoshnevisan.....Tehran, Iran
B.S., University of Tehran; M.S., Clemson University
Dissertation: Efficient Robust Geotechnical Design – Methodology and Applications
Advisor: Dr. C Juang
Sara has 11 journal publications and a book chapter, was awarded a Distinguished
Graduate Achievement Fellowship, and has accepted a faculty position at
Clemson University.

Shengyin LiYizheng, China
B.E., University of Science and Technology of China
Dissertation: A Framework for Designing of Electric Vehicle Charging Infrastructure
Network
Advisor: Dr. Y Huang

Zhengqi Li..... Wuhai, China
B.S., M.S., Tongji University
Dissertation: Proportioning and Properties of Ultra-High Performance Concrete Mixtures
for Application in Shear Keys of Precast Concrete Bridges
Advisor: Dr. P Rangaraju
Zhengqi has fifteen peer-reviewed publications, including nine journal papers and six
conference papers. He plans to work in the concrete material industry.

Jie Lu.....Beijing, China
B.E., Tsinghua University; M.S., University of Florida
Dissertation: Robust Modeling Framework for Transportation Infrastructure System
Protection Under Uncertainty
Advisors: Dr. Y Huang and Dr. S Atamturktur

Tina Nikou..... Tehran, Iran
B.S., Sharif University of Technology; M.S., Clemson University
Dissertation: The Quest for Simple Ingenuity: Towards a Data-driven Framework for
Defining and Modeling Elegant Design in Engineering
Advisor: Dr. L Klotz

Saurabh PrabhuMumbai, India
B.S., Veermata Jijabai Technical Institute; M.S., Clemson University
Dissertation: Robust Model Development for Evaluation of Existing Structures
Advisor: Dr. S Atamturktur

Computer Engineering

Guoxin Liu.....Beijing, China
B.S., Beihang University; M.E., University of Chinese Academy of Sciences
Dissertation: An Efficient Holistic Data Distribution and Storage Solution for Online
Social Networks
Advisor: Dr. H Shen

Chenxi Qiu Xian, China
B.S., Xidian University
Dissertation: A Time-Efficient Strategy for Relay Selection and Link Scheduling in Wireless
Communication Networks
Advisor: Dr. H Shen
Chenxi has 14 peer-reviewed publications and was named the Outstanding Graduate
Researcher in Clemson's electrical and computer engineering department in 2014.

Computer Science

Gongbing Hong.....Lawrenceville, GA
B.S., Wuhan Technical University; M.S., University of Science and Technology of China;
M.S., Mississippi State University
Dissertation: Downstream Bandwidth Management for Emerging DOCSIS-Based Networks
Advisor: Dr. J Martin

Electrical Engineering

Jungphil Kwon.....Masan, Korea
B.E., Changwon National University; M.S., University of Florida
Dissertation: Filtering Impulses in Dynamic Noise in the Presence of Large Measurement Noise
Advisor: Dr. A Hoover

Dan Suriyamongkol..... Bangkok, Thailand
B.Sc., King Mongkut Institute of Technology Ladkrabang; M.S., Ohio University
Dissertation: Utilizing Trajectory Sensitivity Analysis and Control in Power Systems
Advisor: Dr. E Makram

Yunsong Zhao Harbin, China
B.S., Tsinghua University
Dissertation: Integrated Coherent Combining of Angled-Grating Broad-Area Diode Lasers:
Design, Fabrication and Characterization
Advisor: Dr. L Zhu

Environmental Engineering and Science

Francisco Javier Barajas Rodriguez Hermosillo, Mexico
B.S., University of Sonora
Dissertation: Kinetics and Simulation of 1,4-Dioxane Biodegradation
Advisor: Dr. D Freedman

Jovan Popovic..... Aurora, IL
B.S., University of Illinois
Dissertation: Electrochemical Enhancement of Butanol Production and Xylose
Consumption in Pure and Mixed Culture Fermentations
Advisor: Dr. K Finneran
Currently a postdoctoral fellow at the University of Minnesota, Jovan has two peer-reviewed
publications and is the recipient of the AEHS Best Student Paper award.

Jennifer Christine Wong Pleasanton, CA
B.S., University of California
Dissertation: Plutonium in the Presence of Natural Organic Matter: Sorption Kinetics,
Surface Complex Stability, and Subsurface Transport
Advisor: Dr. B Powell

Human Centered Computing

Melva Tonisha James Jackson, MS
B.S., University of Mississippi; M.S., Massachusetts Institute of Technology
Dissertation: Iterative Design and Testing of a Mobile Application to Support Food
Consumption Monitoring and Decision Making
Advisors: Dr. K Caine and Dr. S Daily
Melva has two peer-reviewed publications and three book chapter contributions. She has
accepted a position in the MIT Lincoln Lab Cyber Analytics and Decision Systems Group.

Industrial Engineering

Bryan W Pearce..... Greenwood, SC
B.S., M.S., Clemson University
Dissertation: A Study on General Assembly Line Balancing Modeling Methods and Techniques
Advisor: Dr. M Kurz

Melissa Dorlette Paul Port-au-Prince, Haiti
B.S., University of Haiti; M.S., Clemson University
Dissertation: An Investigation of the Efficiency of Synergistic Multicultural Teams
Advisor: Dr. D Gramopadhye

Yushi Yang.....Beijing, China
B.S., Jiangnan University; M.S., Virginia Tech
Dissertation: Nursing Interruption Dynamics: The Impact of Work System Factors
Advisors: Dr. D Neyens and Dr. A Rodriguez
Yushi has seven peer-reviewed publications, won the Karsh Award for the best student poster,
and has accepted a post-doctoral position at University of Wisconsin-Madison.

Materials Science and Engineering

- Tugba Demir.....Bursa, Turkey
B.S., Izmir Institute of Technology; M.S., Clemson University
Dissertation: Synthesis and Characterization of Oleophobic Polyester Films
Advisor: Dr. I Luzinov
- Benn Haywood Gleason.....Phoenix, AZ
B.S., University of Arizona
Dissertation: Designing Optical Properties in Infrared Glass
Advisors: Dr. I Luzinov and Dr. K Richardson
- Ragini Jenkins.....Hyderabad, India
B.S., University of Illinois
Dissertation: A Bioresponsive and Multifunctional Polymer Based “Nanodevice” for
Cancer Nanotheranostics
Advisor: Dr. S Foulger
With three publications and a patent, Ragini is the recipient of the David Jennings
Scholarship, the ACS Excellence in Graduate Polymer Research Award, and the
MRS Leadership Award.
- Chunliang Lu.....Fukang, China
B.S., M.S., Beijing University of Chemical Technology
Dissertation: Anisotropic Stimuli-Responsive Polymeric Nanoparticles: Synthesis and
Characterization
Advisor: Dr. M Urban
- Spencer D Novak.....Winter Springs, FL
B.S., M.S., Clemson University; M.S., Bordeaux University
Dissertation: Electrospray Deposition of Chalcogenide Glass Films for Gradient Refractive
Index and Quantum Dot Incorporation
Advisors: Dr. I Luzinov and Dr. K Richardson

Mathematical Sciences

- Erin K Doolittle.....Yorktown, VA
B.A., B.S., University of Georgia; M.S., Clemson University
Dissertation: Robust Multiobjective Optimization: Theory and Application to
Telecommunications
Advisor: Dr. M Wiecek
- Hewa Arachchige Anuradha Priyadarshani.....Colombo, Sri Lanka
B.S., University of Colombo; M.S., University of North Florida; M.S., Georgia Southern
University
Dissertation: Bayesian Minimum Description Length Techniques for Multiple
Changepoint Detection
Advisors: Dr. R Lund and Dr. Y Li
Hewa has been a graduate teacher of record in the Department of Mathematical Sciences
for four years.
- Shiyi Tu.....Wuhan, China
B.S., University of Science and Technology of China; M.S., Clemson University
Dissertation: Objective Bayesian Analysis on the Quantile Regression
Advisor: Dr. X Sun
Shiyi has one peer-reviewed publication, was named the mathematics department’s
Outstanding Graduate Student, and plans to work at Bank of America.

Mechanical Engineering

Nataraj Chandrasekharan.....Clemson, SC
B.S., Sathyabama University; M.S., Clemson University
Dissertation: Electromechanical Modeling of a Honeycomb Core Integrated Vibration Energy Converter with Increased Specific Power for Energy Harvesting Applications
Advisor: Dr. L Thompson

Tianqi Hang.....Shanghai, China
B.S., East China University of Science and Technology
Dissertation: In vitro Multi-scale Patient-specific Modeling of Hemodynamics in Stage 1 Norwood Palliation for the Treatment of Single Ventricle Heart Disease
Advisor: Dr. R Figliola

Khuong Xuan Nguyen.....Greenville, SC
B.S., Clemson University
Dissertation: On Subgrid-scale Physics in the Convective Atmospheric Surface Layer
Advisor: Dr. C Tong
Khuong's research was supported by the National Science Foundation. His work has been presented internationally and is published in the prestigious *Journal of Fluid Mechanics*.

Meghashyam Panyam Mohan Ram.....Bangalore, India
B.S., M.S., Ramaiah Institute of Technology; M.S., Clemson University
Dissertation: Characterizing the Effective Bandwidth of Nonlinear Vibratory Energy Harvesters Possessing Multiple Stable Equilibria
Advisor: Dr. M Daqaq

Keith Thomas Ashman Phelan.....Clemson, SC
B.S., United States Military Academy; M.S., Clemson University
Dissertation: Configuration Management in Manufacturing and Assembly: Case Study and Enabler Development
Advisor: Dr. J Summers
Keith has eleven peer-reviewed publications, was named a Design for Manufacturing and Life-Cycle Fellowship Awardee and plans to work in product development in the Upstate.

Physics

Mehmet Karakaya.....Konya, Turkey
B.S., Selcuk University; M.S., Clemson University
Dissertation: Scalable Synthesis and Energy Applications of Defect Engineered Nano Materials
Advisor: Dr. A Rao

Polymer and Fiber Science

Stephen James Hipp Spartanburg, SC
B.S., Clemson University
Dissertation: Production and Characterization of Acrylic-Copolyaramid Bicomponent Fibers for Use in Cut Protection
Advisor: Dr. P Brown

COLLEGE OF HEALTH, EDUCATION AND HUMAN DEVELOPMENT
DOCTOR OF PHILOSOPHY

Healthcare Genetics

Sourat Darabi.....Greenville, SC
B.S., M.S., Azad University
Dissertation: Associations Between Hereditary Breast Cancer Susceptibility Gene
Mutations and Aggressive Tumor Phenotype in High Risk Breast Cancer Women
Advisor: Dr. J Eggert

Parks, Recreation and Tourism Management

Sanghoon Kang.....Changwon, Korea
B.A., Gyeongju University; M.A., Seoul National University; M.S., Michigan State
University
Dissertation: Examining Spatial Aspects of Tourist Behavior on the South Carolina
Coastal Area of the United States
Advisor: Dr. W Norman
Sanghoon has two peer-reviewed publications.

Younsuk Kong.....Busan, Korea
B.S., Silla University; M.S., Kyonggi University
Dissertation: Understanding Group Cohesion of Event and Festival Attendees
Advisor: Dr. S Backman

Weber Kirby PlayerClemson, SC
B.S., M.P.R.T.M., Clemson University
Dissertation: Leisure, Obesity and Weight Loss: An Exploration of Leisure, the Public
Health Ecological Model of Obesity and Identity Theory
Advisor: Dr. F McGuire
A 28-year employee of Clemson University, Kirby plans to add teaching to his service
and to apply his research to improving the health of many.

GRADUATE SCHOOL
DOCTOR OF PHILOSOPHY

Policy Studies

Hyeonggu ChaClemson, SC
M.A., Clemson University
Dissertation: Soviet Launch of Sputnik: Sputnik Inspired Educational Reform and
Changes in Private Returns in America
Advisor: Dr. C Simon

Kristen Kate LientzMontclair, VA
B.A., Smith College; M.S., Michigan Technological University
Dissertation: Entrepreneurship, Creativity, and Local Food Systems: Essays on Regional
Economic Development in South Carolina
Advisor: Dr. R Lamie
Katie currently works as an economist for the U.S. Department of Transportation in
Washington, D.C.

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

Prelude	Clemson University Brass Quintet
Selection of Marches and Processionals	Bruce Whisler, trumpet
Processional	Craig King, trumpet
<i>Pomp and Circumstance</i> – Sir Edward Elgar	Anneka Zuehlke, french horn
National Anthem	Matthew Anderson, trombone
Words by Francis Scott Key	Dean Millare, tuba
Music attributed to John Stafford Smith	
Clemson University Alma Mater	Vocalist
Words by AC Corcoran, Class of '19	Haleigh Marcolini
Music by Hugh H McGarity and R Hawkins	
Arranged by J Butler	
Recessional	
<i>Rondeau</i> 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.

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