

Commencement

UF | UNIVERSITY *of*
FLORIDA

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.

Commencement
FALL 2020



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 Linda Moskeland Fuchs, an art historian. The Fuchs family has 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.



2020 FALL

COMMENCEMENT

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Leonard H. Johnson

Daniel T. O’Keefe

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Trevor J. Pope

Marsha D. Powers

Jason J. Rosenberg

Anita G. Zucker

President and Vice Presidents of the University

W. Kent Fuchs, Ph.D.

President

Joseph Glover, Ph.D.

Provost and Senior Vice President - Academic Affairs

Chris Cowen, M.B.A.

Senior Vice President and Chief Financial Officer

Charles E. Lane, D.P.A.

Senior Vice President and Chief Operating Officer - Administration

David R. Nelson, M.D.

Senior Vice President - Health Affairs

J. Scott Angle, Ph.D.

Vice President - Agriculture and Natural Resources

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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 - 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. Ozuzu, M.F.A.

College of the Arts

Sabyasachi Mitra, 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. Rosenbury, J.D.

Fredric G. Levin College of Law

David E. Richardson, Ph.D.

College of Liberal Arts and Sciences

J. 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.

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

GRADUATE SCHOOL

HENRY T. FRIERSON, ASSOCIATE VICE PRESIDENT AND DEAN OF THE GRADUATE SCHOOL

DOCTOR OF PHILOSOPHY

Kimberly Paige Boatright Abbott

Major: *Anthropology*

Dissertation: Repressed Memory of Slavery in Antebellum Plantation Sites: Writing against Whitewashing

Dissertation Chair: P. R. Schmidt

Dissertation Co-chair: M. J. Heckenberger

Ali H. Abdulrahim

Major: *Mechanical Engineering*

Dissertation: Thermodynamic Analysis of Conventional and Alternative Energy Conversion Pathways for the Simultaneous Generation of Power and Desalination of Water in Kuwait

Dissertation Chair: J. N. Chung

Nicholas J. Abuid

Major: *Biomedical Engineering*

Dissertation: Engineering Cerium Oxide Nanoparticle Coatings for Antioxidant/Anti-Inflammatory Protection of Biomaterials and Tissue Grafts

Dissertation Chair: C. Stabler Anderson

Alireza Adibfar

Major: *Design, Construction and Planning*

Dissertation: Fusion of Intelligent Transportation Systems (ITS) Data and Bridge Information Modeling (BrIM) for Interoperability of Sensor Data

Dissertation Chair: A. M. Costin

Elijah Odhiambo Adongo

Major: *Music Education*

Dissertation: Pedagogical Strategies for Developing Style(s) and Conceptual Knowledge of Contemporary African Choral Music

Dissertation Chair: M. M. Davitt

Tanvi Anil Ajantiwalay

Major: *Materials Science and Engineering*

Dissertation: In-situ Micromechanical Characterization of Proton-Irradiated Structural Steels for Generation-IV Reactors

Dissertation Chair: A. Aitkaliyeva

Ali Kareem Shayyish Al Quarishi

Major: *Environmental Engineering Sciences*

Dissertation: Ecohydrological Degradation and Restoration of the Mesopotamian Marshlands

Dissertation Chair: D. A. Kaplan

Yasmine A. Alabbasi

Major: *Nursing Sciences*

Dissertation: Maternal Voice Exposure and Its Effect on Respiratory Support and Feeding Milestones in Premature Infants

Dissertation Chair: C. A. Krueger

Abdulrahman M. Alaqf

Major: *Electrical and Computer Engineering*

Dissertation: Scalable and Robust Hardware IP Protection

Dissertation Chair: S. Bhunia

Arash Alborzi

Major: *Design, Construction and Planning*

Dissertation: Feasibility of Urban Agriculture in Existing Cities: The Case of Gainesville, Florida

Dissertation Chair: M. A. Gold

Ricardo Iván Alcalá Briseño

Major: *Plant Pathology*

Dissertation: Virome Network Analysis: A Network Framework for Studying Landscape Agroecology of Plant Viromes for Disease Management

Dissertation Chair: K. A. Garrett

Jose Daniel Alcantara

Major: *Biomedical Engineering*

Dissertation: Self-Induced Neural Modulation under Real-Time Neurofeedback for Stereotactic Electroencephalography

Dissertation Chair: A. Gunduz

Rawan Aldhabi

Major: *Rehabilitation Science*

Dissertation: The Effect of Hip Abductor Muscles' Strength on Balance and Gait following Total Knee Arthroplasty

Dissertation Chair: M. Horodyski

Sulaiman K. Al-Qallaf

Major: *Chemical Engineering*

Dissertation: Offset Free Model Predictive Control Design, Analysis, and State Estimation

Dissertation Chair: O. D. Crisalle

David M. Anderson

Major: *Zoology*

Dissertation: Broad Scale Perspectives on the Interplay between Life History and Population Ecology

Dissertation Chair: J. F. Gillooly

Wesley Michael Anderson

Major: *Wildlife Ecology and Conservation*

Dissertation: Impacts of an Invasive Ecosystem Engineer upon Wetlands and Aquatic Communities across a Subtropical Agroecosystem

Dissertation Chair: R. K. Boughton

Jacob T. Andring

Major: *Medical Sciences—Biochemistry and Molecular Biology*

Dissertation: Mechanism and Inhibition of Carbonic Anhydrase

Dissertation Chair: R. McKenna

Aline Fabiana Angotti Carrara

Major: *Geography*

Dissertation: The Struggle for Indigenous Territory in the Brazilian Amazon

Dissertation Chair: R. T. Walker

Dissertation Co-chair: C. S. Simmons

Malak Anshassi

Major: *Environmental Engineering Sciences*

Dissertation: Evaluating the Use of Sustainable Materials Management in Rethinking Solid Waste Management and Policies

Dissertation Chair: T. G. Townsend

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

Scott D. Augustine

Major: *Environmental Engineering Sciences*

Dissertation: Novel Methods for Quantifying Vertical Darcy Flux at the Surface Water-Groundwater Sediment Interface

Dissertation Chair: M. D. Annable

Steevie Lyn Bailey

Major: *Counseling and Counselor Education*

Dissertation: Correctional Officer Perceptions of a Prison-Based Animal Program Implemented at a Southern U.S. Correctional Facility

Dissertation Chair: J. Swank

Enrico Rey Barrozo

Major: *Genetics and Genomics*

Dissertation: Defining Herpes Simplex Virus 1 Latency One Cell at a Time

Dissertation Chair: D. C. Bloom

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

Shinibali Bhattacharyya

Major: *Physics*

Dissertation: Effects of Electronic Correlations on Physical Properties of Unconventional Superconductors

Dissertation Chair: P. J. Hirschfeld

Shaheen Bibi

Major: *Plant Pathology*

Dissertation: Role of Metals in Plant-Microbe Interactions

Dissertation Chair: J. B. Jones

Dissertation Co-chair: G. S. Ali

Waleed Abdulrahman Z. Bin Masoud

Major: *Agricultural and Biological Engineering*

Dissertation: Improving the Efficiency to Cool Greenhouses through the Use of a Liquid Desiccant and Regeneration System

Dissertation Chair: M. J. Correll

Dissertation Co-chair: R. A. Bucklin

Nichole Danielle Bishop

Major: *Interdisciplinary Ecology*

Dissertation: A Nutritional Ecology Study of *Dermatemys mawii*, A Critically Endangered Species of Fresh-Water Turtle Endemic to Central America

Dissertation Chair: R. R. Carthy

Dissertation Co-chair: K. A. Bjorndal

Alexandra Bitton Bailey

Major: *Higher Education Administration*

Dissertation: A Phenomenological Study of New and Early Career Faculty in an Accelerated Faculty Learning Community

Dissertation Chair: C. Haynes

John Konuk Blasing

Major: *Sociology*

Dissertation: Sports, Nationalism, and Globalization: An Ethnography of Turkish Football Fandom

Dissertation Chair: T. Sorek

Ellen Kathleen Bledsoe

Major: *Interdisciplinary Ecology*

Dissertation: The Role of Patch- and Landscape-Level Processes in Shaping Desert Rodent Communities

Dissertation Chair: S. K. Ernest

Ke Bo

Major: *Biomedical Engineering*
Dissertation: Neural Mechanism of Affective Scene Perception
Dissertation Chair: M. Ding

Eve Bohnett

Major: *Design, Construction and Planning*
Dissertation: Assessing Landscape Biodiversity Using Complex Spatio-Temporal Models
Dissertation Chair: T. S. Hoctor

Josephine Michelle Brown

Major: *Medical Sciences—Immunology and Microbiology*
Dissertation: Skewed Tryptophan Metabolism Contributes to Disease Pathogenesis in a Lupus-Prone Mouse Model by Impacting T Cell Phenotypes
Dissertation Chair: L. M. Morel

Khlood Saleh Bubshait

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

Taylor Lynae Buchanan

Major: *Health and Human Performance*
Dissertation: Motor Performance Outcomes following Changes in Breathing Frequency
Dissertation Chair: C. M. Janelle

John M. Cain

Major: *Chemistry*
Dissertation: Mechanisms for Emergent Behavior Derived from Interface Strain in Nanoscale Spin Transition Heterostructures
Dissertation Chair: D. R. Talham

Gabriel E. Campbell

Major: *Horticultural Sciences—Environmental Horticulture*
Dissertation: Conservation, Greenhouse Production, and Restoration Outplantings of Sandhill Milkweed (*Asclepias humistrata*)
Dissertation Chair: M. Thetford
Dissertation Co-chair: D. L. Miller

Sean Michael Campbell

Major: *Horticultural Sciences—Environmental Horticulture*
Dissertation: Butterfly Pea (*Clitoria ternatea*) Growth, Development, and Flower Production and Quality in Florida and North America
Dissertation Chair: B. J. Pearson
Dissertation Co-chair: S. C. Marble

Clímaco David Cañarte Gutiérrez

Major: *Sociology*
Dissertation: Migration, Social Support, and Health in Immigrant Communities: A Study on Roma in France and Immigrant Farmworkers in Florida
Dissertation Chair: R. Vacca

Francesco Cappai

Major: *Plant Molecular and Cellular Biology*
Dissertation: Developing Advanced Genetic, Tissue Culture and Molecular Technologies to Enable Machine Harvesting in Low-Chill Blueberry (*Vaccinium corymbosum* L.)
Dissertation Chair: P. R. Muñoz

Nathan Scott Catlin

Major: *Botany*
Dissertation: Conserved Alternative Splicing and Its Interplay with Gene Duplication and Population Evolution
Dissertation Chair: W. B. Barbazuk

Subodha Charles

Major: *Computer Science*

Dissertation: Design of Secure and Trustworthy Network-On-Chip Architectures

Dissertation Chair: P. K. Mishra

Vratika Chaudhary

Major: *Wildlife Ecology and Conservation*

Dissertation: State Uncertainty across Scales—From Pathogens in Individuals to a Community of Mammals

Dissertation Chair: M. K. Oli

Dissertation Co-chair: V. R. Goswami

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

Timothy Dale Clingenpeel

Major: *Electrical and Computer Engineering*

Dissertation: Nano-Layered Nonmagnetic/Ferromagnetic Metaconductors for Energy Efficient Radio Frequency Passives

Dissertation Chair: Y. K. Yoon

Samantha W. Coberly

Major: *Anthropology*

Dissertation: Broken Hearts and Broken Ribs an Examination of Gunshot Wounds to the Neck and Torso

Dissertation Chair: J. Krigbaum

Conrad R. Cole

Major: *Mechanical Engineering*

Dissertation: Thermodynamic Analysis of Oxygen Vacancy Formation Reaction in Nonstoichiometric Oxides for Solar Energy Conversion and Storage

Dissertation Chair: D. W. Hahn

Dissertation Co-chair: C. Taylor

Evan M. Craig

Major: *Microbiology and Cell Science*

Dissertation: Evaluation of Retro-2 Structural Activity Relationship Analogs and Polymer Encapsulation Procedures for Improvement of Treatment Efficacy against *Leishmania* Sp. Infection

Dissertation Chair: P. E. Kima

Stephen J. Crawford

Major: *Civil Engineering*

Dissertation: Development of Bearing Capacity Factors and LRFD Load and Resistance Factors for Shallow Foundations Subjected to Combined Lateral and Axial Loading

Dissertation Chair: M. C. McVay

Dissertation Co-chair: S. J. Wasman

Lais Da Silva

Major: *Pharmaceutical Sciences*

Dissertation: Therapeutic Impairment of Acinar Ductal Metaplasia in Murine Pancreatic Three-Dimensional Organoids

Dissertation Chair: T. D. Schmittgen

Anis Davoudi

Major: *Biomedical Engineering*

Dissertation: Intelligent Monitoring of Patients in the Acute Care Setting

Dissertation Chair: P. Rashidi

Afiya Shalla De Sormeaux

Major: *Agricultural Education and Communication*

Dissertation: Food Waste Behavior among College Students—Drivers and Communication Strategies

Dissertation Chair: L. K. Lundy

Alia N. DeLong

Major: *Interdisciplinary Ecology*

Dissertation: Farmer Decision-Making: A New Generation of New and Beginning Farmers

Dissertation Chair: M. E. Swisher

Dissertation Co-chair: C. A. Chase

Kelly M. DeMars

Major: *Medical Sciences—Neuroscience*

Dissertation: Blocking BET Protein Activity is Neuroprotective in Ischemic Stroke

Dissertation Chair: E. J. Candelario Jalil

David T. Dillon

Major: *Anthropology*

Dissertation: Risk Perceptions as Potential Mediators of Environmental Toxicants Associated with Biomass Fuel Use

Dissertation Chair: C. McCarty

Florian Diot-Néant

Major: *Chemistry*

Dissertation: Green Synthesis of Bio-Based Monomers from Cellulose-Based Levoglucosenone and Preparation of Polyacrylates and Polyesters: Investigating More Sustainable Materials

Dissertation Chair: S. A. Miller

Elliott William Dirr

Major: *Biomedical Engineering*

Dissertation: Treatment of Cardiometabolic Dysfunction Using Targeted Parasympathetic Neuromodulation

Dissertation Chair: K. Otto

Bayli B. DiVita Dean

Major: *Medical Sciences—Immunology and Microbiology*

Dissertation: Gliomas Alter HSPC Gene Expression and Impact the Immune System

Dissertation Chair: C. Flores

Erica E. Dolinting

Major: *Health and Human Performance*

Dissertation: Message Appeals on Information Sharing and Giving Behaviors in Charity Running Events for Homeless People: The Roles of Elevation and Trust Propensity

Dissertation Chair: Y. J. Ko

Yuzhu Dong

Major: *Human-Centered Computing*

Dissertation: Expressive Eyes and Bodies: Tracking, Algorithms, Evaluation

Dissertation Chair: E. Jain

Jacqueline A. Donovan

Major: *Higher Education Administration*

Dissertation: Essays on the Community College Baccalaureate: A Multi-Level Policy Analysis

Dissertation Chair: D. A. Kramer

Ana Paula Dos Santos De Carvalho

Major: *Entomology and Nematology*

Dissertation: The Evolution of the Sphragis in Butterflies

Dissertation Chair: A. Kawahara

Stefanie Kathrin Drescher

Major: *Pharmaceutical Sciences*

Dissertation: Evaluating the Pulmonary Fate of Inhaled Therapeutics via Computational Modeling

Dissertation Chair: G. Hochhaus

Dissertation Co-chair: J. B. Bulitta

Xiaochen Du

Major: *Curriculum and Instruction*

Dissertation: English Speaking Students' Learning Experiences in a Dual Language Immersion Program

Dissertation Chair: D. Fu

Shiyu Duan

Major: *Electrical and Computer Engineering*

Dissertation: Unifying Kernel Methods and Neural Networks and Modularizing Deep Learning

Dissertation Chair: J. C. Príncipe

Lisa G. Duffy

Major: *Anthropology*

Dissertation: Using Residue Analysis to Explore Ancient Maya Recipes and Food-Processing Technology

Dissertation Chair: K. F. Emery

Stacey Lyn Ellison

Major: *Agricultural Education and Communication*

Dissertation: Assessing Work Engagement among UF/IFAS Extension Agents Using the Utrecht Work Engagement Scale

Dissertation Chair: A. M. Harder

Gayle Nelson Evans

Major: *Curriculum and Instruction*

Dissertation: Characterization of Social Network Formation and Associated Mentoring Functions in a Summer Research Experience for Teachers

Dissertation Chair: K. J. Crippen

Feifei Fan

Major: *Curriculum and Instruction*

Dissertation: When East Meets West: Exploring Identities of Chinese ESOL Teacher Candidates in the U.S.-Based Practicum

Dissertation Chair: E. J. De Jong

Ziqi Fan

Major: *Electrical and Computer Engineering*

Dissertation: Implementation of a Parallel Broadband Numerical Solver for Helmholtz Equation Using Fast Multipole Boundary Element Method on Heterogeneous Systems and Its Application to Simulation of Head-Related Transfer Functions

Dissertation Chair: K. McMullen

Shaheen Farhadi

Major: *Biomedical Engineering*

Dissertation: Synthetic Control of Galectin-3 Oligomerization: Emerging Concepts and Biomedical Applications

Dissertation Chair: G. Hudalla

Tiffany Leigh Fisher

Major: *Special Education*

Minor: *Research and Evaluation Methodology*

Dissertation: Roles and Preparedness in Multi-Tiered Systems of Support: A Survey of Florida Elementary Special Educators

Dissertation Chair: P. T. Sindelar

Brett A. Fleisher

Major: *Pharmaceutical Sciences*

Dissertation: Systems-Based Modeling Approaches for Improving Triple-Negative Breast Cancer Patients' Outcomes

Dissertation Chair: J. B. Bulitta

Zhenyu Fu

Major: *Nuclear Engineering Sciences*

Dissertation: Understanding the Microstructure and Fission Products of Post-Irradiated TRISO Fuel

Dissertation Chair: Y. Yang

Dissertation Co-chair: I. Van Rooyen

Rodrigo Furtado Dos Santos

Major: *Plant Molecular and Cellular Biology*

Dissertation: Optimizing Genome-Wide Selection for Forest Tree Breeding

Dissertation Chair: M. Kirst

Dissertation Co-chair: M. F. Ribeiro De Resende Jr.

Murielle Gammons

Major: *Higher Education Administration*

Minor: *Leadership Development*

Dissertation: Them in STEM: Experiences that Impact Persistence for 8 First-Generation African-American Engineering Students at 4 Predominantly White Institutions

Dissertation Chair: C. Haynes

Aasrith Ganti

Major: *Electrical and Computer Engineering*

Dissertation: Wireless Power in the MRI System

Dissertation Chair: J. Lin

Drake Mitchel Ginter Garner

Major: *Plant Molecular and Cellular Biology*

Dissertation: Understanding How Environmental Treatments Affect Floral Volatiles, Investigating Possible Commercial Applications, and Bringing Model Science into Education

Dissertation Chair: T. A. Colquhoun

Dissertation Co-chair: K. M. Folta

Callie Elizabeth Gilchrest

Major: *School Psychology*

Dissertation: Preschooler Executive Functioning and Teachers' Perceptions of Student-Teacher Relationships

Dissertation Chair: T. M. Smith-Bonahue

Scarlett Godinez

Major: *Chemistry*

Dissertation: Modification of Thiol-ene Films for Improved Material Properties

Dissertation Chair: V. D. Kleiman

Melissa Gonzalez

Major: *School Psychology*

Dissertation: Lived Experiences of the Diagnostic Process and Symptom Interpretation among Puerto Rican Mothers with a Child with Autism Spectrum Disorder

Dissertation Chair: T. M. Smith-Bonahue

Kyle Brandon Griffin

Major: *Agricultural and Biological Engineering*

Dissertation: A Kinetic Model for *Methylosinus trichosporium* OB3b Utilization of Synthetic Food Waste-Derived Biogas for Growth and Polyhydroxybutyrate Production

Dissertation Chair: P. C. Pullammanappallil

Dissertation Co-chair: S. A. Svoronos

Adam Blaine Grossman

Major: *Microbiology and Cell Science*

Dissertation: Global Dysregulation of *Staphylococcus aureus* Homeostasis from Treatment with Soluble Lignin

Dissertation Chair: K. C. Rice

Dissertation Co-chair: W. Vermerris

Zhen Guan

Major: *Forest Resources and Conservation*

Dissertation: Using High-Resolution Ground-Based Imagery for Strawberry Biophysical Parameter Estimation and Radiative Transfer Modeling

Dissertation Chair: A. H. Abd-Elrahman

Yu Han

Major: *Design, Construction and Planning*

Dissertation: Agent-Based Modeling of Human-Environment Interactions in Coastal Flood Adaptation

Dissertation Chair: Z. R. Peng

Natalie Ann Harrison

Major: *Microbiology and Cell Science*

Dissertation: *Lactobacillus johnsonii* N6.2-Derived Nanovesicle Components as Driving Factors to T1D Prevention

Dissertation Chair: G. L. Lorca

Kelly Ann Hawkins

Major: *Rehabilitation Science*

Dissertation: Walking Control after Stroke and the Feasibility of Transcutaneous Spinal Direct Current Stimulation during Locomotor Training after Spinal Cord Injury

Dissertation Chair: E. J. Fox

Ru He

Major: *Chemistry*

Dissertation: Novel Trans-N-Heterocyclic Carbene Platinum(II) Complexes

Dissertation Chair: K. S. Schanze

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

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

Charles D. Hernandez

Major: *Industrial and Systems Engineering*

Dissertation: Data Driven Optimization and Its Applications

Dissertation Chair: H. Liu

Dissertation Co-chair: E. Akcali

Viyaktha Hithaishi Hewageegana

Major: *Coastal and Oceanographic Engineering*

Dissertation: Improving the Modeling of Onshore Sandbar Migration and Beach Recovery

Dissertation Chair: A. Canestrelli

Jessica N. Hightower

Major: *Interdisciplinary Ecology*

Dissertation: The Response of Bird Communities to Logging, Fragmentation, and Conversion to Oil Palm Plantations in Borneo

Dissertation Chair: R. J. Fletcher Jr.

Harold Allen Hollis

Major: *Physics*

Dissertation: Data Analysis, Mirror Coating Design, and Custom Electronics for the Any Light Particle Search Experiment

Dissertation Chair: G. Mueller

Xiaohui Huang

Major: *Computer Science*

Dissertation: Video-Based Machine Learning for Intelligent Transportation Systems

Dissertation Chair: S. Ranka

Dissertation Co-chair: A. Rangarajan

Tony Harvey Hughes

Major: *Entomology and Nematology*

Dissertation: Ground-Dwelling Ant (Hymenoptera: Formicidae) Composition, Distribution, and Diversity in Relation to Vegetation and Habitat Quality of Protected Longleaf Pine Forests in Florida Sandhills

Dissertation Chair: P. G. Koehler

Mary Elizabeth Ibarrola

Major: *Anthropology*

Dissertation: Placemaking in the Borderland: An Archaeological Perspective on the African Diaspora within Colonial Florida

Dissertation Chair: J. M. Davidson

Lorelie Dela Fuente Imperial

Major: *Curriculum and Instruction*

Dissertation: A Sensemaking Perspective on Graduate Teaching Assistants' Knowing and Planning for Model-Based Reasoning

Dissertation Chair: K. J. Crippen

Fernanda Iruegas Bocardo

Major: *Plant Pathology*

Dissertation: Population Biology Study of *Xanthomonas euvesicatoria* and *X. perforans* in Florida

Dissertation Chair: E. M. Goss

Fatemah A. Jamal

Major: *Interdisciplinary Ecology*

Dissertation: Ecology and Systematics of Irregular Echinoids (Echinoids, Echinodermata) and Associated Pea Crabs (Crustacea, Arthropoda) from the Gulf of Mexico and Bahamas

Dissertation Chair: M. Kowalewski

Johanna Ruth Jantzen

Major: *Botany*

Dissertation: Evolution of Neotropical *Tibouchina sensu stricto* (Melastomataceae)

Dissertation Chair: P. S. Soltis

Dissertation Co-chair: D. E. Soltis

SuKyung Jeon

Major: *Chemistry*

Dissertation: Design and Synthesis of Different Heterostructures Using Prussian Blue Analogues

Dissertation Chair: D. R. Talham

Xinyi Jiang

Major: *Pharmaceutical Sciences—Pharmaceutical Outcomes and Policy*

Dissertation: The Cascade of Hepatitis C Virus Care among Individuals with Substance Use Disorders

Dissertation Chair: H. Park

Hailey A. Johnson

Major: *Geology*

Minor: *Curriculum and Instruction*

Minor: *Electrical and Computer Engineering*

Dissertation: Reusable Geoscientific Software Design and Applications in Coastal Morphology Research and Education

Dissertation Chair: P. N. Adams

Dissertation Co-chair: J. A. Fortes

Verlin W. Joseph

Major: *Epidemiology*

Dissertation: Marijuana Use, Pain, and Symptoms of Cannabis Use Disorder among PLWH: A Mixed Methods Approach

Dissertation Chair: R. L. Cook

Congwen Kan

Major: *Design, Construction and Planning*

Dissertation: A Cyber-Physical Systems (CPS) Approach to Planning and Operation of Mobile Cranes

Dissertation Chair: C. J. Anumba

Renita Kay Kastner Wilcox

Major: *Soil and Water Sciences*

Dissertation: Multidisciplinary Modeling to Explore the Risk Perception of Soil Degradation and the Eco-Efficiency of Phosphorus in South Florida

Dissertation Chair: S. Gerber

Mahshad Kazem Zadeh

Major: *Design, Construction and Planning*

Dissertation: Uncovering Myths and Realities of Nurses' Perceptions of Safe Patient Rooms for Fall-Risk Patients: A Comparative Analysis of Space Syntax and Nurses' Perceptions

Dissertation Chair: S. Ahrentzen

Colin Patrick Kearney

Major: *Mass Communication*

Dissertation: Regionalism in Prime-Time: An Examination of the American South on Television

Dissertation Chair: R. Rodgers

Robin Hendrikus Johannes Kemperman

Major: *Chemistry*

Dissertation: Enhanced Confidence in Metabolite Identification and Innovative Approaches for Improved Ion Mobility Separations

Dissertation Chair: R. A. Yost

Alexandria Elizabeth Kesterson

Major: *Medical Sciences—Immunology and Microbiology*

Dissertation: Ciprofloxacin Immunomodulatory Properties in a Pneumonic Model of *Yersinia pestis*

Dissertation Chair: C. H. Heine

Kwanmok Kim

Major: *Interdisciplinary Ecology*

Dissertation: How Does Structural Complexity Affect Species Composition

Dissertation Chair: P. C. Frederick

Jeannie M. Klein-Gordon

Major: *Plant Pathology*

Dissertation: *Xanthomonas perforans*: Population Shifts over Time in Florida and Exploration of Secret Weapons for Keeping Its Competitors at Bay

Dissertation Chair: E. M. Goss

Dissertation Co-chair: J. B. Jones

James William Kline

Major: *Curriculum and Instruction*

Dissertation: Educational Technology Project Management Effectiveness Factors across Industry Sectors: A Web-Based Classical Delphi Study

Dissertation Chair: A. D. Ritzhaupt

Unmesh Koirala

Major: *Forest Resources and Conservation*

Dissertation: Economic Feasibility of Incentivizing Farm/Forest Water Conservation-Based Practices in the Upper Floridan Aquifer

Dissertation Chair: D. Adams

Leslie M. Kollar

Major: *Botany*

Dissertation: The Genetic Basis of Volatile Production in the Moss *Ceratodon purpureus*

Dissertation Chair: S. McDaniel

Venkata Surya Chaitanya Kolluru

Major: *Materials Science and Engineering*

Dissertation: Computational Methods and Algorithms for the Prediction of Surface Structures and Properties

Dissertation Chair: R. Hennig

Sara J. Komenda

Major: *Forest Resources and Conservation*

Dissertation: Exploring the Use of Smart Irrigation Systems for Residential Water Conservation

Dissertation Chair: M. C. Monroe

Tadbhagya Kumar

Major: *Mechanical Engineering*

Dissertation: Eulerian Thermo-Mechanical Simulations of Heterogeneous Solid Propellants Using an Approximate Projection Method

Dissertation Chair: T. L. Jackson

Ethan Kutlu

Major: *Linguistics*

Dissertation: Perception in Context: The Effect of Multilingualism and Race on Accentedness Judgments

Dissertation Chair: S. Wulff

Faith N. Lambert

Major: *Veterinary Medical Sciences*

Dissertation: The Endocrine Disrupting Effects of Select Ultraviolet-Filters to *Daphnia magna* and Novel Methods for Determining Endocrine Disruption in Arthropods

Dissertation Chair: C. D. Vulpe

Kalindhi A. Larios Mendieta

Major: *Soil and Water Sciences*

Dissertation: Exploration of Phosphorus Fluxes in the Everglades Stormwater Treatment Areas Using a System Dynamics Approach

Dissertation Chair: S. Gerber

Kangjae Lee

Major: *Mechanical Engineering*

Dissertation: A Laser-Based Heating System Coupled with In-Operando Raman Spectroscopy for Studying Solar Thermochemical Redox Cycles of Ceria and LSM Perovskites

Dissertation Chair: J. Scheffe

Michele Catherine Lee

Major: *English*

Dissertation: Drawing the Boundaries of a Genre: Defining the Asian American Children's Novel

Dissertation Chair: K. B. Kidd

Sang-Bin Lee

Major: *Entomology and Nematology*

Dissertation: Task Allocation, Age Polyethism and Foraging Behaviors of the Formosan Subterranean Termite

Dissertation Chair: N. Su

Allison Jane Levy

Major: *Chemistry*

Dissertation: Anabolic Steroids: Cationization, Dimerization, and Ion Mobility Separation

Dissertation Chair: R. A. Yost

Jingwei Li

Major: *Curriculum and Instruction*

Dissertation: Elementary Students' Mathematics Learning and Anxiety in a Game-Based Adaptive Learning Platform: An Individual Differences Perspective

Dissertation Chair: P. Antonenko

Ying Li

Major: *Medical Sciences—Immunology and Microbiology*

Dissertation: The Mechanistic Study of Host Adaptive Immune Response to Encapsulated Cell Grafts Using Antigen-Specific in vitro Model

Dissertation Chair: C. Stabler Anderson

Jiapu Liang

Major: *Biomedical Engineering*

Dissertation: Engineering a Favorable Microenvironment for Islet Transplantation within an Extrahepatic Site

Dissertation Chair: C. Stabler Anderson

Peter Robert Licari

Major: *Political Science*

Dissertation: Press B to March: The Effects of Video Games on Political Behavior

Dissertation Chair: M. D. Martinez

Catherine Lippi

Major: *Geography*

Minor: *Entomology and Nematology*

Dissertation: Leveraging Mosquito Surveillance and Epidemiological Data to Inform Public Health Response: A Spatial Statistics Framework for Arbovirus Management and Vector Control in Ecuador

Dissertation Chair: S. J. Ryan

Kai Liu

Major: *Mechanical Engineering*

Dissertation: Systematic Evaluation and Improvement of Euler-Lagrange Methodology: Application to Spray Control

Dissertation Chair: S. Balachandar

Jasmine Lopez

Major: *Horticultural Sciences*

Dissertation: Discovery, Fine Mapping, and Characterization of Graywall Resistance Loci in Tomato

Dissertation Chair: S. F. Hutton

Shihan Ma

Major: *Health and Human Performance*

Dissertation: Tourist Perception and Response to Climate Change: A Big Data Analysis on Tourist Social Media

Dissertation Chair: A. P. Kirilenko

Conor MacDonnell

Major: *Soil and Water Sciences*

Dissertation: An Investigation of Physical and Chemical Restoration Techniques on the Success and Biogeochemistry of Subtropical Seagrass Ecosystems

Dissertation Chair: P. W. Inglett

Naja Amanda Mack

Major: *Human-Centered Computing*

Dissertation: Icon History: An Intelligent Conversational History Tutor

Dissertation Chair: J. E. Gilbert

Mhairi Katriona MacLean

Major: *Biomedical Engineering*

Dissertation: Biomechanics of Walking with Mechanical Assistance: From a Robotic Exoskeleton or Partial Bodyweight Support

Dissertation Chair: D. P. Ferris

Hoda Manafian

Major: *Health and Human Performance*

Dissertation: Agritourism Development: Definition, Preferences, and Spatial Distribution in Florida

Dissertation Chair: H. J. Gibson

Dissertation Co-chair: A. M. Almeyda Zambrano

Paige Elizabeth Mandelare-Ruiz

Major: *Chemistry*

Dissertation: Chemical Signaling in Marine Fungal and Coral Systems

Dissertation Chair: S. Loesgen

Sergio Marconi

Major: *Interdisciplinary Ecology*

Dissertation: Disentangling the Role of Ecological Drivers on Forest Biological Dimensions across Scales

Dissertation Chair: E. P. White

Felicien Masanga Maisha Sr.

Major: *Anthropology*

Dissertation: Exploring Manhood, Masculinities and the Roles of Men regarding Pregnancy and Childbirth in a Humanitarianized War Zone of Eastern Democratic Republic of Congo

Dissertation Chair: A. E. Strong

Dissertation Co-chair: C. J. Mulligan

Joseph Thomas McNeil

Major: *Physics*

Dissertation: Branching Ratio Measurements of Ξ_c^0 Decays Using Amplitude Analysis Techniques at Belle and Belle II

Dissertation Chair: J. M. Yelton

Vikram Dilip Mehar

Major: *Chemical Engineering*

Dissertation: Structure and Reactivity of Palladium Oxides and Palladium - Silver Oxide Bimetallic Interfaces

Dissertation Chair: J. F. Weaver

Daniel C. Melear

Major: *Counseling and Counselor Education*

Dissertation: A Grounded Theory of How Couple Counselors Understand Apology and Adaptive Shame in Relationship Repair with Couples Facing Infidelity

Dissertation Chair: S. L. Smith

Shashank Menon

Major: *Civil Engineering*

Dissertation: Multiphysics Induced Failure in Porous Media under Static and Dynamic Conditions

Dissertation Chair: X. Song

Mouloud Messaoudi

Major: *Design, Construction and Planning*

Dissertation: BIM-Based Virtual Permitting Review Process for Residential Building in the State of Florida

Dissertation Chair: N. O. Nawari

Sreenivasan Meyyappan

Major: *Biomedical Engineering*

Dissertation: Neuronal Mechanisms of Spatial and Feature Attention Control

Dissertation Chair: M. Ding

Patrick Devin Milligan

Major: *Zoology*

Dissertation: Carbon Fixation and Plant Performance for an East African Ant-Plant Occupied by Native and Invasive Ants

Dissertation Chair: T. Palmer

Katsutoshi Mizuta

Major: *Soil and Water Sciences*

Minor: *Food and Resource Economics*

Dissertation: Interfacing Pedometrics and Econometrics to Model the Efficiency of Soil-Ecosystem Functions at Regional Scale

Dissertation Chair: S. Grunwald

Shirley Nelly Morque

Major: *Design, Construction and Planning*

Dissertation: Towards a Sustainable Water Environment Assessing the Water Cycle Impacts of Residential Water Demands in a Municipal Water Supply and Treatment System: Model Development, Implementation, and Case Studies

Dissertation Chair: R. Ries

Hossein Mosavi

Major: *Civil Engineering*

Dissertation: Long-Term Electrical and Transport Properties of Concrete

Dissertation Chair: K. A. Riding

Mohammad Moulod

Major: *Mechanical Engineering*

Dissertation: Science and Engineering of a Wearable Artificial Kidney

Dissertation Chair: S. Moghaddam

Mitch R. Murray

Major: *English*

Dissertation: The Art of Genre: The *Künstlerroman* in Contemporary American Fiction

Dissertation Chair: P. E. Wegner

Nasser Nassiri Koopaei

Major: *Pharmaceutical Sciences*

Dissertation: Drug Delivery to Brain Using Neural Stem Cell Exosomes

Dissertation Chair: T. D. Schmittgen

Zoliswa Nombulelo Nhleko

Major: *Interdisciplinary Ecology*

Dissertation: The Poaching Epidemic on White Rhino Demography, Distribution, Behaviour and Physiology

Dissertation Chair: R. A. McCleery

Benjamin Michael Nichols

Major: *Horticultural Sciences*

Dissertation: Characterizing the *Fs* Locus from *C. x kinokuni* 'Mukaku Kishu'

Dissertation Chair: J. X. Chaparro

Cristina Cecilia Nuñez Godoy

Major: *Interdisciplinary Ecology*

Dissertation: Improving Payments for Ecosystem Service Programs in a Global Deforestation Hotspot: The Gran Chaco of Argentina

Dissertation Chair: E. F. Pienaar

Dissertation Co-chair: L. C. Branch

Seth Timothy Nydam

Major: *Aerospace Engineering*

Dissertation: Design, Testing, and Operations of a Low Resource Optical Precision Timing Instrument for Ground-to-Space Time Synchronization

Dissertation Chair: J. Conklin

Kaitlynn P. Olczak

Major: *Biomedical Engineering*

Dissertation: Coatings for Improving the Performance of Neural Interfaces

Dissertation Chair: K. Otto

Joseph D. Olivera

Major: *Nutritional Sciences*

Dissertation: Roles of ZIP14 in Iron Overload-Related Endocrinopathies

Dissertation Chair: M. D. Knutson

Ayodeji Abayomi Otufowora

Major: *Epidemiology*

Dissertation: Factors that Influence Generational Navigation to and Enrollment in Health Research among Community-Residing Older Adults in North Central Florida

Dissertation Chair: L. B. Cottler

Andres Santiago Paleo Torres

Major: *Civil Engineering*

Dissertation: Modeling Residential Infrastructure Vulnerability to Hurricane Induced Coastal Flood

Dissertation Chair: K. R. Gurley

John Yong Park

Major: *Botany*

Dissertation: Quantifying Leaf Phenology of Tropical Forest Canopy Trees and Species from UAV Images and Its Relationship to Plant Functional Traits

Dissertation Chair: J. W. Lichstein

Brittany D. Partain

Major: *Biomedical Engineering*

Dissertation: The Articular Joint as an Organ System: Advancing Our Understanding of Tissue Interactions in Healthy and Osteoarthritic Joints

Dissertation Chair: K. Allen

Dissertation Co-chair: J. P. Dobson

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

Trushant Khilan Patel

Major: *Aerospace Engineering*

Dissertation: Analysis of Supersonic Jet Noise in the Sideline and Upstream Directions Using the Navier-Stokes Equations

Dissertation Chair: S. A. Miller

Pornpamol Pattamanont

Major: *Animal Sciences*

Dissertation: Relationships of Dry Period Length with Milk Yield, Culling, Reproduction, and Economics in the Subsequent Lactation of Dairy Cows

Dissertation Chair: A. De Vries

Felipe Machado Pinheiro

Major: *Interdisciplinary Ecology*

Dissertation: Silvopastoral Management of the Brazilian Drylands: Soil Carbon Sequestration and Farmers-Managed Restoration of Native Vegetation

Dissertation Chair: R. P. Nair

Dissertation Co-chair: V. D. Nair

David M. Plotkin

Major: *Entomology and Nematology*

Dissertation: Systematics of the Emerald Moths (Lepidoptera: Geometridae: Geometrinae)

Dissertation Chair: A. Kawahara

Joachim L. Polack

Major: *Music*

Dissertation: *Samba do Avião*: Transnationalism and Modernity in Antônio Carlos Jobim's Early 1970s Repertoire

Dissertation Chair: L. N. Crook

Dissertation Co-chair: S. dos Santos

Karyn Elise Pounds

Major: *Agricultural and Biological Engineering*

Dissertation: Fabrication of Bio-Based Intelligent Copolymer Film with Computational Technology for the Real-Time Food Quality Monitoring and Protection

Dissertation Chair: Z. Tong

Dissertation Co-chair: M. J. Correll

Kimberly Danielle Prince

Major: *Environmental Engineering Sciences*

Dissertation: Mechanisms and Drivers of Polychlorinated Biphenyl Biomagnification

Dissertation Chair: C. Angelini

Niels Olduvai Proctor

Major: *Forest Resources and Conservation*

Dissertation: Assessing the Use and Benefits of Online Self-Directed Retrieval Practice in the Context of an Undergraduate Plant Identification Course

Dissertation Chair: M. C. Monroe

Dissertation Co-chair: P. Antonenko

Pamala Pamandus Proverbs

Major: *Mass Communication*

Dissertation: Expanding the Boundaries of Public Relations Research to Build a Framework to Address Episodic Framing of Gender-Based Violence in the Caribbean

Dissertation Chair: S. K. Kiouisis

Paulina H. Quijia-Lamiña

Major: *Horticultural Sciences—Environmental Horticulture*

Minor: *Statistics*

Dissertation: Application of *in vitro* Culture Techniques for the Conservation of Native Orchids from Ecuador

Dissertation Chair: M. E. Kane

Sourav Raha

Major: *Physics*

Dissertation: String Bits at Finite Temperature

Dissertation Chair: C. B. Thorn III

Dipti Rai

Major: *Soil and Water Sciences*

Dissertation: Soil Biogeochemical Properties and Microbial Community Composition under Prescribed Burning in Subtropical Rangelands of Florida

Dissertation Chair: S. Gerber

Dissertation Co-chair: M. L. Silveira

Farhad Ramezanghorbani

Major: *Chemistry*

Dissertation: Developing Machine Learning Tools and Models to Accelerate Applicability of Neural Network Potentials in Drug Discovery

Dissertation Chair: A. E. Roitberg

Dissertation Co-chair: C. M. Colina

Meera Rath

Major: *Pharmaceutical Sciences*

Dissertation: Exploring the Role of Microglia in Chronic Voluntary Binge Ethanol Consumption Mouse Model

Dissertation Chair: B. Liu

Homan Regmi

Major: *Entomology and Nematology*

Dissertation: Integrated Management of Root-Knot Nematode (*Meloidogyne* spp.) on Tomato Combining Host Resistance and Nematicides

Dissertation Chair: J. Desaeger

Tyler Joseph Remedés

Major: *Nuclear Engineering Sciences*

Dissertation: Analytic Modeling of a Deep Shielding Problem

Dissertation Chair: J. E. Baciak

Camilo Andres Riano Rios

Major: *Mechanical Engineering*

Dissertation: Propellant-Less Roto-Translational Control of Multiple Spacecraft in Low Earth Orbit Using Uncertain Environmental Forces and Torques

Dissertation Chair: R. Bevilacqua

Nicole Marie Robey

Major: *Environmental Engineering Sciences*

Dissertation: *Advances in Sustainable Management of Landfill Leachate*

Dissertation Chair: T. G. Townsend

Katy L. Robinson

Major: *Mass Communication*

Dissertation: *Says Who? A Qualitative Study of the Relationship between Employee Voice and Strategic Internal Communication*

Dissertation Chair: L. Men

Dissertation Co-chair: S. K. Kiouisis

Mary D. Roca

Major: *English*

Dissertation: *Reading Girls and Girls' Reading: Education and Citizenship in U.S. Girls' Books, 1868-1913*

Dissertation Chair: A. M. Ulanowicz

Barukh Ben Rohde

Major: *Electrical and Computer Engineering*

Dissertation: *Motivations and Outcomes of an Undergraduate Teaching Assistantship Program*

Dissertation Chair: W. R. Eisenstadt

Dissertation Co-chair: E. P. Douglas

Dominic J. Rucco

Major: *Chemistry*

Dissertation: *Protein-Polymer Chemistry: Applications of Controlled Radical Polymerizations with Biological Systems*

Dissertation Chair: B. S. Sumerlin

Bradley Russell-Webster

Major: *Chemistry*

Dissertation: *Ligand Effects on the Size, Structure and Reactivity of Ce/O Clusters and Molecular Nanoparticles*

Dissertation Chair: G. Christou

Kaitlyn M. Sarlo Davila

Major: *Animal Sciences*

Dissertation: *Genetic Dissection of Thermotolerance in Beef Cattle*

Dissertation Chair: R. Mateescu

Georg Scheutz

Major: *Chemistry*

Dissertation: *Dynamic Interactions in Design and Synthesis of Polymer Materials*

Dissertation Chair: B. S. Sumerlin

Christopher Jason Schletter

Major: *Music Education*

Dissertation: *An Examination of Music Performance Anxiety in High School Band Conductors*

Dissertation Chair: W. Bauer

Tasha Mari Schoppee

Major: *Nursing Sciences*

Dissertation: *Dignity Therapy Intervention Fidelity: A Cross-Sectional Descriptive Study with Elderly Cancer Outpatients*

Dissertation Chair: D. J. Wilkie

Gibson P. Scisco

Major: *Materials Science and Engineering*

Dissertation: *Templated Carbon Nanotube Electrodes for On-Chip Electrochemical Double Layer Capacitors*

Dissertation Chair: K. S. Jones

Dissertation Co-chair: K. J. Ziegler

Weiqi Shen

Major: *Mechanical Engineering*

Dissertation: Modeling of Broadband Shock-Associated Noise in Supersonic Jets Using Large-Eddy Simulation and Decomposition Methods

Dissertation Chair: S. A. Miller

Luming Shi

Major: *Coastal and Oceanographic Engineering*

Dissertation: Characterization of Meteotsunamis in the Northern Gulf of Mexico and the U.S. East Coast

Dissertation Chair: M. Olabarrieta Lizaso

Benjamin Philip Shickel

Major: *Computer Science*

Dissertation: Sequential Machine Learning Methods and Applications for Patient Monitoring

Dissertation Chair: P. Rashidi

Dong Jin Shin

Major: *Music*

Dissertation: Beyond Orientalism: Reconsidering East Asian Influence in Early Twentieth-Century European Music

Dissertation Chair: S. dos Santos

Fei Shuang

Major: *Mechanical Engineering*

Dissertation: Atomistic Modeling for Capturing Failure Mechanisms in Nanocrystals and Electrode Materials for Li-ion Batteries

Dissertation Chair: K. E. Aifantis

Tautvydas Shuipys

Major: *Genetics and Genomics*

Dissertation: Characterization of a Random Synthetic Peptide that Alters Discrete Red Light Responses

Dissertation Chair: K. M. Folta

Jasdeep S. Sidhu

Major: *Physics*

Dissertation: A Study of Kondo Physics and Unconventional Superconductivity in Inhomogeneous Electronic Systems

Dissertation Chair: J. K. Ingersent

Matthew Benjamin Silic

Major: *Mechanical Engineering*

Dissertation: RSSI Localization of Mobile Robots Using Antenna Directionality and a Two-Ray Radio Propagation Model: Theory and Comparative Experimental Evaluation

Dissertation Chair: K. Mohseni

Kristen Skruber

Major: *Medical Sciences—Molecular Cell Biology*

Dissertation: Regulation of the Actin Cytoskeleton by Profilin-1 in Mammalian Cells

Dissertation Chair: E. A. Vitriol

Thomas Bryan Smith

Major: *Criminology, Law, and Society*

Dissertation: A Theory of Biosocial Support

Dissertation Chair: C. L. Gibson

Yangyang Song

Major: *Agronomy*

Dissertation: Assessing the Relationship of Seed Vigor to Field Physiological Performance and the Influence of Seed Maturity on Seed Vigor and Quality over Multiple Generations in Peanut (*Arachis hypogaea* L.)

Dissertation Chair: D. L. Rowland

Dissertation Co-chair: B. Tillman

Ray A. Spradlin

Major: *Health and Human Performance*

Dissertation: Necessity of Muscle IGF-1 for Recovery from Disuse and Adaptation to Endurance Exercise Training

Dissertation Chair: E. R. Barton

Chad J. Spreadbury

Major: *Environmental Engineering Sciences*

Dissertation: Evaluating Reuse Practices of Waste-Derived Aggregates: Identifying Knowledge Gaps and Strategies

Dissertation Chair: T. G. Townsend

Allen Coolidge Starke

Major: *Electrical and Computer Engineering*

Dissertation: Development of SDN Architectures for Management and Security of Wireless & Mobile Systems

Dissertation Chair: J. Y. McNair

Jep Marie-Claire Stockmans

Major: *Religion*

Dissertation: The Make-Believe City: A Spatial Approach to Lived Religious Experience in the Urban Landscape of Addis Ababa, Ethiopia

Dissertation Chair: T. Østebø

Scott G. Strednak Jr.

Major: *Chemical Engineering*

Dissertation: Concentrated Fiber Suspensions in Confined Shearing Flows

Dissertation Chair: J. E. Butler

Lauren R. Stutts

Major: *Plant Molecular and Cellular Biology*

Dissertation: Evaluating Candidate Anthracnose Resistance Genes in Sorghum

Dissertation Chair: W. Vermerris

Michael D. Sunshine

Major: *Rehabilitation Science*

Dissertation: Electrical Activation and Analysis Paradigms for Restoration of Breathing

Dissertation Chair: D. Fuller

Ratna G. Suthar

Major: *Agricultural and Biological Engineering*

Dissertation: Modeling Postharvest Losses in the Florida Tomato System

Dissertation Chair: J. Judge

Kok Ben Toh

Major: *Interdisciplinary Ecology*

Dissertation: Predicting Malaria: Models and Their Applications

Dissertation Chair: D. Ribeiro do Valle

Eduardo Sebastian Torres Villavicencio

Major: *Civil Engineering*

Dissertation: Experimental and Analytical Investigation of UHPC Tensile Strength Behavior

Dissertation Chair: H. R. Hamilton III

Dissertation Co-chair: G. R. Consolazio

Wako Godana Tuni

Major: *Electrical and Computer Engineering*

Dissertation: Design Methodology of Analog and RF Building Blocks Based on Precomputed Actual Device Technology Data

Dissertation Chair: W. R. Eisenstadt

Dissertation Co-chair: S. E. Thompson

James Ryan Tyger

Major: *Higher Education Administration*

Dissertation: Compassion Fatigue in Student Affairs Professionals

Dissertation Chair: D. A. Kramer

Morgan Enrique Urdaneta

Major: *Medical Sciences—Neuroscience*

Dissertation: The Role of Cortical Depth on Bidirectional Brain-Machine Interfaces

Dissertation Chair: K. Otto

Valerie Christine Valerio Holguin

Major: *Agricultural and Biological Engineering*

Dissertation: Analyzing Livestock Value Chains in Sub-Saharan Africa with Data and Simulation Models: 3 Case Studies

Dissertation Chair: G. A. Kiker

Dissertation Co-chair: R. Muneeppeerakul

Nicholas A. Vandervoort

Major: *Materials Science and Engineering*

Dissertation: Characterization and Improvement of the Mechanical Properties of Fine Diameter Fibers

Dissertation Chair: W. M. Sigmund

María C. Vélez-Climent

Major: *Plant Pathology*

Dissertation: Evaluation of Southern Highbush Blueberry Cultivars for Resistance to Major Fungal Diseases in Florida and Population Genetics of Anthracnose Fungi Affecting North and Central Florida Blueberry Production

Dissertation Chair: P. F. Harmon

Kartika Venugopal

Major: *Medical Sciences—Cancer Biology*

Dissertation: Leukemia Associated Mutations in *DNMT3A* Mediate Sensitivity to Replication Stress Induced by Nucleoside Analogs

Dissertation Chair: O. Guryanova

Bo Wang

Major: *Mechanical Engineering*

Dissertation: Computational Models for Developing Design Criteria for Next Generation Electrodes for Li-ion and Na-ion Batteries

Dissertation Chair: K. E. Aifantis

Wei Wang

Major: *Mechanical Engineering*

Dissertation: A Numerical Study of Acoustics from Supersonic Particle-Laden Jets via Multi-Phase Acoustic Analogy

Dissertation Chair: S. A. Miller

Yu Wang

Major: *Geography*

Minor: *Statistics*

Dissertation: Evaluating the Effects of Land Surface Conditions on Rainfall Patterns of Modeled Landfalling Tropical Cyclones Using Geospatial Technologies

Dissertation Chair: C. J. Matyas

Joseph Jessop Warren

Major: *Design, Construction and Planning*

Dissertation: Cooperative Preservation: Converting Multi-Site Historic Buildings into Cooperative Housing Corporations

Dissertation Chair: J. S. Matthews

Lauren Ashley Watkins

Major: *Forest Resources and Conservation*

Dissertation: Assessing Environmental Education Outcomes and Motivations in Community-School Partnerships

Dissertation Chair: M. C. Monroe

Alexander J. Weaver

Major: *Physics*

Dissertation: Hermite-Gauss TEM Based MEMs of Interferometric Signals in Gravitational Wave Detection, and Fundamental Restrictions of Paraxial Wave Descriptions

Dissertation Chair: G. Mueller

Melissa Mansfield Weinsz

Major: *Health and Human Performance*

Dissertation: Building a Future Career Autobiography: A Mixed Methods Study of the Career Construction and Exploration Processes of NCAA Division I Student-Athletes

Dissertation Chair: M. Sagas

Elizabeth Healy White Rose

Major: *Interdisciplinary Ecology*

Dissertation: Population Characteristics, Movement Behavior, and Resource Selection of Florida Burrowing Owls Breeding in Suburban and Pastureland Habitats

Dissertation Chair: R. K. Boughton

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

Surafel F. Woldegiorgis

Major: *Nuclear Engineering Sciences*

Dissertation: Artificial Neural Network Assisted Neutron Tomography for Future Nuclear Treaty Verifications

Dissertation Chair: J. E. Baciak

Xiuyuan Wu

Major: *Design, Construction and Planning*

Dissertation: Geometry and Architectural Representation in Premodern China

Dissertation Chair: H. Zou

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

Yuhua Xu

Major: *Health and Human Performance*

Minor: *Geography*

Dissertation: Planning for Spatial-Economic Resilience: Home-Sharing in Rural Florida

Dissertation Chair: L. Pennington

Guoqian Yan

Major: *Geography*

Dissertation: Hurricanes Rainfall Spatial Pattern and Relationship with Environmental Moistures for the North Atlantic Basin

Dissertation Chair: C. J. Matyas

Le Yang

Major: *Electrical and Computer Engineering*

Dissertation: Electromagnetic Interference Modeling, Prediction and Suppression Techniques of the Variable Frequency Motor Drive System

Dissertation Chair: S. Wang

Lu Yang

Major: *Chemistry*

Dissertation: Enhancing the Bioactivity of Functional Nucleic Acid by Nanostructure Construction

Dissertation Chair: Y. C. Cao

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: Y. Wang

Dissertation Co-chair: P. D. Zwick

Sundara Ramakarthik Yarasuri

Major: *Civil Engineering*

Dissertation: Enhancement and Validation of a Residential Infrastructure Hurricane Wind Vulnerability Model

Dissertation Chair: K. R. Gurley

Lauriane Sènadé Massan Yehouenou

Major: *Food and Resource Economics*

Dissertation: Experimental Economics for Conservation and Management of Natural Resources: From Watersheds in Florida, USA to Forests in Benin, West Africa

Dissertation Chair: K. A. Grogan

Dissertation Co-chair: S. N. Morgan

Cen Yue

Major: *Mass Communication*

Dissertation: The Paradox of Using Public Social Media for Work: The Influence of After-Hours Work Communication on Employee Outcomes

Dissertation Chair: M. A. Ferguson

Tatyana Zamkovaya

Major: *Microbiology and Cell Science*

Dissertation: Unraveling the Ecological Relevance of Microbial Dark Matter

Dissertation Chair: A. Conesa Cegarra

Tingting Zeng

Major: *Mechanical Engineering*

Minor: *Electrical and Computer Engineering*

Dissertation: Autonomous Data-Driven Energy-Optimal Control of Building HVAC Systems

Dissertation Chair: P. Barooah

Yi Zhang

Major: *Design, Construction and Planning*

Dissertation: A Justice-Oriented Approach to Identify Priorities for Transportation Adaptation in Response to Sea Level Rise Induced Flooding

Dissertation Chair: Z. R. Peng

Yifan Zhang

Major: *Mechanical Engineering*

Dissertation: Tribological Studies on Shape Memory Photonic Crystals

Dissertation Chair: C. Taylor

Yingjie Zhang

Major: *Electrical and Computer Engineering*

Dissertation: Investigation of Radiated Electromagnetic Interference Generated by Isolated Power Converters

Dissertation Chair: S. Wang

Yu Zhang

Major: *Coastal and Oceanographic Engineering*

Dissertation: Development of Modeling Techniques Using Discrete Elements with Applications to Civil Engineering Systems

Dissertation Chair: X. Yu

Dissertation Co-chair: M. T. Davidson

Shaomin Zhao

Major: *Food Science*

Dissertation: Cranberry Juice Consumption Modified Metabolome and Gut Microbiome in Women in a Placebo-Controlled Double-Blinded Study

Dissertation Chair: L. Gu

Zexi Zheng

Major: *Mechanical Engineering*

Dissertation: Probing Phonon Thermal Transport Properties from Molecular Dynamics Simulations by Direct Mode Propagation Tracking

Dissertation Chair: Y. Chen

Jie Zhou

Major: *Nutritional Sciences*

Dissertation: Associations between the Wnt Signaling Pathway and Iron-Deficient Milk of Hephaestin Knockout Mouse Dams Underlies Hair Loss in Pups

Dissertation Chair: C. D. Vulpe

Dissertation Co-chair: J. F. Collins

Liang Zhou

Major: *Electrical and Computer Engineering*

Dissertation: Electrothermal MEMS Scanning Mirrors and Lenses with Large Range and High Robustness for Two-Photon Microscopy

Dissertation Chair: P. Feng

DOCTOR OF EDUCATION

Dustin Bratton Adams

Major: *Educational Leadership*

Dissertation: The Association between Perceptions of School Climate and Teachers' Perceptions of Feedback Given within the Teacher Evaluation Process

Dissertation Chair: L. B. Eldridge

Shayne Phillips Cade

Major: *Higher Education Administration*

Dissertation: Persistence as a Manifestation of Motivation: A Phenomenological Exploration of Motivation for First-Generation College Students Who Completed Online Baccalaureate Degree Programs

Dissertation Chair: K. D. Peck Parrott

Eric Thomas Coley

Major: *Higher Education Administration*

Dissertation: Building Interprofessional Bridges: A Qualitative Study of What Interprofessional Education Means to Student Physical Therapists

Dissertation Chair: C. Haynes

Max Diaz

Major: *Curriculum and Instruction*

Dissertation: Employer-Based Needs Analysis of ICT-Related Competencies in ELT Job Advertisements in Hong Kong

Dissertation Chair: S. Kumar

Kristina S. Greenaway

Major: *Educational Leadership*

Dissertation: Principals of Change: Leading the Process of Successful Turnaround in Rural Florida

Dissertation Chair: L. J. Searby

Robert Anthony Ovalle

Major: *Curriculum and Instruction*

Dissertation: Improving Instructional Leadership through Practitioner Research: Adding Coaching to Teacher Evaluation

Dissertation Chair: A. J. Adams

Leigh L. Powell

Major: *Curriculum and Instruction*

Dissertation: Data-Driven Learning Design: An Exploration with Faculty on Information that Informs Their Practice

Dissertation Chair: S. Kumar

Leanna Cristina Rodriguez

Major: *Educational Leadership*

Dissertation: An Analysis of the First Amendment in Public Schools and an Examination of How It Will Be Applied to Electronic Communication off School Hours for Teachers and Students

Dissertation Chair: L. B. Eldridge

DOCTOR OF BUSINESS ADMINISTRATION

Jason Altmire
Michael R. Anderson

William J. Carty Jr.
James Fatzinger
William C. Poellnitz

Roxanne Y. Valies
Warner Garrison Walker III

DOCTOR OF PLANT MEDICINE

Matthew Amos Borden

Eleanor F. Lopez

PROFESSIONAL DEGREES

THE FREDRIC G. LEVIN COLLEGE OF LAW

Dean Laura A. Rosenbury

DOCTOR OF JURIDICAL SCIENCES IN TAXATION

Dalton L. Dallazem

JURIS DOCTOR

Farhaan Kamal Anjum
Kyle S. Bugden
Austin R. Claiborne
Christina R. Cox
Jordyn L. Csanyi-Fuentes
Sara Olivia Dicks

Eric H. Foulds Jr.
Austin D. Hogan
Matthew Donald Lemons
Jacob Keith Markham
Jean-Garcia Marseille Jr.
Hunter M. Masin

Brian T. Nelson
Jared Daniel Pape
Jessica V. Rauckis
Zachary D. Ross
James Dylan White
Abraham Penn Wilson

MASTER OF LAWS IN INTERNATIONAL TAXATION

Claudia Mercedes Agudelo

Suyang Ma

Philomina Minsi

MASTER OF LAWS IN TAXATION

Farhaan Kamal Anjum
Ayuba Kwari
Jacob Keith Markham

Jean-Garcia Marseille Jr.
Juan Jose Oliveros Munoz

Jared Daniel Pape
Zachary D. Ross
James Dylan White

MASTER OF LAWS IN U.S. LAW

Mohammad Abdulrahman Alsumaih

THE COLLEGE OF NURSING

Dean Anna M. McDaniel

DOCTOR OF NURSING PRACTICE

Natalia Prieto

Abigail Lorraine Williams



What Makes a University Great?

Some interesting facts about the University of Florida

Educational Excellence

UF is consistently ranked among the nation's top universities: No. 6 in U.S. News & World Report "Top Public Universities" (2020); No. 3 on the Forbes' list of Best Value Public Universities (2019); No. 6 in the New York Times list of universities that do the most to help low-income students (2015); No. 2 in Kiplinger's "Best Values in Public Colleges" (2017); No. 3 in the Milken Institute's Ranking of Best Universities for Technology Transfer.

Faculty

- UF has more than 6,000 faculty members with distinguished records in teaching, research and service, including 36 Eminent Scholar chairs and 45 faculty elections to the National Academy of Sciences, Engineering, the National Academy of Medicine or the American Academy of Arts and Sciences.
- Awards include three Pulitzer Prizes, NASA's top award for research, the Smithsonian Institution's conservation award and a Fields medal.

Students

- Students admitted for the fall 2020 freshman class had an average 4.47 GPA, average SAT score of 1383, and an average ACT score of 31.
- The freshman retention rate of 97% is among the highest in the country.
- UF awards more professional degrees to African American, Hispanic and other minority students than any other public university in the Association of American Universities (2014-15).
- Sixty-eight percent of UF full-time freshmen graduate in four years (2012-13 cohort), and 90% of UF freshmen graduate within six years (2012-2013 cohort).





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.

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 February 2021.

Caps and Gowns, An Explanation

The academic regalia worn by graduating students and faculty in this era 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.



UF

2020 FALL

COMMENCEMENT



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