Commencement
This is not an official graduation list

While every effort is made to ensure accuracy in this commencement program, printing deadlines may result in omission of some names and use of names of persons not completing graduation requirements as intended. This printed program, therefore, should not be used to determine a student’s academic or degree status. The university’s official registry for conferral of degrees is the student’s permanent academic record as reflected on the student’s transcript, maintained by the Office of the University Registrar.
Greetings from the President

On behalf of the University of Florida, our faculty and our entire university community, I would like to extend my deepest congratulations to you, the Doctoral Graduates of 2020.

I celebrate your remarkable accomplishment in earning a doctoral degree from one of the world’s leading research institutions. I applaud you for your years dedicated to in-depth scholarship, thoughtful analysis and meticulous presentation of your findings. I join you in thanking your faculty advisors, mentors and the family and friends who have supported you in your journey to reach this day.

This is a time for celebration, and also for reflection of your future. Whether you choose to pursue a career in academe, the private sector, government or the nonprofit world, I am confident that the research and analysis skills you honed as a doctoral student will serve you well. The complexity and global nature of today’s professional opportunities demand nothing less.

The university has benefitted from your research work, teaching, insights and discoveries, and we are grateful to you for your time here. We hope you will recall these years fondly, and that you will remain connected to UF as active members of our distinguished alumni.

Good luck, best wishes, and Go Gators!

W. Kent Fuchs

University of Florida President

Dr. W. Kent Fuchs

Dr. Kent Fuchs became the 12th President of the University of Florida in January 2015. Building on many years of excellence and focused leadership, the university has reached its goal of joining the nation’s top-ten public research universities.

Dr. Fuchs has set UF on a path to joining the top-five public research universities and becoming the nation’s number one university for comprehensive excellence. UF is working toward those goals through the creation of 500 new faculty positions, the addition of advanced and beautiful university facilities and an ongoing $3 billion fundraising campaign.

Previous to the UF presidency, Dr. Fuchs was provost of Cornell University. He has served in academic leadership positions and as a faculty member of electrical and computer engineering at Cornell, Purdue and the University of Illinois.

He is a fellow of the American Academy of Arts and Sciences, the American Association for the Advancement of Science, the Institute of Electrical and Electronics Engineers, and the Association for Computing Machinery, and has received numerous awards for teaching and research.

President Fuchs earned his doctorate in electrical and computer engineering from the University of Illinois, and a Master of Divinity from Trinity Evangelical Divinity School. He also holds a Bachelor of Science in Engineering from Duke University.

Dr. Fuchs is married to LindaMoskeland Fuchs, an art historian. The Fuchses have three sons, a daughter, and three grandchildren.

Born on an Oklahoma farm in 1954, President Fuchs spent much of his youth in Alaska before moving to Miami, where he graduated from Miami Killian Senior High School.
# University of Florida Leadership

## State Board of Education
- Richard Corcoran, Commissioner of Education
- Andy Tuck, Chair
- Marva Johnson, Vice Chair

## Florida Board of Governors
- Marshall M. Criser III, Chancellor
- Richard Corcoran, Commissioner of Education
- Sydney Kitson, Chair
- Brian Lamb, Vice Chair

## University of Florida Board of Trustees
- Morteza “Mori” Hosseini, Chair
- Thomas G. Kuntz, Vice Chair

## President and Vice Presidents of the University
- W. Kent Fuchs, Ph.D., President
- Joseph Glover, Ph.D., Provost and Senior Vice President - Academic Affairs
- Charles E. Lane, D.P.A., Senior Vice President and Chief Operating Officer - Administration
- David R. Nelson, M.D., Senior Vice President - Health Affairs
- Jack Payne, Ph.D., Senior Vice President - Agriculture and Natural Resources
- Elias G. Eldayrie, M.B.A., Vice President and Chief Information Officer - Information Technology
- Zina Evans, Ph.D., Associate Provost and Vice President - Enrollment Management
- Antonio Farias, M.F.A., Chief Diversity Officer and Senior Advisor to the President
- Jodi Gentry, M.A., Vice President - Human Resource Services
- Amy M. Hass, J.D., Vice President - General Counsel
- Mark E. Kaplan, J.D., Vice President - Government and Community Relations
- Thomas J. Mitchell, M.S., Vice President - Advancement
- D’Andra Mull, Ph.D., Vice President – Student Affairs
- David Norton, Ph.D., Vice President - Research
- Nancy Paton, M.S., Vice President for Strategic Communications and Marketing
- Curtis Reynolds, M.B.A., M.S.E.E., Vice President - Business Affairs

## Deans of the University
- R. Elaine Turner, Ph.D., College of Agricultural and Life Sciences
- Onye P. Ozuuzu, M.F.A., College of the Arts
- John Kraft, Ph.D., Warrington College of Business
- A. Isabel Garcia, D.D.S., M.P.H., College of Dentistry
- Chimay Anumba, Ph.D., College of Design, Construction and Planning
- Glenn E. Good, Ph.D., College of Education
- Cammy R. Abernathy, Ph.D., Herbert Wertheim College of Engineering
- Henry T. Frierson, Ph.D., The Graduate School
- Michael Reid, Ph.D., College of Health and Human Performance
- Nick Place, Ph.D., IFAS Extension
- Robert Gilbert, Ph.D., IFAS Research
- Leonardo Villalón, Ph.D., International Center
- Diane H. McFarlin, B.S., College of Journalism and Communications
- Laura A. Rosembury, J.D., Fredric G. Levin College of Law
- David E. Richardson, Ph.D., College of Liberal Arts and Sciences
- Adrian Tyndall, M.D., M.P.H., Interim, College of Medicine
- Anna M. McDaniel, Ph.D., R.N., College of Nursing
- Julie A. Johnson, Pharm.D., R.N., College of Pharmacy
- Michael G. Perri, Ph.D., College of Public Health and Health Professions
- Dana Zimmel, D.V.M., Interim, College of Veterinary Medicine
- Judith C. Russell, M.S., University Libraries
- Heather White, Ph.D., Dean of Students
Kelsey S. Aadland  
Major: Microbiology and Cell Science  
Dissertation: Conservation of Early miRNA Biogenesis in Animal and Plant Lineages  
Dissertation Chair: B. D. Kolaczkowski

Nader Farhan Abdulhameed  
Major: Materials Science and Engineering  
Dissertation: Quantitative Fractographic Analysis to Measure the Fracture Toughness of Dental Resin Composites  
Dissertation Chair: J. J. Mecholsky, Jr.

Daniel Nicholas Acton  
Major: Criminology, Law, and Society  
Dissertation: Sibling Influences: Delinquency and Victimization  
Dissertation Chair: C. L. Gibson

Stephanie M. Adams  
Major: Forest Resources and Conservation  
Dissertation: Physiological, Morphological, and Biochemical Changes in Persea Species' Response to Laurel Wilt after Paclobutrazol Treatments  
Dissertation Chair: J. A. Smith

Pedro F. Adorno Maldonado  
Major: Civil Engineering  
Dissertation: The Effects of Emerging Transportation Technologies (Time-to-Green Mobile Apps in Particular) on Drivers' Behaviors and Safety at Signalized Intersections  
Dissertation Chair: S. Srinivasan

Nihan Agacli Dogan  
Major: Curriculum and Instruction  
Dissertation: Description and Exploration of Middle School Students' Acceptance of Chromebooks: A Mixed Methods Study  
Dissertation Chair: K. M. Dawson

Natasha Marie Agramonte  
Major: Entomology and Nematology  
Dissertation: Neuroethology of Pyrethroid-Resistant Aedes aegypti: Toxicological Differences, Excito-Repellent Behaviors, and Electrophysiological Firing Response to Pyrethroid Insecticides  
Dissertation Chair: J. R. Bloomquist

Niousha Ahmari  
Major: Medical Sciences—Physiology and Functional Genomics  
Dissertation: Targeting Peripheral and Central Immune Changes in Obesity and Hypertension through Bone Marrow Beta-Adrenergic Blockade  
Dissertation Chair: J. Zubcevic

Kawther Sahib Al Jasim  
Major: Horticultural Sciences  
Dissertation: Novel Approaches to Induce Early Flowering and Fruiting in Juvenile Citrus Hybrids and Transgenic Plants  
Dissertation Chair: J. W. Grosser

Mohammed Al Meqdad  
Major: Linguistics  
Dissertation: Discourse and Identity among Syrian Refugees: A Qualitative Analysis of Institutional and Refugee Discourse  
Dissertation Chair: D. Boxer
Mimonah Qasim Al Qathrady  
**Major:** Computer Engineering  
**Dissertation:** Data-Driven Indoor Mobility Analysis, Modeling, and Encounter Classification for IoT Applications  
**Dissertation Chair:** A. A. Helmy

Yasser Thakkar Albogami  
**Major:** Pharmaceutical Sciences—Pharmaceutical Outcomes and Policy  
**Dissertation:** Safety and Effectiveness of Pharmacological Treatments in Patients with Chronic Lower Respiratory Disease and Type II Diabetes  
**Dissertation Chair:** A. G. Winterstein

Bahareh Alipanahi Ramandi  
**Major:** Computer Science  
**Dissertation:** Variants and Applications of Colored de Bruijn Graphs  
**Dissertation Chair:** C. A. Boucher

Abdulrahman Salah Almithn  
**Major:** Chemical Engineering  
**Dissertation:** C-X Bond Hydrogenolysis on Transition Metals: Effects of High CO-Adsorbates Coverages, Catalyst Model, and Phosphorus Incorporation  
**Dissertation Chair:** D. Hibbitts

Mohammad Hasan Alshaer  
**Major:** Pharmaceutical Sciences—Clinical Pharmaceutical Sciences  
**Dissertation:** Therapeutic Optimization of Antibacterial Agents  
**Dissertation Chair:** C. A. Peloquin

Valeria Alterman  
**Major:** Business Administration—Management  
**Dissertation:** Can Specialized Attention from HR Backfire? The Role of Older Worker-Specific HR Practices on the Retention of Older Workers  
**Dissertation Chair:** M. Wang

Zuhair Abdulmohsin Al-Yousef  
**Major:** Chemical Engineering  
**Dissertation:** Improved Control of Direct Methanol Fuel Cells via Multivariable Methods  
**Dissertation Chair:** O. D. Crisalle

Icaro Alzuru Cortez  
**Major:** Computer Engineering  
**Dissertation:** Human-Machine Extraction of Information from Biological Collections  
**Dissertation Chair:** J. A. Fortes

Prabha Rajini Amarasinghe  
**Major:** Botany  
**Dissertation:** Evolution of Memecylon (Melastomataceae) in the Old World Tropics at Multiple Scales  
**Dissertation Chair:** N. Cellinese

Kelsey Andersen Onofre  
**Major:** Plant Pathology  
**Dissertation:** Modeling Epidemics in Seed Systems to Inform Intervention  
**Dissertation Chair:** K. A. Garrett

Jesse D. Anderson  
**Major:** Design, Construction and Planning  
**Dissertation:** The Political Efficacy of Informal Settlements in Patna, Bihar  
**Dissertation Chair:** A. Alakshendra

Altan Apar  
**Major:** Political Science  
**Dissertation:** Competitiveness as a Security Dispositif in the International System  
**Dissertation Chair:** I. Oren  
**Dissertation Co-chair:** A. A. Hozic
Stephen Michael Apple  
Major: Aerospace Engineering  
Dissertation: Design and Performance Characterization of a New LISA-Like Gravitational Reference Sensor Test Bed Using the UF Torsion Pendulum  
Dissertation Chair: J. Conklin

Lucas Hunter Armitage  
Major: Medical Sciences—Immunology and Microbiology  
Dissertation: Regulation of Innate Immune Cell Function and Dysfunction by PTPN22 Allotypes  
Dissertation Chair: C. E. Mathews

Vadim Da Costa Arsky Filho  
Major: Music Education  
Dissertation: A Comparison of Brazilian and United States First Year Music Majors' Pre-College Musical Experiences and Musical Self-Concept  
Dissertation Chair: W. Bauer

Ibukun Timothy Ayankojo  
Major: Soil and Water Sciences  
Minor: Agronomy  
Dissertation Chair: K. T. Morgan

Ori R. Baber  
Major: Health and Human Performance  
Dissertation: A New Spatial-Interaction Approach to Evaluate Neighborhood-Level Equity in Access to Opportunities for Physical Activity  
Dissertation Chair: H. J. Gibson

Grant Alexander Backlund  
Major: Statistics  
Dissertation: Analysis of Markov Chain Monte Carlo Algorithms for Bayesian Regression Models with Heavy-Tailed and Skewed Error Distributions  
Dissertation Chair: J. P. Hobert

Kamaldeep Kaur Bansal  
Major: Plant Pathology  
Dissertation: Comparative Genomics and Transcriptomics of the Pollen-Mimicking Floral Infection of Blueberry by Monilinia vaccinii-corymbosi  
Dissertation Chair: J. A. Rollins

Danielle Barbe  
Major: Health and Human Performance  
Minor: Mass Communication  
Dissertation: Developing a Crisis Communication Model for the Tourism Industry: The Effects of Source, Media, and Time  
Dissertation Chair: L. Pennington

Molly Anne Barlow  
Major: Psychology  
Dissertation: Effects of Economic Context on the Discounting of Delayed and Probabilistic Gains and Losses  
Dissertation Chair: J. Dallery

Brooke E. Barnes  
Major: Chemistry  
Dissertation: The Effect of Peptide Specific Interactions on Polymer Self-Assembly  
Dissertation Chair: B. S. Sumerlin

Colin Sheldon Barquist  
Major: Physics  
Dissertation: Design, Development, Fabrication, and Measurement of Micro-Electromechanical Oscillators for the Study of Quantum Turbulence and Other Superfluid Properties  
Dissertation Chair: Y. Lee
Adam R. Benjamin
Major: Forest Resources and Conservation
Dissertation: Improving Structure from Motion Photogrammetry Mapping Operations through Efficiency and Accuracy Analysis
Dissertation Chair: H. H. Hochmair

Ann Bernert
Major: Plant Molecular and Cellular Biology
Dissertation: Discovery of RquA Function and Prospects for Engineering Quinone Metabolism in Bacteria, Yeast, and Plants
Dissertation Chair: G. J. Basset

Rajendra Rana Bhat
Major: Electrical and Computer Engineering
Dissertation: Deep Semi-Temporal Learning and Application in Genomics and Precision Medicine
Dissertation Chair: D. Wu

Krishna Bhattarai
Major: Horticultural Sciences—Environmental Horticulture
Dissertation: Genetic Mapping and Next-Generation Sequencing to Identify Quantitative Trait Loci and Candidate Genes for Powdery Mildew Resistance in Gerbera (Gerbera hybrida)
Dissertation Chair: Z. Deng
Dissertation Co-chair: D. G. Clark

Kerri Lisa Blumenthal
Major: Religion
Dissertation: Rejecting the Eagle, Embracing the Condor: Spirituality and Lifestyle Migration among North Americans in Cuzco, Peru
Dissertation Chair: A. Peterson

Gregory Harlan Bontrager
Major: Linguistics
Dissertation: Effect of Orthographic Depth on Reading in English and Spanish
Dissertation Chair: C. R. Wiltshire

Wesley W. Boone IV
Major: Wildlife Ecology and Conservation
Dissertation: Ecology and Population Genetics of Marsh Rice Rats and Hispid Cotton Rats on Near-Shore Islands
Dissertation Chair: R. A. McCleery
Dissertation Co-chair: J. D. Austin

Thiago Borba Onofre
Major: Agricultural and Biological Engineering
Dissertation: Development of an Internet of Things Data Collection Platform for Agricultural Applications
Dissertation Chair: C. W. Fraisse
Dissertation Co-chair: J. Y. McNair

Khlood Saleh Bubshait
Major: Nursing Sciences
Dissertation: Maternal Voice as a Regulator of Neural Development in Premature Infants
Dissertation Chair: C. A. Krueger

Chesya Burke
Major: English
Dissertation: #Hashtag, Black Girl Magic: Reimagining Black Women Fluid Artists within the Spirituality of Womanism
Dissertation Chair: D. W. King

Katie Ann Butera
Major: Rehabilitation Science
Dissertation Chair: S. George
Dissertation Co-chair: E. J. Fox
John Marcus Cain  
Major: Chemistry  
Dissertation: Mechanisms for Emergent Behavior Derived from Interface Strain in Nanoscale Spin Transition Heterostructures  
Dissertation Chair: D. R. Talham

Salvatore John Calise III  
Major: Medical Sciences—Molecular Cell Biology  
Dissertation: The Role of Inosine Monophosphate Dehydrogenase Filaments in Cell Biology  
Dissertation Chair: E. K. Chan

Christina M. Callicott  
Major: Anthropology  
Dissertation: Music, Plants, and Medicine: Lamista Shamanism in the Age of Internationalization  
Dissertation Chair: C. M. Tucker

Will Gaston Carden  
Major: Chemistry  
Dissertation: Ligand Effects in Gold Precursors for Focused Electron Beam Induced Deposition  
Dissertation Chair: L. A. McElwee-White

Sarah Beth Carey  
Major: Botany  
Dissertation: Sex-Biased Evolutionary Processes in Mosses  
Dissertation Chair: S. McDaniel

Stephanie T. Carnell  
Major: Human-Centered Computing  
Dissertation: Using Virtual Human Communication Skills Learning Scenarios to Study and Affect Learner Message Production  
Dissertation Chair: B. Lok

Keisha Yarie Castillo-Torres  
Major: Electrical and Computer Engineering  
Dissertation: Magnetic Isolation of Fecal Indicating Bacteria Using Bio-Functionalized Magnetic Microdiscs for Water Quality Monitoring  
Dissertation Chair: D. P. Arnold

Madison Ward Cates  
Major: History  
Dissertation Chair: W. Link

Nicholas David Cavallaro  
Major: Agricultural and Biological Engineering  
Dissertation: Laser Carbonized Biosensors for Point of Use Detection of Listeria monocytogenes  
Dissertation Chair: E. McLamore

Elizabeth Cerejido  
Major: Art History  
Dissertation Chair: M. Stanfield-Mazzi  
Dissertation Co-chair: K. Cabanas

Aokun Chen  
Major: Electrical and Computer Engineering  
Dissertation: On the Feasibility and Temporal Consistency of Personalized, Human-Centric Computer Usage Profiling for Continuous Authentication  
Dissertation Chair: D. Oliveira
Amani Cheniour  
Major: Materials Science and Engineering  
Dissertation: Study of U$_3$Si$_2$ Fuel Microstructure Behavior under LWR Conditions Using the Phase Field Method  
Dissertation Chair: M. Tonks

Andreina Chiu Lam  
Major: Chemical Engineering  
Dissertation Chair: C. Rinaldi

Kwansun Cho  
Major: Electrical and Computer Engineering  
Minor: Communication Sciences and Disorders  
Dissertation: Foreign Accent Assessment in Second-Language Vowels  
Dissertation Chair: J. G. Harris

Bhaswati Choudhury  
Major: Mechanical Engineering  
Dissertation: Study of Dielectric Barrier Discharge (DBD) Plasma-Based Fluid Decontamination  
Dissertation Chair: S. Roy

Thomas J. Cirino  
Major: Pharmaceutical Sciences—Pharmacodynamics  
Dissertation: Biological Mediators of Pain, Substance Abuse and Cognitive Impairment in HIV Infection: Sufficiency of the HIV-Tat Protein  
Dissertation Chair: J. P. McLaughlin

Christopher Jordan Clukay  
Major: Anthropology  
Dissertation: Exploring the Role of Genetics and Epigenetics in Response to Conflict-Related Violence  
Dissertation Chair: C. J. Mulligan

Sayak Das Gupta  
Major: Chemistry  
Dissertation: Polynuclear Cerium/Manganese-oxo Clusters and Their Structural Relevance to Composite Oxides of Cerium and Manganese  
Dissertation Chair: G. Christou

Trevor Davila  
Major: Mathematics  
Dissertation: Infinite-Dimensional Coarse Geometry of Groups and Spaces  
Dissertation Chair: A. N. Dranishnikov

Adrian Diaz  
Major: Aerospace Engineering  
Dissertation: A Concurrent Atomistic-Continuum Method for Massively Parallel Simulation of Non-Equilibrium Solids  
Dissertation Chair: Y. Chen

James Daniel Diffenderfer  
Major: Mathematics  
Dissertation: An Active Set Method for Nonlinear Programming  
Dissertation Chair: W. W. Hager

Christopher Aaron DiScenza  
Major: Coastal and Oceanographic Engineering  
Dissertation: Wave Turbulence of Edge Waves  
Dissertation Chair: A. A. Sheremet

Brittney Nicole Dixon  
Major: Public Health  
Dissertation: The Association between the Built Environment and Intervention-Related Weight Loss Outcomes for Rural Adults with Obesity  
Dissertation Chair: K. M. Ross
Lisa G. Duffy
Major: Anthropology
Dissertation: Using Residue Analysis to Explore Ancient Maya Recipes and Food-Processing Technology
Dissertation Chair: K. F. Emery

Kyle A. Dyson
Major: Medical Sciences—Immunology and Microbiology
Dissertation: Towards a Comprehensive Understanding of Medulloblastoma Immunobiology
Dissertation Chair: D. Mitchell

Parker Benjamin Edwards
Major: Mathematics
Dissertation: A New Palette for Persistence Landscapes
Dissertation Chair: P. Bubenik

Robert Stephen Eisinger
Major: Medical Sciences—Neuroscience
Dissertation: Reward Processing and Impulsivity in Parkinson's Disease
Dissertation Chair: A. Gunduz

Amy L. Elliott
Major: Epidemiology
Dissertation: Racial/Ethnic and Area Deprivation Disparities in the Juvenile Justice Drug and Alcohol Use Services Cascade
Dissertation Chair: L. B. Cottler

Fabien Emmetiere
Major: Chemistry
Dissertation: Knoevenagel Adduct Allyl Anions: A Platform for Simplifying and Diversifying Complex Molecule Synthesis
Dissertation Chair: A. J. Grenning

Michael Esbach
Major: Interdisciplinary Ecology
Dissertation: Hunting for Justice: Indigenous Self-Determination and the Sustainability of Subsistence in the Ecuadorian Amazon
Dissertation Chair: B. A. Loiselle

Brandon James Eudy
Major: Nutritional Sciences
Dissertation: Role of Adenosine and Adenosine Receptors in Cytokine Secretion from Macrophages and Implication to Immune Function in a Mouse Model of Liver Damage
Dissertation Chair: R. P. Da Silva

Ying Fan
Major: Food Science
Minor: Food and Resource Economics
Dissertation: Determination of Whiteleg Shrimp Quality by a Sensory Evaluation Method Using Aqueous Aroma Dilutions and by a Colorimetric Strip Method
Dissertation Chair: P. J. Sarnoski
Dissertation Co-chair: K. R. Schneider

Daniel Elias Farrah
Major: Design, Construction and Planning
Dissertation: Integration of Environmental Indicators into Land-Use Conflict Identification Strategy to Analyze the Impacts of Multiple Land Use Scenarios
Dissertation Chair: P. D. Zwick

Henrietta Oyeyemi Fasanya
Major: Medical Sciences—Cancer Biology
Dissertation: The Role of Cathepsin Inhibition in Osteosarcoma Metastasis
Dissertation Chair: D. W. Siemann
Ehsan Fereyduni  
Major: Chemistry  
Dissertation: Discovery of a Room-Temperature Cope Rearrangement and Applications in Synthesis of Terpenes, Complex Amides, and Esters  
Dissertation Chair: A. J. Grenning

Gabriel Alejandro Fernandez Bueno  
Major: Medical Sciences—Immunology and Microbiology  
Dissertation: Mitochondrial Dysfunction as a Component of Pathogenesis in Non-Alcoholic Fatty Liver Disease and Type 2 Diabetes Mellitus  
Dissertation Chair: C. E. Mathews

Paula Fernandez Hernandez  
Major: Romance Languages—Spanish  
Dissertation: Canary Islands and the Caribbean at the Anthropocene Crossroads: Islands and Feminine and/or Feminist Poetry in the 21st Century  
Dissertation Chair: E. Barradas

Alinka Leila Földesi-Freeman  
Major: Nursing Sciences  
Dissertation: HIV-Related Stigma and Medication Adherence: A Rural-Urban-Suburban Comparison Using Secondary Data from a Florida Cohort  
Dissertation Chair: J. R. Stacciarini

Kara Lea Fransisco  
Major: Sociology  
Dissertation: Bad Bodies and Contested Conceptions: Exploring Trying to Conceive, Pregnancy, and Birth  
Dissertation Chair: B. A. Zsembik

Ian R. Frazier  
Major: Psychology  
Dissertation: Trust-Related Decision Making and Aging  
Dissertation Chair: N. C. Ebner

Michele Lisa Fullarton  
Major: Materials Science and Engineering  
Dissertation: Thermodynamics and Charged Defects in Nuclear Alloys and Semiconductor Materials from First-Principles Calculations  
Dissertation Chair: S. R. Phillpot

Elyssa J. Gage  
Major: History  
Dissertation Chair: S. T. Kroen

Kareem A. Galal  
Major: Pharmaceutical Sciences—Medicinal Chemistry  
Dissertation: Synthesis and Biological Evaluation of Optimized Analogues of Benzyl Piperidine Based Neuropeptide FF Receptor Ligands  
Dissertation Chair: C. R. McCurdy

Mayur Ghatge  
Major: Electrical and Computer Engineering  
Dissertation: Linear and Non-Linear Micro-Acoustic Waveguides for Frequency Control Applications  
Dissertation Chair: R. Tabrizian

Elizabeth Maura Gleeson  
Major: Art History  
Dissertation: Between the Public and Private: Women’s Networks and the Politics of Portraiture at Napoleon’s Court  
Dissertation Chair: M. L. Hyde
Emma Grauerholz-Fisher  
Major: Psychology  
Dissertation: Assessment and Teaching of Task Analyses in Individuals with Autism Spectrum Disorders  
Dissertation Chair: T. R. Vollmer

Jandy A. Gu  
Major: Anthropology  
Dissertation: Vanguard or Vandal: Symbolic Boundaries and Subjectivities of Grafite and Pixação in São Paulo, Brazil  
Dissertation Chair: I. Jusinionyte  
Dissertation Co-chair: M. J. Heckenberger

Dongwoo Hahn  
Major: Health and Human Performance  
Dissertation: Diaphragm Weakness in Acute Myocardial Infarction by NAD(P)H Oxidase 4: Murine Diaphragm Preparation for Mitochondrial Function Assessment  
Dissertation Chair: L. F. Ferreira

LB Hannahs  
Major: Higher Education Administration  
Dissertation: From the Top Down: An Exploratory Study of a Diversity Mandate  
Dissertation Chair: K. D. Peck Parrott

Clarissa M. Harris  
Major: Animal Sciences  
Dissertation: The Antimicrobial Effects of a Vinegar-Based Ingredient, Lauric Arginate and Ethylenediamine Tetraacetic Acid against Salmonella on Skinless Ground Chicken Breast Meat  
Dissertation Chair: S. K. Williams

Holden Earl Harris  
Major: Interdisciplinary Ecology  
Dissertation: Viability and Effectiveness of a Commercial Fishery to Mitigate Invasive Lionfish in the Northern Gulf of Mexico  
Dissertation Chair: M. S. Allen  
Dissertation Co-chair: W. F. Patterson III

Angelique M. Haworth  
Major: Educational Leadership  
Dissertation: The Principal as an Advocate for Gifted Programs: A Multiple Case Study  
Dissertation Chair: L. B. Eldridge  
Dissertation Co-chair: L. J. Searby

Kirsten A. Hecht  
Major: Interdisciplinary Ecology  
Dissertation: A Mixed-Methods Investigation of Public Engagement Activities by Herpetologists  
Dissertation Chair: K. A. Stofer  
Dissertation Co-chair: M. A. Nickerson

Kristofer Thomas Henderson  
Major: Electrical and Computer Engineering  
Dissertation: Sensor Fusion for Non-Line-of-Sight Visualization and Imaging  
Dissertation Chair: S. J. Koppal

Lauren Michael Henry  
Major: Criminology, Law, and Society  
Dissertation: Prosecutorial Sexual Assault Case Declination in Indian Country: A Legal Theory Consideration  
Dissertation Chair: L. M. Lanza Kaduce

Kevin A. Henson  
Major: Environmental Engineering Sciences  
Dissertation: Quantifying the Effects of Upland Management on the Hydrology, Flora, and Fauna of Pine Flatwoods-Wetland Mosaics in the Southeastern United States  
Dissertation Chair: D. A. Kaplan
Marilyn Horta  
Major: Psychology  
Dissertation: The Effects of Chronic Intranasal Oxytocin Administration and Brain Mechanisms Underlying Dynamic Emotion Identification Accuracy in Healthy Aging  
Dissertation Chair: N. C. Ebner  
Dissertation Co-chair: A. Keil

Cody Coyotee Howard  
Major: Botany  
Dissertation: Evolutionary Insights into Monocotyledonous Geophytes  
Dissertation Chair: N. Cellinese

Muhammad Imran  
Major: Physics  
Dissertation: Theory of Magnetotransport in the Dirac and Weyl Semimetals  
Dissertation Chair: S. P. Hershfield

Cameron Jerome Jack  
Major: Entomology and Nematology  
Dissertation: Facilitating the Development of an Integrated Pest Management Approach for Controlling Varroa destructor in Florida  
Dissertation Chair: J. Ellis

Haoming Jin  
Major: Physics  
Minor: Materials Science and Engineering  
Dissertation: Comparative Studies of the Electrical Properties of Heterostructures Containing Topological Insulators or Strontium Titanate  
Dissertation Chair: A. F. Hebard

Lindsay M. Johnson  
Major: Zoology  
Dissertation: Phenotypic Effects of Spontaneous Mutations in Caenorhabditis elegans  
Dissertation Chair: C. Baer

Andrew S. Jones  
Major: Chemical Engineering  
Dissertation: Doped Rare-Earth Oxides for the Oxidative Coupling of Methane  
Dissertation Chair: H. E. Hagelin Weaver

Harrison Henry Jones  
Major: Zoology  
Dissertation: Avian Behavioral and Community-Level Responses to Forest Fragmentation in the Western Andes of Colombia  
Dissertation Chair: T. Palmer  
Dissertation Co-chair: S. K. Robinson

Madison P. Jones IV  
Major: English  
Dissertation: Writing, Place, Network: Scale and Digital Rhetoric  
Dissertation Chair: S. I. Dobrin

Rachel Elaine Joyce  
Major: Microbiology and Cell Science  
Dissertation: Bioprecipitation: The Connection between Microbiology and Meteorology  
Dissertation Chair: B. C. Christner

Colin Patrick Kearney  
Major: Mass Communication  
Dissertation: Regionalism in Prime-Time: An Examination of the American South on Television  
Dissertation Chair: R. Rodgers
Oliver Keller
Major: Entomology and Nematology
Dissertation: Studies on Robopus Motschulsky, 1853 and Heterophotinus Oliver, 1894 and Related West Indian Fireflies (Coleoptera: Lampyridae)
Dissertation Chair: M. A. Branham

Rachel Catherine Kelley
Major: Health and Human Performance
Minor: Nutritional Sciences
Dissertation: Skeletal Muscle and Cardiac Abnormalities in Diet-Induced Obesity and Heart Failure with Preserved Ejection Fraction
Dissertation Chair: L. F. Ferreira

Roozbeh Ketabi
Major: Computer Engineering
Dissertation: Enabling Urban-Scale Simulation, Similarity, Matching, and Forecasting Applications Using Spatio-Temporal Analysis of Vehicular Mobility
Dissertation Chair: A. A. Helmy

Erica Jean Kiernan
Major: Public Health
Dissertation: Evaluating the Relationship between Apathy and Grit with Participation in a Parkinson's Community Exercise Program
Dissertation Chair: A. V. Blue

Benjamin J. Kimock
Major: Astronomy
Dissertation: Lyman-α Blobs in Cosmological Simulations
Dissertation Chair: D. T. Narayanan

Tamara Ibragimovna Khudoyberdieva King
Major: Pharmaceutical Sciences—Pharmacy
Dissertation: Bioanalytical Method Development, Validation, and Application to Preclinical Pharmacokinetic Studies of Neuropeptide FF Targeting Compounds and Kratom Alkaloids
Dissertation Chair: T. D. Schmittgen
Dissertation Co-chair: C. R. McCurdy

Rahul Babu Koneru
Major: Mechanical Engineering
Dissertation: Investigations of Shock Wave-Particle Bed Interactions Using a Euler-Lagrange Framework
Dissertation Chair: S. Balachandar

Pavlo Ivan Kravchenko
Major: Chemical Engineering
Dissertation Chair: D. Hibbitts

Ouidad Lahtigui
Major: Chemistry
Dissertation: Fundamental and Applied Studies of the Cope Rearrangement
Dissertation Chair: A. J. Grenning

Kangjae Lee
Major: Mechanical Engineering
Dissertation: A Laser-Based Heating System Coupled within Operando Raman Spectroscopy for Studying Solar Thermochemical Redox Cycles of Ceria and LSM Perovskites
Dissertation Chair: J. Scheffe
Sangyoul Lee
Major: Food and Resource Economics
Dissertation: The Unintended Consequences of Environmental Regulation and Voluntary Pollution Prevention Program: Substitution, Leakage, and Spillover
Dissertation Chair: X. Bi

Patrice J. Leopold
Major: Counseling and Counselor Education
Dissertation: Examining Empathy, Resilience, and Parental Attachment as Mediators for Intergenerational Transmission of Conflict in Dyadic Romantic Relationships
Dissertation Chair: J. Swank

Alice Kelsey Lewis
Major: Zoology
Dissertation Chair: M. J. Cohn

Gengnan Li
Major: Chemistry
Dissertation: Structural and Functional Investigation of Macromolecules in Natural Product Biosynthetic Pathways
Dissertation Chair: S. D. Bruner

Shuzhan Li
Major: Curriculum and Instruction
Dissertation: Rural Mainstream Elementary Teacher Identity in Teaching English Language Learners
Dissertation Chair: M. R. Coady

Tiantian Li
Major: Soil and Water Sciences
Dissertation: From Biowaste to Value Added Materials and Its Application in Soil and Water
Dissertation Chair: Y. Li
Dissertation Co-chair: Z. Tong

Yang Li
Major: Mechanical Engineering
Dissertation: A Multiscale Simulation Study of PbTe-PbSe Heterostructures from Growth to Defect Formation to Phonon Transport
Dissertation Chair: Y. Chen

Ying-Yu Liao
Major: Plant Pathology
Dissertation: Antibacterial Potential of Nano Magnesium, and Role of Type VI Secretion System of Xanthomonas perforans
Dissertation Chair: M. Paret
Dissertation Co-chair: J. B. Jones

Yi Ting Lien
Major: Pharmaceutical Sciences—Pharmacy
Dissertation: Application of Pharmacometric Principles for Enhanced Decision Making in Special Patient Populations
Dissertation Chair: S. Schmidt
Dissertation Co-chair: V. Vozmediano Esteban

Andrea Lin
Major: Medical Sciences—Immunology and Microbiology
Dissertation: Immune Changes with ATG+GCSF Therapy and Its Impacts on C-Peptide Preservation in Type 1 Diabetes
Dissertation Chair: C. E. Mathews

Thomas Linehan
Major: Aerospace Engineering
Dissertation: Vortex Flows and the Stability and Control of Thin Low-Aspect-Ratio Wings with Application to Bird Landing
Dissertation Chair: K. Mohseni
Taylor N. Lipscomb  
Major: *Fisheries and Aquatic Sciences*  
Dissertation: Using Larval Digestive System Ontogeny to Inform Larviculture Protocols in Freshwater Ornamental Fishes  
Dissertation Chair: M. A. DiMaggio

Jun Liu  
Major: *Research and Evaluation Methodology*  
Dissertation: Detecting Differential Item Functioning Items through the Use of Multiple Group Mixture Item Response Theory Model  
Dissertation Chair: D. Miller

Yiyang Liu  
Major: *Epidemiology*  
Dissertation: Cocaine Use Patterns and Polysubstance Use among Cocaine Users from a National Survey  
Dissertation Chair: L. B. Cottler

Yue Liu  
Major: *Environmental Engineering Sciences*  
Dissertation: Mathematical and Physical Models of Urban Particulate Granulometry  
Dissertation Chair: J. J. Sansalone

Jason Paul Longtin  
Major: *Music Education*  
Dissertation: The Experiences of Music Education Majors Who Transfer from a Two-Year College to a Public Four-Year University in Florida: A Hermeneutic Phenomenology  
Dissertation Chair: W. Bauer

Beatriz Lopez Gutierrez  
Major: *Forest Resources and Conservation*  
Dissertation: Challenges and Opportunities for Biodiversity Conservation through Nature-Based Activities in the Osa Peninsula of Costa Rica  
Dissertation Chair: E. N. Broadbent

Natercia Lourinho Moura do Valle  
Major: *Curriculum and Instruction*  
Minor: *Research and Evaluation Methodology*  
Dissertation: The Influence of Learning Analytics Dashboard Design on Learners' Statistics Anxiety, Motivation, and Learning Performance  
Dissertation Chair: P. Antonenko

Xiaojie Lu  
Major: *Design, Construction and Planning*  
Minor: *Statistics*  
Dissertation: Exploring the Effects of Innovative Lighting Interventions on Older Adults' Movement Behaviors and Overcoming Fear of Falling  
Dissertation Chair: S. Ahrentzen

Yanyan Lu  
Major: *Soil and Water Sciences*  
Dissertation: Agronomic and Environmental Impact of Land Application of Biosolids on Bahiagrass Pastures in Florida  
Dissertation Chair: M. L. Silveira

Yu Lu  
Major: *Materials Science and Engineering*  
Dissertation: Understanding the Microstructure Evolution and Mechanical Property Degradation of Thermally Aged and Neutron Irradiated Duplex Stainless Steels  
Dissertation Chair: Y. Yang

Yangdi Lyu  
Major: *Computer Science*  
Dissertation: Test Generation for System-On-Chip Security Validation  
Dissertation Chair: P. K. Mishra
Russell Michael Macoon  
Major: Chemical Engineering  
Dissertation: Dispersion of Drug Particles and Emulsion Drops in Oleogels for Ophthalmic Drug Delivery  
Dissertation Chair: J. E. Butler  
Dissertation Co-chair: A. Chauhan

Katherine Maslak Madson  
Major: Design, Construction and Planning  
Dissertation: Evaluation of Types of Flexibility in Delivering Manufacturing Facilities and a Real Options Analysis of Scalability within the Pharmaceutical Sector  
Dissertation Chair: B. W. Franz

Matthew David Magennis  
Major: Health and Human Performance  
Dissertation: Emotion and Movement Quality: Speed, Smoothness and Timing Accuracy  
Dissertation Chair: C. M. Janelle

Nidza Vizcarra Marichal  
Major: Curriculum and Instruction  
Dissertation: Teacher Knowledge about Teaching Rural Secondary English Learners  
Dissertation Chair: M. R. Coady

Maria Dolores Martin Gasulla  
Major: Civil Engineering  
Dissertation: Integrating Autonomy and Connectivity to Improve Traffic Operations at Roundabouts  
Dissertation Chair: A. Elefteriadou

Michaela Wynne McCrary  
Major: Biomedical Engineering  
Dissertation: Development of Spinal Cord Injury In Vitro Model Systems and In Vivo Therapeutic Strategies  
Dissertation Chair: C. E. Schmidt

Lucas Glen McEachron  
Major: Interdisciplinary Ecology  
Dissertation: Reef Fish Spatial Distributions Throughout the Florida Keys in the Context of Matrix Effects, Trophic Dynamics, and Complementary Modeling Techniques  
Dissertation Chair: R. J. Fletcher, Jr.  
Dissertation Co-chair: M. S. Allen

Antionette M. McFarlane  
Major: Sociology  
Dissertation: "Black Men and Women Are Not Raised to Love Each Other": The Perspectives of Black College Students regarding Dating Violence  
Dissertation Chair: C. L. Shehan

Noah John McFerran  
Major: Nuclear Engineering Sciences  
Dissertation: Surface Measurement Gamma-Ray Spectroscopy Variation Characterization of Filled Uranium Hexafluoride Cylinders  
Dissertation Chair: P. J. Enqvist

Daniel C. Melear  
Major: Counseling and Counselor Education  
Dissertation: A Qualitative Study of How Couple Counselors Understand Apology and Adaptive Shame in Relationship Repair with Couples Facing Infidelity  
Dissertation Chair: S. L. Smith

Anthony Eli Melton  
Major: Botany  
Dissertation: Molecular Evolutionary and Macroecological Investigations of the Eastern Asia—Eastern North America Floristic Disjunction  
Dissertation Chair: D. E. Soltis  
Dissertation Co-chair: P. S. Soltis
Andrew L. Miller  
Major: Physics  
Dissertation: Using Machine Learning and the Hough Transform to Search for Gravitational Waves from Young Isolated Neutron Stars  
Dissertation Chair: B. F. Whiting

Stephanie Michelle Mintz  
Major: Criminology, Law, and Society  
Dissertation Chair: L. M. Lanza Kaduce

Hamideh Mohammadi  
Major: Romance Languages—Spanish  
Dissertation: Effect of Age of Exposure in Heritage and Second Language Processing  
Dissertation Chair: J. R. Valdes Kroff

Cameron D. Morley  
Major: Mechanical Engineering  
Dissertation: Collective Cell Behavior in 3D: Mechanics, Migration, and Transport  
Dissertation Chair: T. E. Angelini

Aaron James Mullins  
Major: Entomology and Nematology  
Dissertation: Nitrogen Procurement and Provisioning in the Termites  
Dissertation Chair: N. Su

Aravinda Munasinghe  
Major: Chemistry  
Dissertation: Polymers’ Effects on Structure and Dynamics of upon Conjugation, Including Their Effect towards the Microenvironment of the Protein  
Dissertation Chair: C. M. Colina

Matthew Nicholas Musselwhite  
Major: Veterinary Medical Sciences  
Dissertation: Central and Peripheral Modulation of Reflex Tracheobronchial Cough in the Cat  
Dissertation Chair: D. C. Bolser

Barbara A. Myslik  
Major: Mass Communication  
Dissertation: Agenda Building Potential of Populist Politicians in the European Union and in the United States  
Dissertation Chair: S. K. Kiousis

Martin Nnamdi Nwodo  
Major: Design, Construction and Planning  
Dissertation: Investigation of Exergy-Based Life Cycle Assessment of Buildings  
Dissertation Chair: C. J. Anumba

Seth Timothy Nydam  
Major: Aerospace Engineering  
Dissertation Chair: J. Conklin

Steven V. Nystrom  
Major: Chemical Engineering  
Dissertation: Catalysis: Elucidating Kinetics and Trends Using DFT and Experiments  
Dissertation Chair: D. Hibbitts

Aleksandra Ita Olszewska  
Major: Curriculum and Instruction  
Dissertation: Counter-Stories from Poland: Identities and Language Identities of Adolescent Refugee-Background Students  
Dissertation Chair: M. R. Coady
James M. Orrock
Major: Plant Pathology
Dissertation: Evaluation of Tea (Camellia sinensis) as a Novel Crop for Florida
Dissertation Chair: B. S. Richter
Dissertation Co-chair: B. Rathinasabapathi

Zachary Ben Osking
Major: Medical Sciences—Molecular Cell Biology
Dissertation: ALS-Linked SOD1 Mutants Enhance Neurite Outgrowth and Disrupt the Actin Cytoskeleton
Dissertation Chair: E. A. Vitriol

Xiaoshu Pan
Major: Chemistry
Dissertation: Aptamer Engineering for Enhanced Delivery of Functional Proteins and Biomarker Analysis in Cancer Therapy
Dissertation Chair: R. A. Butcher

Shubham Pandey
Major: Materials Science and Engineering
Dissertation: Evolution of Alloys and Radionuclide Sequestration by First-Principles Calculations
Dissertation Chair: S. R. Phillpot

Bongsuk Park
Major: Civil Engineering
Dissertation: Reclaimed Asphalt Pavement (RAP) Characterization to Maximize RAP Content in Polymer-Modified Asphalt Mixtures
Dissertation Chair: R. Roque

Jungyoung Park
Major: Curriculum and Instruction
Minor: Research and Evaluation Methodology
Dissertation: Developing a Measure of Preservice Teachers’ Metalinguistic Knowledge for Teaching Reading: Evidence-Centered Assessment Design
Dissertation Chair: Z. Fang

Upasana Parthasarathy
Major: Medical Sciences—Immunology and Microbiology
Dissertation: E3 Ubiquitin Ligase HECTD3 Acts a Novel Tumor Suppressor in Colon Cancer by Regulating Essential Oncogenic Pathways
Dissertation Chair: D. Avram

Jayshree Shantibhai Patel
Major: Entomology and Nematology
Dissertation: Biology of the Hybrid Termites of Coptotermes formosanus and C. gestroi (Blattodea: Rhinotermitidae)
Dissertation Chair: N. Su

Anirudra Paul
Major: Chemistry
Dissertation: Development of New Methods for α-C-H Bond Functionalization of Cyclic Amines
Dissertation Chair: D. Seidel

Joshua Thomas Paul
Major: Materials Science and Engineering
Dissertation: Utilization of High-Throughput Techniques for Materials Discovery and Characterization
Dissertation Chair: R. Hennig

John M. Peasant Jr.
Major: Music Education
Dissertation: The Exploration of Digital Gamification on Middle School Band Students’ Practice Habits
Dissertation Chair: W. Bauer
Percy A. Peralta
Major: Interdisciplinary Ecology
Dissertation Chair: K. A. Kainer
Dissertation Co-chair: C. M. Tucker

Daniel Pimentel
Major: Mass Communication
Dissertation: If I Become the Masses I Will Act: VR Animal Embodiment and Psychic Numbing
Dissertation Chair: S. Kalyanaraman

Daniella Steiner Kesler Porter
Major: Special Education
Dissertation: Investigating an Experienced Early Childhood Teacher’s Process of Developing an Emergent Curriculum
Dissertation Chair: K. M. Kemple

Brianna Belén Posadas
Major: Human-Centered Computing
Dissertation: Crowdsourcing Ground Truth Data Collection for Precision Agriculture Using a Citizen Science Mobile Application
Dissertation Chair: J. E. Gilbert

Aditya Mahadev Prakash
Major: Industrial and Systems Engineering
Dissertation: Healthcare Service Operations with Strategic Patients: Modeling and Analysis
Dissertation Chair: X. Zhong

Julianne Price
Major: Psychology
Dissertation: Hair Cortisol Trajectories from Pre-Treatment to Early Abstinence in Alcohol Use Disorder: A Correlate of Cognitive Recovery
Dissertation Chair: S. J. Nixon

Niels Olduvai Proctor
Major: Forest Resources and Conservation
Dissertation: Assessing the Use and Benefits of Self-Directed Retrieval Practice in the Authentic Context of an Undergraduate Course
Dissertation Chair: M. C. Monroe
Dissertation Co-chair: P. Antonenko

Sheryl E. Quail
Major: Forest Resources and Conservation
Minor: Geography
Dissertation: REDD, Sustainable Agricultural Intensification, and Land Cover Change Modeling: Analyzing Tradeoffs and Synergies at a REDD Pilot Project in Kilosa District, Tanzania
Dissertation Chair: G. Barnes
Dissertation Co-chair: B. A. Child

Carlos J. Quintero
Major: Soil and Water Sciences
Dissertation: Geometry Controls on Water and Carbon Fluxes in a Subtropical Karst Wetland Landscape
Dissertation Chair: M. J. Cohen
Dissertation Co-chair: T. Z. Osborne

Shashank Ranjan
Major: Computer Science
Dissertation: Multispectral Analysis and Visualization Algorithms for Scientific Study of Biological Materials
Dissertation Chair: C. T. Toler-Franklin
Biswa Rijal
Major: Materials Science and Engineering
Dissertation: First Principle Study of Defects in Materials Surfaces
Dissertation Chair: R. Hennig

Michael Kenneth Riley II
Major: Plant Molecular and Cellular Biology
Dissertation: Development of Lignin Nanomaterials for the Delivery of Nucleic Acids
Dissertation Chair: W. Vermerris

Raele Donetha Robison
Major: Rehabilitation Science
Dissertation: Lingual Physiologic Reserve Homeostenosis and Bulbar Function in Individuals with Amyotrophic Lateral Sclerosis
Dissertation Chair: E. K. Plowman

Kayla B. Rodney
Major: English
Dissertation: Seeking Knowledge: Education Theory in the Literary Works of African American Writers
Dissertation Chair: D. W. King

Max H. Russo
Major: Pharmaceutical Sciences—Pharmacodynamics
Dissertation: Molecular Mechanisms Associated with Adverse Effects of the Environmentally Persistent Organochlorine Pesticide Dieldrin
Dissertation Chair: B. Liu

Mark Robert Sandfoss
Major: Zoology
Dissertation: Ecological Disturbance and Responses of Florida Cottonmouth Snakes *Agkistrodon conanti* on Seahorse Key, Florida
Dissertation Chair: H. B. Lillywhite

Ravneet Kaur Sandhu
Major: Horticultural Sciences
Dissertation: Relay Cropping as an Alternative Technique in Vegetables and Strawberry Production for Growers in Florida for Maximizing Economic Returns
Dissertation Chair: N. S. Boyd

Jay Claus Santos
Major: Health and Human Performance
Dissertation: Antecedents and Consequences of College Athletes' Time Demands
Dissertation Chair: M. Sagas

Ayush Shekhar Saxena
Major: Zoology
Dissertation: Tempo, Mode, and Fitness Effects of Spontaneous Mutation in *Caenorhabditis elegans*
Dissertation Chair: C. Baer

Tracey B. Schafer
Major: Soil and Water Sciences
Dissertation: Hurricane Impacts on Water Quality and Dissolved Organic Matter Cycling along an Aquatic Continuum
Dissertation Chair: T. Z. Osborne
Dissertation Co-chair: R. K. Reddy

Lesley Ann Schumacher
Major: Entomology and Nematology
Dissertation: Sod-Based Rotation for *Rotylenchulus reniformis* Management and Effects on Nematode Community Structure in Peanut-Cotton Systems
Dissertation Chair: Z. Grabau
Erika Rachel Schwarz  
Major: Veterinary Medical Sciences  
Dissertation: Development of an Ovine Model of Zika Virus Infection  
Dissertation Chair: M. T. Long

Sarah Kaitlyn Scott  
Major: Chemistry  
Dissertation: Development of the Enyne Cope Rearrangement for Applications in Complex Molecule Synthesis  
Dissertation Chair: A. J. Grenning

Mathew Sebastian  
Major: Medical Sciences—Molecular Cell Biology  
Dissertation: Pglyrp3, a Novel Critical Regulator of Breast Cancer Development and Metastasis  
Dissertation Chair: D. Tran  
Dissertation Co-chair: D. W. Siemann

Shengchen Shan  
Major: Plant Molecular and Cellular Biology  
Dissertation: Bridging Genetic and Phenotypic Consequences of Polyploidy: Transcriptome, Methylome, and Transgenic Studies of Tragopogon (Asteraceae)  
Dissertation Chair: D. E. Soltis

Tianqi Shan  
Major: Biomedical Engineering  
Dissertation: Photoacoustic Imaging and Its Application in Congenital Brain Diseases  
Dissertation Chair: H. Jiang

Melanie R. Shapiro  
Major: Medical Sciences—Immunology and Microbiology  
Dissertation: Insulin-Like Growth Factors as Biomarkers with Immunological Impacts on the Development of Type 1 Diabetes  
Dissertation Chair: T. M. Brusko  
Dissertation Co-chair: M. A. Atkinson

Ribhu Sharma  
Major: Materials Science and Engineering  
Dissertation: An Investigative Study of Dopant Diffusion in Gallium Oxide and Design Optimization of β-Ga2O3 Schottky Rectifiers  
Dissertation Chair: M. E. Law

Alex Justin Shaw  
Major: Computer Science  
Dissertation: Automatic Recognition of Children's Touchscreen Stroke Gestures  
Dissertation Chair: L. Anthony

Philip L. Shirk  
Major: Zoology  
Dissertation: Chameleons in a Changing Climate  
Dissertation Chair: C. W. Osenberg

Andrew M. Shirley  
Major: Plant Pathology  
Dissertation: Chemical Control and Population Dynamics of Pseudoperonospora cubensis, the Cause of Cucurbit Downy Mildew in Florida  
Dissertation Chair: G. E. Vallad

Maryada Shrestha  
Major: Forest Resources and Conservation  
Dissertation: Evaluating Approaches to Estimate Tree and Understory Contributions to Carbon Flux in a Pine Savannah in North Central Florida  
Dissertation Chair: J. Vogel
Alex Purman Smith  
Major: Political Science  
Dissertation: The Art of Political Negotiation: How Heresthetic Changes Legislative Inertia on Civil Rights  
Dissertation Chair: L. C. Dodd  
Dissertation Co-chair: B. A. Rosenson

Garrett Richard Smith  
Major: Medical Sciences—Neuroscience  
Dissertation: Hippocampal Subregion Transcriptomic Profiles Reflect Strategy Selection during Cognitive Aging  
Dissertation Chair: T. C. Foster

Johnathan David Smith  
Major: Computer Science  
Dissertation: Analysis of Large Networks with Limited Data  
Dissertation Chair: M. T. Thai

James Gerald Solari  
Major: Counseling and Counselor Education  
Dissertation: Therapy with Disordered Gamers: An Interpretive Phenomenological Analysis of Counselor Experience  
Dissertation Chair: S. C. Echevarria-Doan

Zachary Anthony Sorrentino  
Major: Medical Sciences—Neuroscience  
Dissertation: Truncation of Alpha-Synuclein: Implications for Neurodegenerative Diseases  
Dissertation Chair: B. I. Giasson

Michelle Souza Oliveira  
Major: Plant Pathology  
Dissertation: Colletotrichum gloeosporioides Species Complex Characterization and Management of Colletotrichum Crown Rot of Strawberry  
Dissertation Chair: N. A. Peres Lauretti

Lindsay J. Spiers  
Major: Fisheries and Aquatic Sciences  
Dissertation: The Role of Herbivores in Shaping Coral Reef Macroalgal Communities: Differing Effects of Herbivorous Fish and the Long Spined Sea Urchin Diadema antillarum  
Dissertation Chair: T. K. Frazer

Theodor L. Stansly  
Major: Agronomy  
Dissertation: The Response of Glucosinolates to Biotic and Abiotic Stress on Oilseed Brassica carinata in the Southeastern United States  
Dissertation Chair: D. L. Wright  
Dissertation Co-chair: I. M. Small

Max David Stein  
Major: Mechanical Engineering  
Dissertation: Displacement and Static Force Analysis of the General 3-RRR Spherical Parallel Mechanism  
Dissertation Chair: C. D. Crane III

Thanachart Subgranon  
Major: Civil Engineering  
Dissertation: Fine Lightweight Aggregate-Based Internal Curing-Enhanced Crack Mitigation in Concrete  
Dissertation Chair: M. Tia

Meng Tang  
Major: Computer Engineering  
Dissertation: Performance Optimization for Sparse Matrix Factorization Algorithms on Hybrid Multicore Architectures  
Dissertation Chair: S. Ranka
Justin Shane Tauscher
Major: Counseling and Counselor Education
Dissertation: Preferences for Technology Based and In-Person Substance Use Disorder Treatment: A Discrete Choice Experiment
Dissertation Chair: M. K. DePue

Georgina Nicole Thompson
Major: Microbiology and Cell Science
Dissertation: Intercontinental Patterns of Diazotroph Community Assembly among the Ancient Forest of the Northern Hemisphere
Dissertation Chair: E. Triplett

Trevor B. Tilly
Major: Environmental Engineering Sciences
Dissertation: Improving the Toxicity Assessment of Nanoparticles Using Bioinspired Condensational Particle Growth Mechanism
Dissertation Chair: C. Wu

Aleksandra Tomic
Major: Linguistics
Dissertation: Codeswitching as a Beneficial Cue in the Processing of Subsequent Speech: Evidence from Eyetracking Studies on Emotionality and Prediction
Dissertation Chair: J. R. Valdes Kroff

Mohsen Tootoonchi
Major: Agronomy
Dissertation: Ecological Impacts of Climate Change and Saltwater Intrusion on Aquatic and Wetland Plants
Dissertation Chair: L. A. Gettys
Dissertation Co-chair: J. A. Ferrell

Amanda J. Townsend
Major: Astronomy
Dissertation: Big Science with Small Telescopes: Novel Optical Instrumentation and Compact Object Observations
Dissertation Chair: S. S. Eikenberry

Trang Theresa Tran
Major: Chemistry
Dissertation: Investigating Polymorphism-Induced Conformational Changes in HIV-1 Protease by Pulsed Electron Paramagnetic Resonance and Molecular Dynamics
Dissertation Chair: G. E. Fanucci

Prabhanshu Tripathi
Major: Chemistry
Dissertation: Structural Basis of the Self-Resistance Mechanisms in the Colibactin Biosynthetic Pathway
Dissertation Chair: S. D. Bruner

Kshitiz Upadhyay
Major: Mechanical Engineering
Minor: Materials Science and Engineering
Dissertation Chair: G. Subhash

Laura B. Van Voorhis
Major: Anthropology
Dissertation: Prehistoric Denizens of Fort Center, Florida: Osteoarchaeology and Stable Isotope Geochemistry
Dissertation Chair: J. Krigbaum

Claudia A. Vargas
Major: Curriculum and Instruction
Minor: Geology
Dissertation: STEM Identity Development in Minoritized Youth
Dissertation Chair: P. Antonenko
Dissertation Co-chair: B. J. MacFadden
Cecilia Josefina Vásquez-Pazmiño
Major: Anthropology
Dissertation: The History of the Space in Colta Lake Valley (Chimborazo, Ecuador)
Dissertation Chair: A. Oyuela-Caycedo

Kyle Jude Michael Ventura
Major: Materials Science and Engineering
Dissertation: Thermodynamic Simulation and Experimental Evaluation of Novel Ni-Based Superalloys
Dissertation Chair: G. E. Fuchs

Kristen Amelia Walczesky
Major: Anthropology
Dissertation: Totem Poles in the East: An Examination of the Misrepresentation, Silencing, and Forced-Forgetting of Native Americans in the United States
Dissertation Chair: S. D. deFrance

Glen Harris Walters
Major: Electrical and Computer Engineering
Dissertation: Scaling and Design of Thin Film Ferroelectric Hafnium Oxide for Memory and Logic Devices
Dissertation Chair: T. Nishida

Wei-en Wang
Major: Health and Human Performance
Dissertation: Neural Dynamics of Pain and Motor Function in Chronic Musculoskeletal Pain
Dissertation Chair: S. A. Coombes

Xiaojie Wang
Major: Industrial and Systems Engineering
Dissertation: Distributionally Robust Stochastic Optimization in Power System and Healthcare System
Dissertation Chair: Y. Guan
Dissertation Co-chair: X. Zhong

Kelly A. Wiechman
Major: Romance Languages—French and Francophone Studies
Minor: Linguistics
Dissertation: Fugitives and Exiles: Francophone Migration in South Carolina 1562-1810
Dissertation Chair: H. Blondeau

Ryan Michael Wilhelmi
Major: Geology
Dissertation: Evolution and Exposure of Precambrian Basement along the Western Margin of the Wyoming Province
Dissertation Chair: D. A. Foster

MacKenzie D. Williams
Major: Medical Sciences—Immunology and Microbiology
Dissertation: Genetic Associations Driving Islet Autoantibody Persistence, Residual Beta Cell Function, and Altered Innate Responses in Type 1 Diabetes
Dissertation Chair: M. A. Atkinson

Rua Mae Williams
Major: Human-Centered Computing
Dissertation: Metacogs: VR Toolkit for Executive Function Assessment and Metacognitive Strategy Development via Agent-Based Modeling
Dissertation Chair: J. E. Gilbert

Brandon W. Witbeck
Major: Mechanical Engineering
Dissertation: Molecular Dynamics Simulations of the Impact of Defects on Ni/Al Nanolaminate Combustion
Dissertation Chair: D. Spearot
Tianyuan Xiao  
Major:  Chemistry  
Dissertation: Synthesis, Characterization and Properties of Nanoparticles and Their Assemblies under High-Pressure and Asymmetric Field  
Dissertation Chair: Y. C. Cao

Yao Xiao  
Major:  Biomedical Engineering  
Dissertation: Multimodal CT Image Quality Enhancement and Radiation Optimization  
Dissertation Chair: R. Fang

Zhengtao Xu  
Major:  Materials Science and Engineering  
Dissertation Chair: J. Xue

Fang Yao  
Major:  Design, Construction and Planning  
Dissertation: Developing a Data-Driven System for Tracking and Visualizing Urban Geo-Topics: From Retrospective to Real-Time  
Dissertation Chair: P. D. Zwick  
Dissertation Co-chair: Y. Wang

Leping You  
Major:  Mass Communication  
Dissertation: The Antecedents and Outcomes of Corporate Political Advocacy: A Scale Development  
Dissertation Chair: L. L. Hon

Bin Yu  
Major:  Epidemiology  
Dissertation: Social Capital and Suicidal Behaviors among Rural-To-Urban Migrants in China  
Dissertation Chair: X. Chen

Yanan Yu  
Major:  Industrial and Systems Engineering  
Dissertation: Convex Hull Pricing and Strong Formulations for Unit Commitment Problem  
Dissertation Chair: Y. Guan

Ruyue Yuan  
Major:  Mathematics  
Dissertation: Portfolio Allocation Using Hidden Markov Chain and Dynamic Programming  
Dissertation Chair: M. Rao

Rola S. Zeidan  
Major:  Veterinary Medical Sciences  
Dissertation: Identifying Mitochondrial-Cell Signaling Networks by Functional Profiling  
Dissertation Chair: C. D. Vulpe

Peilan Zhang  
Major:  Pharmaceutical Sciences—Medicinal Chemistry  
Dissertation: Characterization of Functional Proteins for Drug Research  
Dissertation Chair: Y. Ding

Shuaifang Zhang  
Major:  Mechanical Engineering  
Dissertation: A Phase-Field Model Describing Fracture in Anisotropic Brittle Materials  
Dissertation Chair: M. Tonks

Yinan Zhao  
Major:  Astronomy  
Dissertation: Development of Algorithms for Detecting Weak Signals in Radial Velocity Data and Quasar Spectra  
Dissertation Chair: J. Ge
Haocheng Zhou
Major: Mechanical Engineering
Dissertation: A MEMS-Based Five-Hole Probe with Optical Pressure Transducers
Dissertation Chair: M. Sheplak

Zhengbo Zhu
Major: Chemistry
Dissertation: Redox-Neutral C-H Functionalization of Amines and Conjugated-Base-Stabilized Carboxylic Acid Catalysis
Dissertation Chair: D. Seidel

Rebecca Ann Zimler
Major: Entomology and Nematology
Dissertation: Emergence and Transmission Potential of Zika Virus by Invasive Mosquitoes from Florida and Puerto Rico
Dissertation Chair: B. W. Alto

DOCTOR OF EDUCATION

Shanda Clarke
Major: Curriculum and Instruction
Dissertation: Closing the Opportunity Gap: Insights into Project-Based Learning with Low-Achieving First Graders
Dissertation Chair: E. Bondy

Matthew E. Cribbs
Major: Curriculum and Instruction
Dissertation: Using Lesson Study to Implement Inquiry-Based Science Instruction: Insights Gained by Teachers and an Academic Coach
Dissertation Chair: A. Murata
Dissertation Co-chair: N. L. Dana

Kelli Jo Edgell
Major: Educational Leadership
Dissertation: Proficiency Rate Differences between the Florida Comprehensive Assessment Test and the Florida Standards Assessment in Title I and Non-Title I Schools
Dissertation Chair: C. H. Redding

Angelic M. Eggert
Major: Curriculum and Instruction
Dissertation: Exploring Teacher Use of iPads in a One-to-One Elementary Environment
Dissertation Chair: S. Kumar

Stephanie E. Fitzwater
Major: Curriculum and Instruction
Dissertation: Determining Factors that Prompt Mobile Device Management Adoption in K-12 Schools and School Districts
Dissertation Chair: K. M. Dawson

William A. Hamilton
Major: Higher Education Administration
Dissertation: Exploring the Limits of the Grit Narrative: A Quantitative Case Study of Nontraditional College Student Persistence
Dissertation Chair: D. A. Kramer

Brittany Matthews-Mijatovic
Major: Higher Education Administration
Dissertation: A Phenomenological Study on the Enrollment Decisions of High-Achieving, Low-Income Students Enrolled in a Community College
Dissertation Chair: J. D. Porter-Roberts
Dissertation Co-chair: C. Haynes
Deborah J. McDonald  
**Major:** Educational Leadership  
**Dissertation:** Analysis of Collegiate Academic Mentorship Program on Persistence, Leadership Development and Academic Achievement of Underrepresented Populations at West Point  
**Dissertation Chair:** L. B. Eldridge  
**Dissertation Co-chair:** C. H. Redding

Tara Lynne Orlowski  
**Major:** Special Education  
**Dissertation:** Directors' Use of Strategies to Support Child Care Personnel’s Transfer of Learning from Professional Development Activities into the Workplace  
**Dissertation Chair:** K. M. Kemple

Brittany Rae Rincon  
**Major:** Curriculum and Instruction  
**Dissertation:** Collaborative Coaching for Sharing Teaching Practices: Implementation of a Peer Coaching Model in an Independent School  
**Dissertation Chair:** V. A. Vescio

Matthew Roger Roy  
**Major:** Curriculum and Instruction  
**Dissertation:** Facilitating Writing Professional Development: A Practitioner Research Study  
**Dissertation Chair:** A. J. Adams

Stephanie M. Russo-Bischoff  
**Major:** Curriculum and Instruction  
**Dissertation:** Instructional Coaching of Differentiated Instruction in Language Arts Block: Teachers’ Perceptions of the Impact on Their Practice  
**Dissertation Chair:** V. A. Vescio

Rachel Holly Scott  
**Major:** Curriculum and Instruction  
**Dissertation:** Path Analysis of Technology Integration Factors in Magnet Schools  
**Dissertation Chair:** A. D. Ritzhaupt

Amy Morris Wagner  
**Major:** Curriculum and Instruction  
**Dissertation:** Teacher Driven Professional Development: Exploring Motivation to Engage in Practitioner Inquiry and How to Support Teachers through the Process  
**Dissertation Chair:** A. J. Adams  
**Dissertation Co-chair:** J. L. McLeskey

Douglas Earl Wendel  
**Major:** Higher Education Administration  
**Dissertation:** Pathways to Success: Effects of Developmental Mathematics Pathway Choice on Subsequent Course Success  
**Dissertation Chair:** D. A. Kramer

Willie Mae India White  
**Major:** Educational Leadership  
**Dissertation:** Understanding the Persistence of Take Stock in Children Scholarship Recipients  
**Dissertation Chair:** C. H. Redding
DOCTOR OF AUDIOLOGY

Jamie Bianco  
Brandy Michele Brent  
Alicia Ann D’Itri Chavez  
Patrick E. Cloward  
Kayla Ann Dub  
Carol Anne Ford  
Christina Yoon Young Kim  

Brittany Marie Larson  
Lambert Lee  
Guoyi Liu  
Joycelin V. Lopez  
Trevor W. Menchenton  
Holly Ann Mulhern  

Mariruth L. Overton  
Elizabeth D. Purdy  
Catherine Sabourin  
Brieanne Louise Salzman  
Lara Marie Shur  
Helen Teresa Simovic  
Hannah E. Weinman

DOCTOR OF BUSINESS ADMINISTRATION

Raymond Bruce Johnson  
Samuel Lopez Jr.

DOCTOR OF PLANT MEDICINE

Alicia J. Kelley

THE COLLEGE OF NURSING

Dean Anna M. McDaniel

DOCTOR OF NURSING PRACTICE

Amber Lynn Bart  
Lauren Monica Battaglia  
Sara Rose Belmore  
Bryanna Noemi Beyerlein  
Raquel Nicole Bicknell  
Shelby Paige Brads  
Catherine Marie Brugnolotti  
Kimberly Beers Castillo  
Grace Shim Choe  
Wendy Lucente Cleary  
Caroline Lindy Collins  
Sophie Katherine Cote  
Brent Douglas Cox  
Olivia Janelle de Jong  
Cindy S. Derequito  
Chiomu L. Echeazu  
Jamie Lynn Englant  
Zuzanna Fedak  
Shaina Briann Flowers  

Lauren Hope Hughes  
Aija Hurem  
Caroline Boudet Johnson  
Alexa Joseph Joy  
Amy M. Kammerer-Brannon  
Katie Renae Kauffman  
Elizabeth Ansley Liufau  
Gabrielle LoFranco  
Megan H. Lunden  
Eralene Cate Aluague Manangan  
Talia Rose Maschino  
Claire Marie Masforroll  
Leah McCain  
Kelly F. Moss  
Mildred K. Myrttil  
Amelia Nichols Alava  
Emily Legrand Oswald  
Kathryn A. Pinkston  

Tonya Kay Powell  
Jean Alexis Rafacz  
Chandra M. Ramos  
Kathleen Rose Renner  
Kristin Marie Rerra  
Sidney Marie Resmondo  
Carly Michelle Robinson  
Randall James Schrenk  
Olivia B. Sims  
Angela Kathleen Stalvey  
Sarah Spivey Stephenson  
Andre M. Suplick-Zaffuto  
Rachel A. Tax  
Rae McBride Teaf  
Patricia Marie Trinika-Stone  
Kristen L. Troxler  
Rachel Lauren Tucker  
Jennifer Lynn White  
Ryan Andrew Woodmansee

THE COLLEGE OF PUBLIC HEALTH AND HEALTH PROFESSIONS

Dean Michael G. Perri

DOCTOR OF PHYSICAL THERAPY

Melissa S. Balbirer  
Hannah Benoit Belles  
Alisa M. Bhagat  
Brandi Marie Black  
Luke Harrison Brown  
Christopher Michael Bruscatto  
Regina Camberos Rios  
Aaron Andrew Capera  
Ioana Daniela Cardeli  
Nicole S. Casagrand  
Rebecca E. Chamberlain  
Nicole Diane Chase  

Tommy Leon Coffey Jr.  
Andrew Francis Collins  
Korey D. Cooke  
Sarah Burton Cooke  
Nicole Cox  
Anna C. Davis  
Courtney Taylor Deason  
Erin Lee Dickson  
Abby E. Dillard  
Seth M. Donelson  
Soha Elsayed  
Eleyn B. Fangonilo

Renée Lynn Fontana  
Alexander deHeptner Franklin  
Mariana Rita Franz  
Allison Elizabeth Gaia  
Adriana Lynn Garcia  
Flora Virginia Eleace Gatewood  
Mutsa Mary Godza  
Ryan E. Guettler  
Katherine Broomfield Ihlenfeldt  
Katherine M. Inzerto  
Alison Lynn Irwin  
Jacob R. Irwin
Chain of Office

This custom-made ornament is worn with the president’s regalia, symbolizing the authority and responsibilities of the office. The chain is engraved with the names and service years of the university presidents. The medallion’s centerpiece is a 1.3-carat diamond.

Academic Mace

Dating back to the Middle Ages, the mace symbolizes strength and authority. The UF ceremonial mace was created for the university’s sesquicentennial celebration in 2003. The 70-inch staff features an alligator sitting atop a globe. The four pillars supporting the globe represent the four original colleges: Agriculture, Engineering, Law, and Liberal Arts. The staff is carved from cherry wood. The university’s chief marshal, who leads all academic processions, carries the mace.

Diplomas

Diplomas will be mailed to the graduate’s diploma mailing address in June 2020.
Caps and Gowns, An Explanation

The academic regalia worn by graduating students and faculty at today’s commencement ceremonies evolved from a style of dress worn by members of guilds and religious orders in medieval times. The academic gown is worn by individuals who have earned a degree in higher education. In addition, hoods are worn by graduate degree candidates, but not by undergraduate degree candidates.

At the University of Florida, the lining of the hood has a blue chevron on an orange background to represent the university colors. University faculty members who hold degrees from another college or university wear the colors of their alma mater.

The velvet edging on the academic hood is the color that represents the particular degree held by the wearer. Agricultural and Life Sciences and Forest Resources and Conservation share maize edging; Design, Construction and Planning and Building Construction are blue violet; Audiology degrees have colonial blue edging; Business Administration and Accounting are drab; Dentistry is lilac; Education is light blue; Engineering degrees are represented by orange edging; Fine Arts degrees have brown edging; Health and Human Performance is sage green; Journalism and Communications is garnet; Law is purple; Liberal Arts is white and Liberal Sciences is gold yellow; Medicine is green; Music is pink; Natural Resources and Environment is antique gold; Nursing is apricot; Doctor of Pharmacy is olive; Philosophy is royal blue; Public Health degrees have salmon pink edging; Rehabilitation Counseling degrees have Nile green edging; and Veterinary Medicine is gray.

Distinctions among sleeves indicate the type of degree held by the wearer. A long, pointed sleeve indicates a bachelor’s degree, while a long, closed sleeve with a slit near the upper part of the arm designates a master’s degree. A round, open sleeve identifies a doctoral degree.

The blue doctoral regalia also has velvet running on the rest of the gown, including crossbars on the sleeve. Colored tassels on the degree candidates’ caps indicate a candidate’s school or college.
Alma Mater

*Florida, our Alma Mater*
*Thy glorious name we praise*
*All thy loyal sons and daughters*
*A joyous song shall raise.*
*Where palm and pine are blowing,*
*Where southern seas are flowing,*
*Shine forth thy noble Gothic walls,*
*Thy lovely vine-clad halls.*
*Neath the Orange and Blue victorious*
*Our love shall never fail.*
*There’s no other name so glorious-*
*All hail, Florida, Hail!*

Milton Yeats