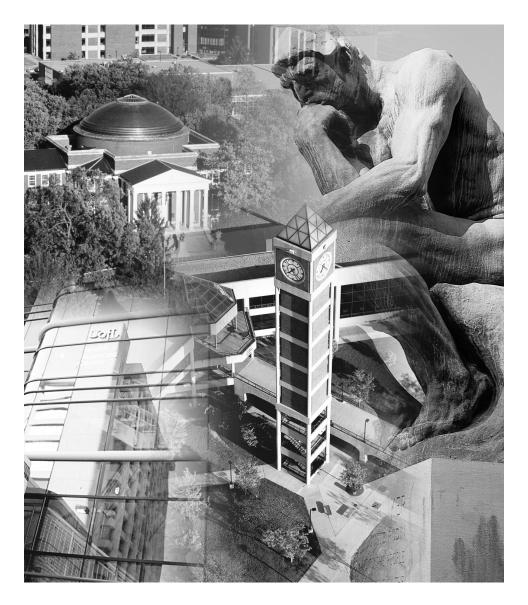


# DOCTORAL HOODING & GRADUATION CEREMONY

December 16, 2022

LOUISVILLE.



Fall 2022 Celebration

December 16, 2022



### The Academic Regalia

The tradition of gowns and hoods being worn as academic regalia at graduation ceremonies stems from a distinctive style of academic dress that emerged in the first universities in Europe in the twelfth century. The style was influenced by the fact that masters and scholars at that time were usually members of the clergy. For example, in 1222 at the Council of Oxford, the Archbishop of Canterbury ordered English clerics to wear the cappa clausa — a closed, flowing gown based on a lay fashion of the period. As a result, this garment came to be regarded as academic dress for university masters who, as clerics, wore it. Later, when the clergy neglected the rule in general, the garment was recognized as an exclusively academic one.

The pileus, a common headdress of medieval laymen, was adopted by the Church at the Synod of Bergamo (1311) and became typical headwear at the universities. The caps and tams worn by faculty are a direct descendant of the pileus. The pileus quadratus, or square cap, is today's mortarboard worn by most graduates.

The hood as an academic vestment originated from the cowl worn by monks in the Middle Ages as protection against inclement European weather. It was worn over a short cape known as a tippet, and had a tail, known as a liripipe, which was used to pull the hood over the head and then was wrapped around the throat to keep the hood in place. Today the tippet remains as part of the hood and, although the hood is never worn on the head, the liripipe is retained as the funnel-shaped hood.

The tradition of wearing the hood hanging down the back is said to be derived from the practice of medieval monks, many of whom were solicitors in the King's Court, who used the bag-like hanging hood as a "contribution bowl" for clients and well-wishers. Early scholars used the hood to collect the fees for lectures.

Colors have long been significant in denoting different academic disciplines and, more recently, levels of scholastic achievement. Standard gowns of different shape, length and sleeve design indicate the degrees of Bachelor, Master and Doctorate. The robes of the President, Provost, Chair of the Board of Trustees, and Grand Marshal represent the office, not the degree.

In the hoods of the faculty, the color of the border indicates the type of degree, while the lining of the hood shows colors of the university that bestowed the degree.

#### **Hoods and Tassels**

The distinctive colors in the hoods and the tassels of the caps accord with the following:

Audiology	Spruce Green
Business	Drab
Dentistry	Lilac
Education	Light Blue
Engineering	Orange
Information Sciences	Gold
Law	Purple
Liberal Arts	White
Library Science	Lemon
Medicine	Kelly Green
Music	Pink
Nursing	Apricot
Philosophy	Dark Blue
Public Administration	Peacock Blue
Public Health	Salmon Pink
Science	Gold
Social Work	Citron

### The Guy Stevenson Award for Excellence in Graduate Studies

Claire Elizabeth Westcott Ph.D. Microbiology and Immunology

Mentor: Associate Professor Kevin Sokoloski

The Guy Stevenson Award for Excellence in Graduate Studies honors a former dean of the Graduate School and is presented to an outstanding doctoral degree recipient who has demonstrated excellence in both scholarship and leadership within the discipline and has made significant contributions to teaching and/or service. Claire Westcott is the recipient of this year's Stevenson award and, as such, serves as the Graduate School's outstanding student, carries our banner for the Hooding and Commencement ceremonies, and delivers the student speech for the Hooding ceremony.

Born in rural southeast Missouri, an area with limited access to science education, Claire Westcott has always had a passion for science literacy and outreach. She received her bachelor's degree in biology from the University of Missouri, where she worked in multiple microbiology labs.

In 2016. Claire moved to Louisville where she became a technician for Dr. Kevin Sokoloski, later joining the lab as a PhD student focused on RNA protein interactions with alphaviruses. Claire jumped headfirst into volunteering her extra time with the Science Policy and Outreach Group (SPOG) at the University of Louisville and the Louisville Regional Science and Engineering Fair (LRSEF). During her time in SPOG, Claire took on a variety of leadership opportunities as Policy Coordinator, Louisville Science Pathways Director, and Director of SPOG. Under her direction, Claire implemented and expanded several programs that focused on opening doors for future scientists and improving inclusivity within the science community. Claire was instrumental in establishing the partnership between Louisville Science Pathways (LSP) and Kentuckiana Works, an organization that supports the Louisville community by making job seeking more equitable. This partnership helped make Louisville Science Pathways a fully funded research internship, which allowed the program to reach more members of underserved populations. She continued to serve LSP as a director for two more years.

Claire also served as a board member to the Louisville Regional Science and Engineering Fair, where she pioneered programming to promote equity and engagement within the fair and founded STEM Ambassadors. This program recruits scientists in the Louisville community to participate in LRSEF, build relationships with young scientists, and promote excitement for different scientific fields.

Claire was also a leader in the Department of Microbiology and Immunology at the University of Louisville. Claire served as president of the Microbiology and Immunology Student Organization, where she built a community among graduate students. She also served as the student representative to the M&I Admissions Committee and department orientation where she provided a welcoming space for prospective and new students.

Claire's passion for science communication is also prominent in her written work, as she has several first author publications that include her dissertation work about viral RNA and protein interactions and the local SARS-CoV-2 Wastewater Surveillance program. Upon graduation and throughout her career, she plans to continue to focus on science communication and outreach.

#### The John Richard Binford Memorial Award

Kyle Levi Fulghum
Ph.D. Physiology and Biophysics
Mentor: Professor Bradford Hill

Kyle Fulghum is the recipient of the John Richard Binford Memorial Award, which honors a former chairman of the Department of Psychology. This award recognizes a doctoral degree recipient who excels in scholarship and has contributed to other areas within the discipline such as leadership, teaching, or service.

Kyle Fulghum earned a Bachelor's degree (summa cum laude) in Biological Chemistry from Evangel University and a Master's degree in Cell and Molecular Biology from Missouri State University. Prior to starting his doctoral studies at the University of Louisville, Kyle worked in clinical and basic lab research settings where he focused on projects related to physical activity, airborne toxins, and human health. While pursuing his PhD at UofL, Kyle's work on cardiac metabolism resulted in 9 peer-reviewed publications, 11 presentations at national conferences, and the awarding of an international Early Investigator Award from the Society for Heart and Vascular Metabolism.

Currently, Kyle's research is funded by the National Institute of Health and investigates how aerobic exercise training promotes physiological remodeling of the heart. One of his overarching goals is to understand how exercise can be optimized to improve health and reduce the risks of complex diseases. Some of his work has been highlighted in a coauthored textbook chapter for the American Physiological Society and in several peer-reviewed journals, including the Journal of Molecular and Cellular Cardiology, Journal of Sport and Health Sciences, and the American Journal of Physiology.

Kyle's passion for human health and performance began with his participation in athletics at an early age, which he continued throughout his life. As a doctoral student, Kyle continued his involvement in athletics, participating as a weightlifting athlete in regional and national events, which included winning a Kentucky State Championship. He further established himself as a leader in the field of exercise sciences by holding active memberships with organizations such as the American Heart Association, American College of Sports Medicine, and USA Weightlifting. While at UofL, Kyle served on additional training committees, represented the Department of Physiology in the Graduate Student Council, and helped mentor several students with research projects.

After graduation, Kyle plans to continue his work examining the connections between exercise, metabolism, and human health. He would like to incorporate the use of innovative technologies to develop strategies for personalized healthcare and the optimization of exercise training protocols.

# The John M. Houchens Prize for Outstanding Dissertation

Mohamed Nazih Mohamed Shehata Ph.D. Computer Science and Engineering Co-Mentors: Professors Adel Elmaghraby and Ayman El-Baz

Mohamed Nazih Mohamed Shehata is the winner of the John M. Houchens Prize, which honors a former registrar of the university and is awarded to the doctoral student who presents the most meritorious dissertation for the current commencement.

Mohamed Shehata, PhD (Member, IEEE) received his B.Sc. degree in Computer Engineering and Control Systems from Mansoura University, Egypt, 2009. In 2014, he joined the Biolmaging Lab at the University of Louisville. In 2016, Mohamed was awarded his M.Sc. degree from the Electrical and Computer Engineering Department at the University of Louisville, and directly enrolled in his Ph.D. program in the Computer Engineering and Computer Science Department, Mohamed successfully defended his PhD in Summer 2022. His dissertation focuses on machine and deep learning for medical imaging analysis, specifically, on the design of computer-aided diagnostic (CAD) systems for detection/ classification of kidney diseases such as acute renal transplant rejection from diffusion-weighted and BOLD-MRIs and renal cancer from contrast-enhanced computed tomography images. In addition, he is working on developing new techniques for the early diagnosis, detection, and prediction of different types of cancers such as liver cancer, spine cancer, breast cancer, prostate cancer, Wilms tumors, and so on. Mohamed authored more than 60 technical peer reviewed publications, and he has also received more than 20 international and local prestigious awards, including the MIT technology review Award for innovators under 35 years old in 2021, Doctoral Dissertation completion award in 2021, Research of Louisville in 2021, EPIC innovator award in 2019 and 2020, Exemplary research scholarship award (2019-2022). Mohamed is currently serving as a Guest-Editor for three prestigious journals, Frontiers in Medicine, Sensors, and Electronics, and he serves as a Review-Editor in Frontiers in Neuroimaging and Frontiers in Medicine as well.

## The Virginia "Jenny" Madden Award for Graduate Student Leadership and Service

Jose M. Najera
M.S. Human Resources and Organization Development
Mentor: Associate Professor Ann Herd

The Virginia "Jenny" Madden Award for Graduate Student Leadership and Service is named in honor of Virginia "Jenny" Madden for her many years of service to the Graduate School, the Staff Senate, and the University of Louisville community. The award recognizes a master's degree recipient who exhibits leadership through service to the recipient's program, college, discipline, the University as a whole, and/or the community. Jose M. Najera is this year's recipient of the Madden award.

Jose's dedication to helping others reach their fullest potential and build bright, equitable futures is evident in all that he does. Jose M Najera is a graduating student from the University of Louisville Master of Science in Human Resources and Organization Development. Born in Guatemala and raised in Los Angeles, California, he now calls Louisville home.

During his studies, Jose gained knowledge in human resource and organizational development leadership, adult and organization learning, and talent management, which he applied when reestablishing the University of Louisville's Society for Human Resource Management (SHRM) Student Chapter. Serving as Chapter President, Jose was responsible for coordinating numerous educational events and studentled activities, as well as being the liaison between local and state SHRM chapters and various schools and departments. Jose helped create a space for students to learn, collaborate, and lead.

As a former senior military leader with 20 years of service, Jose has a keen understanding of the importance of communication, building relationships, and commitment to serving. This, along with his academic experience, and work in the public and private sectors, has allowed Jose to develop a broad perspective of how people and organizations can help elevate marginalized communities by creating opportunities. Now, as a Training Specialist at the Digital Transformation Center at the University of Louisville, and the Health-Equity Innovation Hub, he is charged with building a regional talent pipeline through upskilling and reskilling digital and analytics competencies to create family-sustaining careers for community members. Jose's commitment and the Digital Transformation Center's mission are helping to create a better future for everyone in the Louisville community.

### The Alice Eaves Barns Award for Outstanding Achievement in Master's Program

Dustin Ray Smith M.A. Anthropology

Mentor: Assistant Professor Thomas Jennings

The Alice Eaves Barns Award is named in honor of Mrs. Alice Eaves Barns for her many years of outstanding service as a staff member of the Graduate School. This award recognizes a student who has displayed tenacity in the face of adversity while attaining excellence in both the classroom and outside endeavors and is given in recognition of outstanding achievement in a master's program. Dustin Smith is one of this year's recipients of the Barns award, and he tells his own story in his words here:

Most folks in my small town did not aspire to go to college. Personally, my family did not put much importance on education. Grades were not something that I had to worry about. There were no consequences for not doing homework, or for bringing home a failing grade. I didn't graduate from high school. As the years went by, I found myself wanting more. I longed for more financial stability, and as someone part of the LGBTQ+ community who was living in a small southern town, I didn't feel as safe or as understood as I would like. At the age of 24 I got my driver's license and started studying for the GED. After I aced the practice test the first time out, I was advised to take the actual test and passed on the first try.

These accomplishments gave me the encouragement that I needed, and I decided to go to my local community college. After completing my work there, I enrolled in the anthropology program at Western Kentucky University and excelled, graduating magna cum laude and winning an award for outstanding undergraduate in cultural resource management. My first semester in UofL's graduate program in Anthropology was tough. As someone from a small town who had always struggled with anxiety, being in a much larger city was a very hard adjustment. I had a number of personal losses, which led me to take a break from school. Some time away from school seemed to do the trick and I was able to return the following semester and finish my incomplete work.

The following semester things seemed to be improving. My coursework was going well, and I was offered a position as a TA (one of my proudest achievements). However, 2019 was another tough year for my partner and family. My partner was having a difficult time with his mental health, and his drinking increased. He bounced around between several jobs. During this time, my mother was diagnosed with having blood clots and cancer, and then rapidly progressing dementia. My mental health took a turn. I found it difficult to take care of everything

that I needed to take care of. My family wanted me to move back home, but I knew that if I did that there was a chance that I wouldn't finish school. I was one of the first people in my family to go to college. If I stopped then, I knew that I would regret it forever.

The desire to finish my degree is what has kept me in Louisville. Although I have sometimes struggled with my coursework at UofL, I have also learned about perseverance. In fact, I have actually drawn strength and inspiration from my coursework. Much of the subject matter in the courses that I have taken centers around groups of people who have dealt with things that I cannot even imagine. I remember thinking, if they can survive all they did, I can make it through school! As an outsider, I could identify with the people I read about, and I believe that it gave me strength. Although I definitely still struggle with my mental health, upon looking back, I am glad that I have persisted and have not given up on my education. As I finish my last semester, I must say that I am proud of myself. My final project consists of creating an exhibit around the servants who lived and worked in the Conrad-Caldwell House. Not only were most of the servants from marginalized groups, but they have also largely been neglected when the history of the house is presented. It is my sincere hope that I do justice to those who have largely been ignored by history. I hope to make the invisible now visible. I'm so glad I did not give up on school and that I now have the opportunity to do this work.

#### The Alice Eaves Barns Award for Outstanding Achievement in Master's Program

Bolaji Michael Ogbulu M.U.P. Urban Planning/ M.P.A. Public Administration

Co-Mentors: Associate Professors Aaron Rollins and Sumei Zhang

The Alice Eaves Barns Award is named in honor of Mrs. Alice Eaves Barns for her many years of outstanding service as a staff member of the Graduate School. This award recognizes a student who has displayed tenacity in the face of adversity while attaining excellence in both the classroom and outside endeavors. The award is given in recognition of outstanding achievement in a master's program. Bolaji Ogbulu is one of this year's recipients of the Barns award, and he tells his own story in his words here:

In March of 2020, just before the COVID-19 pandemic engulfed our lives, my mother, Robin Ogbulu, was diagnosed with a rare, but manageable form of cancer called Multiple Myeloma. My parents were divorced, and I am the oldest of three children so took charge of everything. My mother had a few surgeries after the diagnosis and was not well enough to manage everything, so I became the power of attorney, managed her finances, and consulted with her doctors. During the summer of 2020, prior to my enrollment in my program, my mom lived with my wife and I and we cared for her in the second bedroom of our apartment. COVID-19 made everything more difficult. Due to the extreme risk to those in skilled nursing facilities, no long-term facilities were taking patients. I questioned whether I should defer graduate school to focus on her care. By early August just before the semester was set to begin, my mother's health seemed to be steadily improving and we were lucky to find a nursing facility that could admit her. With that weight off my shoulders, I felt comfortable enough to start school that fall semester

Everything was going well. I was enjoying my classes and I checked in on my mom every day and she was doing pretty well - until she wasn't. In late September, her health took a sudden turn for the worst, and she was hospitalized at UofL. Again, as a result of COVID-19 precautions, there was trouble scheduling regular appointments with doctors and getting consistent treatment. She also wasn't healing like the doctors expected her to.

Her health spiraled quickly and her once positive prognosis turned for the worst. Since I was the power of attorney, I communicated with her doctors and managed her care while in school full time. It was a lot to manage, and I fell behind some, but I caught back up quickly and I was able to take an incomplete in one of my four classes so that I could ease up for a bit. Within a week of her hospitalization, in the midst of midterms, and a week after her 54th birthday, my mother passed away.

It was a very tough time. Thankfully, my mom's side of the family is large and not too far away. They were a great comfort to my siblings and me. A week later, we planned the funeral and laid my mom to rest back in our hometown of Lexington.

Education meant a lot to my mom. She never got to finish her education the way that she wanted to so she inspired me and my siblings to learn and make the most of the opportunities that we had. I think that is what drove me to continue through that semester after her passing and it still drives me today. My mom also instilled a desire to serve others and my community. There is not a single day that I don't think about her and how she put aside her educational and career goals to raise me and put me in the position that I am in today. I intend to carry on her legacy after I graduate and into my future of public service

### **Degrees - August and December 2022**

### **Doctor of Audiology and Their Faculty Mentors**

Margaret J. Spiegel

Audiology

Professor Lynzee Cornell

Project: Review of Data Regarding Harassment and Micro Aggressions from Patient Toward Providers on University of Louisville's Health Science Campus

### Doctor of Nursing Practice and Their Faculty Mentors

Courtney Alicia Albers

Nursing

Assistant Professor Sarah Schirmer

Project: Improving Trauma-Informed Education and Parenting for

Resource Parents at a Foster Care Agency

Tracey Brink

Nursing

Assistant Professor Leann Baker

Project: Development of a Project to Improve Prenatal Education at a Rural Medically Assisted Treatment Center Focused on NEaonatal Abstinence Syndrome and Parenting Skills

Anna Louise Davidson

Nursing

Associate Professor Mary-Beth Coty

Project: Reducing Weekly Screen Time Use in College Students

Connor A. Epperson

Nursing

Dr. Kimberly Meyer

Project: Quality Improvement for Timely Extubation in an

Urban Community ICU

Hope Kathryn Eppley

Nursing

Assistant Professor Candace Harrington

Project: Quality Improvement DNP Project Proposal for the

Prevention of ICU Delirium

Logan Marie Griffith

Nursing

Assistant Professor Shannon Shumaker

Project: Impact of Palliative Care Screening Process Implementation

Among Intensive Care Unit Registered Nurses

Kelley Joan James

Nursing

Assistant Professor Beverly Williams-Coleman

Project: Multicomponent Approach to Delirium Prevention in the Acute

Care Setting: An Evidence-Based Quality Improvement Project

Christopher George Jenkins

Nursing

Assistant Professor Candace Harrington

Project: Comprehensive Pain Assessment

Paula Johnson

Nursina

Assistant Professor Lynette Galloway

Project: School Nurses' Participation in Accommodations for

Children with Epilepsy: A Quality Improvement Project

Channing Jane Kay

Nursina

Assistant Professor Sarah Schirmer

Project: Trauma-Informed Schools: A Quality Improvement Project

for a Rural Public School System

Kimberly M. Knott

Nursing

Assistant Professor Paul Clark

Project: Implementation of Scripted Debriefings Following Neonatal

Delivery Room Resuscitations

Ashley Dru Larson

Nursing

Associate Professor Mary-Beth Cody

Project: Retrospective Evaluation of Depression Screening Process Among Older Patients in Primary Care for Quality Improvement Anna M. Marks

Nursing

Associate Professor Elisabeth Volpert

Project: Implementing a Diabetes Risk Screening Protocol in

the Primary Care Setting

Anna M. Moore

Nursing

Assistant Professor Katharine Adelstein

Project: Improving Confidence and Job Satisfaction in Emergency

Nurses through TeamSTEPPS

Nicole Moseley Jaeger

Nursing

Assistant Professor Leann Baker

Project: Neonatal Developmental Care Makes SENSE:

Implementation of an Evidence-Based Guideline for Developmentally

Appropriate Multi-Modal Positive Sensory Exposures

Philip E. Pippen

Nursing

Associate Professor Mary-Beth Coty

Project: Reducing the No-show Rate at a Community Mental

Health Organization

Bailee Elizabeth Pope

Nursing

Professor Frances Hardin-Fanning

Project: Feasibility of An Emergency Department Fall Screening

Tool and Intervention Bundle Checklist on Nursing Fall Prevention Documentation: A Quality Improvement Project

Jessica Marie Rivera

Nursing

Assistant Professor Lynette Galloway

Project: Implementation and Evaluation of Mental Health Referral

Pathway for School Nurses

Sarah Elizabeth Schaefer

Nursina

Dr. Kimberly Meyer

Project: Reducing Rates of Contrast-Induced Nephropathy in the

Cardiac Catheterization Laboratory: A Program Evaluation

Erin Shaye Semeyn

Nursing

Assistant Professor Emily McRae

Project: Piloting a Pediatric Obesity Prevention Screening

Tool and Intervention in a Family Practice Setting

**Emily Christine Storms** 

Nursing

Professor Frances Hardin-Fanning

Project: It Takes Heart: Cardiovascular Disease Risk Reduction in the Underserved and Underinsured Population of Louisville, Kentucky

Michael Stefan Swift

Nursing

Associate Professor Whitney Nash

Project: Implementation and Evaluation of Asthma Education Cell Phone Application: ASTHMAXcel, Within an Allergy and Asthma

Specialty Practice

Maggie Marie Wiser

Nursing

Associate Professor Sara Robertson

Project: A Policy Project: Implementing Safe Firearm Storage Legislation in Kentucky

Shelby Madalyn Young

Nursing

Associate Professor Sara Robertson

Project: Implementation of a Maternal Hypertension Bundle: A

Program Evaluation

### **Doctor of Education and Their Faculty Mentors**

Rachelle Jean Bramlage-Schomburg

Educational Leadership and Organizational Development

Professor William Kyle Ingle

Dissertation: Teachers' Perceptions of Professional Development and Pedagogical Practice: A Study of Kentucky Suburban School District

#### **Doctor of Philosophy and Their Faculty Mentors**

#### College of Arts and Sciences

Ciana M. Applegate
Applied and Industrial Mathematics
Assistant Professor Dan Han

Dissertation: A New Sir Model with Mobility

Holley Pitts Arnold Experimental Psychology Professor Carolyn Mervis

Dissertation: Self-Regulation in Young School-Aged Children

with Williams Syndrome

Kritika Bajaj Chemistry

Co-Mentors Professors Craig Grapperhaus and Robert Buchanan

Dissertation: Alkythiocarbamate Metal Complexes with

Antiproliferation Activity

Ivan Benitez

Criminal Justice

Associate Professor Bradley Campbell

Dissertation: SRO Roles and Teacher Behavioral Intervention Strategies:

An Analysis on Behavioral Approaches and Student Suspensions

Diptaparna Biswas

Physics

Associate Professor Swagato Banerjee

Dissertation: Search for a Dark Leptophilic Scalar Produced in Association with Taupair in Electron-Position Annihilation at

Center-of-Mass Energies Near 10.58 GeV

Tiffany Jo Brandt

Biology

Associate Professor Deborah Yoder-Himes

Dissertation: Death of a Bacterium: Exploring the Inhibition of Staphylococcus Aureus by Burkholderia Cenocepacia

Leigh Cara Brosof

Clinical Psychology

Associate Professor Cheri Levinson

Dissertation: Investigating the Shared and Unique Mechanisms of the

Development of Comorbid Eating Disorder Anxiety Symptoms

During Adolescence

Natalie Kaylyn Burke

Clinical Psychology

Professor Richard Lewine

Dissertation: Investigating the Income Academic Achievement Gap: An Exploration of the Roles of Mindfulness and Self-Concept Clarity

in Low-Income College Students

Derek A. Carpenter

Humanities

Professor John Gibson

Dissertation: Cultivating the Human Narrative: On Nietzsche, Science

Fiction, and the Aesthetics of Life

John Yu-Choh Chang

English/Rhetoric and Composition

Associate Professor Frank Kelderman

Dissertation: Taiwanese Indigenous Representation, Heteroglossia and

Rhetorics of Resistance in Warriors of the Rainbow, Seediq Bale

James Gregory Clark

Humanities

Professor Julie Peteet

Dissertation: Reaching Syrians in Need: An Analysis of Humanitarian

Aid in the 21st Century

Israel Ricardo Curbelo

Applied and Industrial Mathematics

Associate Professor Csaba Biro

Dissertation: The On-Line Width of Various Classes of Posets

Kathryn Lafferty Danner

Humanities

Professor Ranen Omer-Sherman

Dissertation: The A-Word: Destignatizing Abortion in American Culture

Jacinta Parthenia Dickens

Clinical Psychology

Professor Anita Barbee

Dissertation: Quality of Life and End-of-Life Plans: The Inclusion

of Sexual Health

Lauren Brooke Flaherty

Clinical Psychology

Professor Benjamin Mast

Dissertation: The Effects of Stigman on Quality of Life and Psychological Outcomes in Participants with Varying Reports of

Subjective Cognitive Decline

Dalton Seth Gannon

Applied and Industrial Mathematics

Professor Hamid Kulosman

Dissertation: Properties and Classifications of Certain LCD Codes

Leon Sergio Garduno Villa

Criminal Justice

Co-Mentors Professor Deborah Keeling and

Associate Professor Kristin Swartz

Dissertation: The Effects of Gang Membership and Transitions

in a Gang on Within-Individual Changes in Offending

Christina Han

Applied and Industrial Mathematics

Professor Ryan Gill

Dissertation: Cross-Validation for Autoregressive Models

Diana Therese DiGasbarro Hedrick

Clinical Psychology

Professor Benjamin Mast

Dissertation: Changing Public Perception of Dementia: The

Effect and Credibility of Three Informational Models

Hyun Jin Jung

Biology

Professor Mark Running

Dissertation: Determination of the Functional Rose of RAB-GGT in

Physcomitrium Patens

Anna Maureen Kelley Experimental Psychology

Co-Mentors Assistant Professor Campbell Bego

and Associate Professor Marci DeCaro

Dissertation: Effects of Top-down Attention and Individual Differences on Recognition Memory and Recollective Experience

Wing Yee Jackie Ma

Clinical Psychology

Associate Professor Paul Salmon

Dissertation: The Combined Benefits of Dispositional Mindfulness and Trait Self-Compassion as Potential Buffers of the Effects of Perceived Stress on Sleep Quality in College-Aged Young Adults

Michael David Martin

Physics

Professor David Brown

Dissertation: A Computational Model of the Line-1 Retrotransposon Life Cycle and Visualization of Metabolic Networks in 3-Dimensions Suzanne Marie Overstreet

Criminal Justice

Co-Mentors Professors George Higgins and Gennaro Vito Dissertation: *Understanding Racial Disparate Treatment of Juvenile Interpersonal Violent Offenders in The Juvenile Justice System Using Focal Concerns Theory* 

Eve J. Carlisle Polley

Humanities

Professor D. A. Masolo

Dissertation: Unraveling DNA and Identity: A Humanistic Perspective

on Epistemologies and Ethics of Genetic Ancestry Testing

Christopher Ritter Rickels

Humanities

Professor Guy Dove

Dissertation: A New Direction for Public Understanding of Science: Toward a Participant-Centered Model of Science Engagement

Sait Sarr

Urban and Public Affairs

Associate Professor Matthew Ruther

Dissertation: Barriers and Opportunities to Sustainable Urban Agriculture:

The Case of Louisville, Kentucky

Sarah Kelly Shryock

Clinical Psychology

Professor Suzanne Meeks

Dissertation: Age-Related Differences in the Relationship Between

Activity Familiarity and Well-Being

Saurin Rahul Sutaria

Chemistry

Professor Michael Nantz

Dissertation:  $\alpha$ ,  $\beta$ -Unsaturated Aldehydes: The Underrepresented Markers

of Disease

Ming-Chang Tsai

Biology

Professor Michael Perlin

Dissertation: Characterization of Microbotryum Lychnidis-Dioicae

Secreted Effector Proteins that Manipulate Its Host Plant, Silene Latifolia

Sida Wan

Applied and Industrial Mathematics

Associate Professor Csaba Biro

Dissertation: Dimension and Ramsey Results in Partially Ordered Sets

Alex Jordan Way

English/Rhetoric and Composition

Professor Bruce Horner

Dissertation: Rewriting Writing as Transmodal and Translingual:

Transcribing Japanese

#### College of Business

Malcolm Armani Muhammad

Entrepreneurship

Professor Robert Garrett

Dissertation: Ideas in Communities: A Micro-Perspective on

Entrepreneurial Ecosystems

### College of Education and Human Development

Katrina Ellen Elliott

Counseling and Personnel Services

Associate Professor Susan Longerbeam

Dissertation: Academic Achievement and Degree Attainment

Among Students with Children

Maame-Safowaa Geary

Counseling and Personnel Services

Associate Professor Laurie McCubbin

Dissertation: Not Only Black or Only a Woman, a Black Woman: Gendered Racial Microaggressions, Colorism and Hair on Trauma

Symptoms

Ehren Reagor Green

Educational Leadership and Organizational Development

Associate Professor Meg Hancock

Dissertation: The Person Behind the Team: A Phenomenological Exploration of the Role of the Sport Supervisor in NCAA Division I

Intercollegiate Athletics

Achvut Kulkarni

Educational Leadership and Organizational Development

Associate Professor Evan Frederick

Dissertation: The Influence of Sponsorship Engagement on Brand Loyalty: An Analysis of On-Site and Social Media Activational Communications

Timothy Schaun Lau

Counseling and Personnel Services

Professor Jeff Valentine

Dissertation: The Effect of Typewriting vs Handwriting Lecture Notes on Learning: A Systematic Review and Meta-Analysis Stephen Michael Leach

Counseling and Personnel Services

Co-Mentors Professors Jeffrey Valentine and Jason Immekus

Dissertation: A Psychometric Analysis of the Comprehensive School

Survey (CSS) Middle School Version

Edwin Carl Pavy Jr.

Educational Leadership and Organizational Development

Professor Mary Brydon-Miller

Dissertation: "I am Who I am": LGBTQ+ Student Experiences at a

Baptist Liberal Arts University

Jennifer Mary Pollard

Curriculum and Instruction

Professor Ginevra Courtade

Dissertation: Increasing Self-Determination Skills through Behavioral Skills Training for Individuals with Extensive Support Needs to Examine

Reversible Contraceptive Choices

Yohimar Andreina Sivira Gonzalez

Curriculum and Instruction

Co-Mentors Associate Professor James Chisholm

and Professor Michele Foster

Dissertation: Language Ideologies and Racialization of Language:

Multilingual Learners Experiences in the First Year in a Community College

Adam Cory Stieglitz

Educational Leadership and Organizational Development

Professor Mary Brydon-Miller

Dissertation: Voices of the "Served": Community Resident Perspectives

on International Service-Learning in Peru

Katalina Guadalupe Traxler

Counseling and Personnel Services

Associate Professor Susan Longerbeam

Dissertation: Mejorar La Raza: Measuring the Implicit Anti-Black Racial

Bias of Multiracial Individuals

Matthew David Trzaskus

Curriculum and Instruction

Co-Mentors Professor Thomas Tretter and

Associate Professor Justin McFadden

Dissertation: An Analysis of Public Comments on the Implementation of

the NGSS in Kentucky

Tianhong Yao

Counseling and Personnel Services

Associate Professor Laurie McCubbin

Dissertation: Internalized Racism Mediating the Effects of Ethnic-Racial Socialization on Self-Esteem and Psychological Distress Among Asians and Asian Americans in the United States

#### **Interdisciplinary Studies**

Hisham Abouelseoud Elsayem Abdeltawab

Interdisciplinary Studies, specialization in Translational Bioengineering

Professor Ayman El-Baz

Dissertation: Role of Deep Learning Techniques in Non-Invasive

Diagnosis of Human Diseases

Nicholas Craig Allen

Interdisciplinary Studies, specialization in Translational Bioengineering

Associate Professor Martin O'Toole

Dissertation: Tumor Targeting Gold Nanoparticles for Deliver of RNA and DNA Oligonucleotide Therapies for Glioblastoma

Yaser Abdelrahman ElNakieb

Interdisciplinary Studies, specialization in Translational Bioengineering

Professor Ayman El-Baz

Dissertation: The Role of MRI in Diagnosing Autism: a Machine

Learning Perspective

Jessica Marie Miller

Interdisciplinary Studies, specialization in Translational Bioengineering

Co-Mentors Professor Guruprasad Giridharan and

Associate Professor Tamer M. Mohamed

Dissertation: Re-engineering Cardio-oncology Testing using Biomimetic

Heart Slice Cultures

Ahmed Mosaad Elsaid Mohamed Naglah

Interdisciplinary Studies, specialization in Translational Bioengineering

Professor Ayman El-Baz

Dissertation: The Role of Generative Adversarial Networks in Bioimage

Analysis and Computational Diagnostics

### School of Public Health and Information Sciences

Sahal Abdulrahman Alzahrani

Public Health Sciences

Professor Chris Johnson

Dissertation: Rehabilitation Length of Stay in Individuals with Spinal Cord

Injury Paraplegia

Sagnik K. Bhadury

Biostatistics

Co-Mentors Associate Professor Jeremy Gaskins

and Associate Professor Riten Mitra

Dissertation: Bayesian Methods for Graphical Models with Neighborhood

Selection

Sara Atherton Choate

Public Health Sciences

Associate Professor Liza Creel

Dissertation: Meeting the Mental Health Needs of College-Aged Young Adults: Evaluating the Value and Impact of Digital Mental

Health Interventions

Siddhesh Shripad Kulkarni

Biostatistics

Associate Professor James Gaskins

Dissertation: Bayesian Methodologies for Constrained Spaces

Daniel Riggs

Public Health Sciences

Professor Kathy Baumgartner

Dissertation: Ecological Differences in the Associations Between Air Pollution, Greenness, and Risk of Stroke: The Regards Study

Don Ramesh Dinendra Sudaraka Tholkage

Biostatistics

Co-Mentors Associate Professor Qi Zheng and Professor K.B. Kulasekera Dissertation: Statistical Methods for Personalized Treatment Selection and Survival Data Analysis Based on Observational Data with High-Dimensional Covariates

Madeline May Tomlinson

Public Health Sciences

Associate Professor Anne Baber Wallis

Dissertation: A Mixed Methods Assessment of Menstrual Hygiene

Management and School Attendance Among School Girls in

Edo State, Nigeria

Monique Williams

Public Health Sciences

Professor Monica Wendel

Dissertation: "...You Can't Unknow It, It's a New Reality": A Case Study Exploring a Social Justice Public Health Intervention's Impact on Critical Consciousness Development in Youth Lindsey Adelle Wood Public Health Sciences

Assistant Professor Natalie DuPré

Dissertation: Environmental Noise Exposure and its Association with Elementary Standardized Testing Scores

and Adult Mental III-Health in Louisville, Kentucky

Yuanbao Zhang Public Health Sciences Professor Qunwei Zhang

Dissertation: The Role of MMP-3 in Copper Oxide Nanoparticle-

Induced Pulmonary Inflammation and Fibrosis

# Raymond A. Kent School of Social Work and Family Science

Katherine Cameron

Social Work

Professor Seana Golder

Dissertation: Using the Behavioral Risk Factor Surveillance System to Evaluate Realized, Effective, and Equitable Healthcare

Access in the Census Bureau's Region 3, Division 7

Alyssa Ashlyn Middleton

Social Work

Co-Mentors Professors Karlynn BrintzenhofeSzoc and Karen Kayser

Dissertation: Pediatric Oncology Social Work Job Analysis

Sara M. Williams Social Work

Associate Professor Laura Frey

Dissertation: Stigma Described by Attempt Survivors with Divers Gender and Sexual Identities in Their Suicide Stories:

A Hermeneutic Phenomenological Dissertation

### **School of Medicine**

Alyssa Sue Aebersold

Pharmacology and Toxicology

Professor Zhao-Hui Song

Dissertation: Application of Cannabidiol to Ocular Pharmacokinetics and

Pharmacodynamics

Mark Vincent Carreon dela Cerna Biochemistry and Molecular Genetics

Co-Mentors Assistant Professor T. Michael Sabo

and Associate Professor Brian Clem

Dissertation: Applications of Nuclear Magnetic Resonance

Spectroscopy: From Drug Discovery to Protein Structure and Dynamics

Greta Marie Cesarz

Physiology and Biophysics Professor David Magnuson

Dissertation: Defining the Impact of Clinically Modeled Hindlimb Stretching, Exercise, & Inactivity on Functional Recovery after

Spinal Cord Injury

Benjamin Tyler Charpentier
Anatomical Sciences and Neurobiology

Professor Scott Whittemore

Dissertation: Targeting Pathological Changes in the Gut Protects

the CNS from Neuropathology

Nagwa A. ElBaz

Pharmacology and Toxicology Associate Professor Martin O'Toole

Dissertation: The Impact of PEGylation on Cellular Uptake and in Vivo

Biodistribution of Gold Nanoparticle MRI Contrast Agents

Kyle Levi Fulghum

Physiology and Biophysics

Professor Bradford Hill

Dissertation: Metabolic Foundations of Exercise Induced Cardiac Growth

Mariam Refaat Zaky Habil

Pharmacology and Toxicology

Professor David Hein

Dissertation: Investigation of Human N-acetyltransferases (NAT1 and NAT2) Genetic Polymorphisms in Susceptibility to

Aromatic Amine and Alkylaniline Genotoxicity

Haiyan Lu

Pharmacology and Toxicology

Professor John P Wise, Sr.

Dissertation: Translating Particulate Hexavalent Chromium-Induced Chromosome Instability from Human Lung Cells to Experimental Animals,

Human Lung Tumors and Whale Cells

Sean M. Raph

Pharmacology and Toxicology

Associate Professor Matthew Nystoriak

Dissertation: Voltage Gated Potassium Channel Dependent Mechanisms of Cardiovascular Adaptation to Chronic Exercise

Andre Dwyane Richardson Pharmacology and Toxicology Professor Daniel Conklin

Dissertation: Tobacco-Derived Aldehydes, Platelets, and

Thrombogenicity: Role of Transient Receptor Potential Ankyrin-1

Reieena Shrestha

Microbiology and Immunology

Co-Mentors Professors Jun Yan and Haribabu Bodduluri Dissertation: Induction of Trained Immunity by Particulate β-Glucan Controls Cancer Metastasis Through the Sphingolipids-Mediated Mitochondrial Fission Pathway

Gregory James Russo States Anatomical Sciences and Neurobiology

Professor David Magnuson

Dissertation: Cadence and Range of Motion Modulate Pedal Force in a Rat Model of Motorized Cycling after Spinal Cord Injury

Kate Elise Tarvestad
Pharmacology and Toxicology

Professor Brian Ceresa

Dissertation: HGF-Mediated c-MET Signaling in Human Corneal

Epithelial Cells

Jennifer Haruka Toyoda Pharmacology and Toxicology

Professor John Wise

Dissertation: Molecular Mechanisms of Hexavalent Chromium-Induced

Centrosome Amplification

Evan Paul Tracy

Physiology and Biophysics

Associate Professor Amanda LeBlanc

Dissertation: Stromal Vascular Fraction Restores Vasodilatory Function by Reversing Mitochondrial Dysfunction and Oxidative

Stress in Aging-Induced Coronary Microvascular Disease

Claire Elizabeth Westcott

Microbiology and Immunology

Associate Professor Kevin Sokoloski

Dissertation: Defining the Importance of the HNRNP I Interaction to the Sindbis Subgenomic Viral RNA Using an Innovative Tethering Approach

#### J. B. Speed School of Engineering

William Richard Arnold Mechanical Engineering

Associate Professor Hui Wang

Dissertation: Wet Chemical Synthesis and Properties of Argyrodite Sulfide Solid Electrolytes for Solid State Lithium Batteries

Asma Baccouche

Computer Science and Engineering

Professor Adel Elmaghraby

Dissertation: Computer Aided Diagnosis System for Breast Cancer

Using Deep Learning

Bhagyashri Aditya Bhagwat

Electrical Engineering

Associate Professor Michael McIntyre

Dissertation: Nonlinear Observers for Burning Zone Temperatures

and Torque Estimation of the Rotary Kiln

Sonia Juliana Calero-Barney

Chemical Engineering

Professor Mahendra Sunkara

Dissertation: Dilute Anion Alloying of III-V Semiconductors

for Water Splitting

Sagarkumar Dhirubhai Hirpara

Industrial Engineering Professor Pratik Parikh

Dissertation: Models and Algorithms for Trauma Network Design

Hanging Hu

Computer Science and Engineering

Professor Mehmed Kantardzic

Dissertation: Solving the Challenges of Concept Drift in Data Stream

Classification

Muting Ma

Civil Engineering

Associate Professor Zhixia Li

Dissertation: Optimal Scheduling of Connected and Autonomous

Vehicles at Reservation-Based Intersection

Mohamed Nazih Mohamed Shehata

Computer Science and Engineering

Co-Mentors Professors Adel Elmaghraby and Ayman El-Baz

Dissertation: Voices of the "Served": Community Resident

Perspectives on International Service-Learning in Peru

Muhammad Zaigham Abbas Shah Syed Computer Science and Engineering Professor Adel Elmaghraby Dissertation: *IoT In Smart Communities, Technologies and* Applications

Danming Wei Electrical Engineering Professor Dan Popa Dissertation: Design, Evaluation, and Control of NeXus: A Multiscale Additive Manufacturing Platform with Integrated 3D Printing and Robotic Assembly

#### The Graduate Dean's Citations

Hisham Abouelseoud Elsayem Abdeltawab Ph.D. Interdisciplinary Studies, specialization in Translational Bioengineering

Mentor: Professor Ayman El-Baz

Courtney Alicia Albers D.N.P. Nursing Mentor: Associate Professor Sara Robertson

Kritika Bajaj Ph.D. Chemistry Co-Mentors: Professors Craig Grapperhaus and Robert Buchanan

Tiffany Jo Brandt Ph.D. Biology Mentor: Associate Professor Deborah Yoder-Himes

Nagwa A. ElBaz Ph.D. Pharmacology and Toxicology Mentor: Associate Professor Martin O'Toole

Kyle Levi Fulghum Ph.D. Physiology and Biophysics Mentor: Professor Bradford Hill

Kendall Leigh Griffin M.S. Sport Administration Mentor: Assistant Professor Adam Cocco

Mariam
Refaat Zaky
Habil
Ph.D. Pharmacology and
Toxicology
Mentor: Professor David Hein

Hanqing Hu Ph.D. Computer Science and Engineering Mentor: Professor Mehmed Kantardzic

Ahmed Mosaad Elsaid Mohamed Naglah Ph.D. Interdisciplinary Studies, specialization in Translational Bioengineering Mentor: Professor Ayman El-Baz

Jose M. Najera M.S. Human Resources and Organization Development Mentor: Associate Professor Ann Herd

Bolaji Michael Ogbulu M.U.P. Urban Planning/ M.P.A. Public Administration Co-Mentors: Associate Professors Aaron Rollins and Sumei Zhang

Mohamed Nazih Mohamed Shehata Ph.D. Computer Science and Engineering Co-Mentors: Professors Adel Elmaghraby and Ayman El-Baz

Rejeena Shrestha Ph.D. Microbiology and Immunology Co-Mentors: Professors Jun Yan and Haribabu Bodduluri

Kayla Jo Simpson M.S. Health Administration Mentor: Associate Professor Lee Bewley Dustin Ray Smith M.A. Anthropology Mentor: Assistant Professor Thomas Jennings

Claire Elizabeth Westcott Ph.D. Microbiology and Immunology Mentor: Associate Professor Kevin

Sokoloski

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