RESEARCH DIALOGUES

2019

THE UNIVERSITY OF TENNESSEE AT CHATTANOOGA
Welcome to ReSEARCH Dialogues, the largest academic conference on the UTC campus. Now in its fifth year, the two-day signature event showcases the scholarship and creative endeavors of nearly 700 UTC faculty, staff, graduate students and undergraduate students from all campus programs and disciplines. In addition, this year’s program features presentations by students representing Cleveland State Community College and members of the community, making it a true local celebration of research and creative activities.

The research and creative projects featured in this year’s conference underscore UTC’s status as a community-engaged university. Projects focus on a wide range of topics and issues with the goal of solving complex problems that impact Chattanooga and beyond. Featured projects also reflect UTC’s commitment to create meaningful learning experiences for our students, enabling them to achieve success in post-graduate study and the world of work.

Finally, the projects emphasize UTC’s growing emphasis on research, a robust culture that advances intellectual growth among our faculty and provides students with hands-on activities that foster their success and enhance the region’s economic growth.

Congratulations to all the outstanding 2019 ReSEARCH Dialogues presenters and pitch-competition participants. We are proud to support your work, which positively impacts your disciplines and society. We applaud your efforts and wish you much success in your future academic endeavors. To our faculty who serve as research mentors and advisors, we are grateful for your dedication and commitment to our students.

We would like to acknowledge all the individuals who have worked so diligently to make this year’s conference a success. Thank you to our volunteers and staff. We could not do this work without you. To all those who graciously gave their time to serve as pitch-competition judges and session moderators, we truly appreciate your participation and support.

Finally, a very special thank you to our event sponsors. Your support helps sustain this signature event so we can continue to provide an exceptional experience for all participants. Your support also ensures that our faculty, students, staff and members of the community can come together to share ideas and passions and cultivate research dialogues.

Join the conversation!

Welcome
day 1 - april 9

schedule

<table>
<thead>
<tr>
<th>morning</th>
<th>afternoon</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00</td>
<td>1:00</td>
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<td>9:00</td>
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<tr>
<td>Noon</td>
<td>5:00</td>
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</tbody>
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Registration & Information - Tennessee Room Hallway

Poster & Display Presentations - Tennessee Room

Podium & Panel Presentations - Breakout Rooms

Day One Luncheon - Chattanooga Rooms

Performance Presentation - Auditorium

Performance Presentation - Auditorium

Undergraduate Lightning Pitch Competition Audtorium

Student Competition Audtorium

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performance presentations

UNIVERSITY CENTER - LEVEL 2 - AUDITORIUM

morning session

9:30-10:45 am  Sami Burns  UTC Theatre Company Presents

afternoon session

1:00-1:45 pm  Lynn Worcester Jones, DMA, Nikolasa Tejero, DMA  New Music for Clarinet and Piano

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day one luncheon

11:00 AM - 12:30 PM | UNIVERSITY CENTER - LEVEL 2 - CHATTANOOGA ROOMS

Mr. Jed Mescon  Vice President of Public Relations and Marketing, Erlanger Health Systems

Dr. Joanne Romagni  Vice Chancellor for Research and Dean of the Graduate School

Dr. Steven Angle  Chancellor, The University of Tennessee at Chattanooga

Mr. Blake Corman  Chemistry and Mathematics, Undergraduate Researcher, Brock Scholar, and Grote Scholar

Mr. Korede Ajumobi  Master’s Candidate, Mathematics
morning poster & display presentations

9:00 AM - 11:00 AM | UNIVERSITY CENTER - LEVEL 2 - TENNESSEE ROOM

ARTS & SCIENCES

Korede Ajumobi
Garrett Allen
Hadyn Bailey
DeAnna Beasley, PhD
Jessica Bertrand
Sara Bey
Kristen Jennings Black, PhD
Hannah Boulware
Ethan Boyd
Coretzw Breexter
Amy Brock-Hon, PhD
Ashley Carpenter
Tes Cherian
Deandre Cole
Nathan Collyer
Deandre Cole
Sara Bey
DeAnna Beasley, PhD

Kendra Dunan
Karen Campbell
Mackenzie Brown
Rachel Brann
Katie Bogard
Elijah Berry
Heidi Hall
Emily Halvorson
Katie Hargrave, MFA
Loren Hayes, PhD
Heather Henderson
Derek Holman
Molly Hudson
Clayton Jones, MFA
Gracelyn Lane
Jackson Lappin
Kaitlin Lee
Blake Lemay
Brenna Long
Lauren Lyons
Willoumce Markham
Alexandra Martin
Hannah Matthews
Whitney Glaze
Alice Gleadhall
Samhui Gunasekera, PhD
Heidi Hall
Emily Halvorson
Katie Hargrave, MFA
Loren Hayes, PhD
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Jackson Lappin
Kaitlin Lee
Blake Lemay
Brenna Long
Lauren Lyons
Willoumce Markham
Alexandra Martin
Hannah Matthews
Ashley May
Allen Mayo
Reshawn McCarragher, PhD
Matthew McCarver
Erik McCoy
Jonathan Melton
Saada Musa
Camille Oglesby
Jalayee Oliver
Adam Olson
Spencer Overbay
Trevor Paratore
Natalie Parks
Abby Parmaely
Jared Wienklos, PhD
Ketelstand Porter
Kira Robison, PhD
Morgan Royer
Olga Russell
Christian Saenz
Kendra Dunan
Karen Campbell
Mackenzie Brown
Rachel Brann
Katie Bogard
Elijah Berry

HEALTH, EDUCATION & PROFESSIONAL STUDIES

Zach Dyer
Patrick Craig
Samuel Clark
Joseph Cancelleri
Haiven Camenisch
Kyle Barton
William Baker
ENGINEERING & COMPUTER SCIENCE

Stefan Dohse
Claudia Craig
Nathan Collyer
Deandre Cole
Ashley Carpenter
Amy Brock-Hon, PhD
Cortrez Brewster
Ethan Boyd

morning poster & display presentations

1:00 PM - 3:00 PM | UNIVERSITY CENTER - LEVEL 2 - TENNESSEE ROOM

ARTS & SCIENCES

Morgan Andrews
Courtney Barer
Kyle Baker
Roman Boylen
Jacob Burehost
Jacquelyn Carter
Hill Craddock, PhD
Allison Dearing
Trent Deason
Olivia DePhillips

Jennifer Ellis, PhD
Kendra Dunan
Karen Campbell
Mackenzie Brown
Rachel Brann
Katie Bogard
Elijah Berry
Heidi Hall
Emily Halvorson
Katie Hargrave, MFA
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Kira Robison, PhD
Morgan Royer
Olga Russell
Christian Saenz
Kendra Dunan
Karen Campbell
Mackenzie Brown
Rachel Brann
Katie Bogard
Elijah Berry

HEALTH, EDUCATION & PROFESSIONAL STUDIES

Caroline Alexander
Sadie Arborneath
John Ayoub
Lauren Barber
Rebecca Beebe
Mackenzie Brown
Jesseca Bunch
Virginia Caims, MLS
Sandy Cole, MS, EdS
Chelsea Conner
Megean Cowsky
Cole Davis
McKenna Dean
Grace Desserings
Lauren Dodd
Jessica Eisea

Engage Dyer
Sandy Cole, MS, EdS
Chelsea Conner
Megean Cowsky
Cole Davis
McKenna Dean
Grace Desserings
Lauren Dodd
Jessica Eisea
Marina Evers
Shauntia Garner
Jenny Goin
Aliison Hedges
Haylee Ingle
Adrianna Jiosa
Demisha Jones
Sydney Joseph
Audrey Keith
Marissa Knopp
Lanaya Larson

Martha Law
Kelsy Layton
Emma Lynch
Anna Martin
Deborah McAllister, EdD
Farley Meadors
Jessica Meadwos
Krystal Mison
Katherine Needham
Brittany Norris
Rae-Ven Offutt
Grace Rains
Brooklynn Ray
Benjamin Schridler
Haley Stacey
Kristen Steele
Morgan Swafford
Ashley Valenica
Kelsy Waid
Stephen Welch
Kayacee Whiteside
Kayeinec Williams

ERLANGER

Allan Biene, DFT, FACHE
Adria Sherrill
Jennifer Stephens

BUSINESS

Jordan Barnes
Raia Barahona
Ashil Chew
Luccas Do Carmo
Mark Drinkard

HONORS

Itzel Guzman Hernandez
Hannah Holmberg
Cora Miller
Jesse Moore

LIBRARY

Jaccquelyn Scott
William Brewer

Cleveland State Community College
podium & panel presentations

UNIVERSITY CENTER - LEVEL 2 - FOUNDATION ROOM

morning session - 9:00 AM - 11:00 AM

Karissa Peyer, PhD, Moderator
9:15 – 9:30 am Nice girls finish last: Acquiescent assertiveness attributed to workplace violence exposure and uncivil nursing encounters
Karina Kraevasky Phillips

9:30 – 9:45 am Characterization and Biological Response of Legumes Fertilized with Engineered Nanoparticles
Delli Zimmerman

9:45 – 10:00 am Southern Charm: A Study of Dialect Code-Switching Among Southerners
Tyler Clemmons

10:00 – 10:15 am The Benefits of Attending an Academic Conference
Sara Mitchell

10:15 – 10:30 am Beyond Biography: Caravaggio’s Self Portraits as Psychological
Alyson McGowan

10:30 – 10:45 am Mary as a Scribe in Early Modern Painting
Katie Martin

afternoon session - 1:00 PM - 3:00 PM

Gretchen Potts, PhD, Moderator
1:15 – 1:30 pm FOMC Communications: A Sentiment Analysis
Jonathan Stegmann

1:30 – 1:45 pm Looking at Movies with Computers - Using Convolutional Neural Networks for Shot Change Detection in Film Footage
Stephen Clark

1:45 – 2:00 pm Beyond Biography: Caravaggio’s Self Portraits as Psychological
Alyson McGowan

2:00 – 2:15 pm Mary as a Scribe in Early Modern Painting
Katie Martin

podium & panel presentations

UNIVERSITY CENTER - LEVEL 2 - RACCOON ROOM

morning session - 9:00 AM - 11:00 AM

Natalie Haber, MLS, Moderator
9:30 – 10:00 am 3 Cases of Contemporary Digital Writing and Publishing
Rik Hunter, PhD, Amy Burger, Shelby Yarbrough, Jenna Lacey

10:15 – 10:45 am Incorporating Student Film-Making in a Course on Horror and Philosophy
Ethan Mills, PhD, Wes Smith, MA

afternoon session - 1:00 PM - 3:00 PM

1:15 – 1:45 pm 21st Century Success Skills: Drive Your Career
Blake Corman

podium & panel presentations

UNIVERSITY CENTER - LEVEL 3 - HERITAGE ROOM

morning session - 9:00 AM - 11:00 AM

Amanda Clark, PhD, Moderator
9:15 – 9:30 am Latina/Hispanic Women's Perspectives in Chattanooga
Brittany Green

9:30 – 9:45 am Investigating how bacterial pathogens sense and adapt to their environment to survive and spread disease
Abigail Doyle

9:45 – 10:00 am Synthesizing Multifunctional Iron Oxide Nanoparticles and Developing a Model for their Size Analysis using Dynamic Light Scattering
Olivia George

10:00 – 10:15 am Rising Rock documents Chattanooga
Allie Schenker

10:15 – 10:30 am Getting Lost: Examining a Creative Practice Using Found Materials
Mary Page Pepper

afternoon session - 1:00 PM - 3:00 PM

Kristen Knopick, MA, Moderator
1:15 – 1:30 pm High Impact Practice Grant: Collaborative Translation: The Poem as Spatial Rendering
Shane Ward, MFA

1:30 – 1:45 pm The Increasing Commonality of Consensually Non-Monogamous Relationships
Elisabeth Sheff-Stefanik, PhD, CSE

1:45 – 2:00 pm Urban Electric Vehicle Charging Markets: Computational Modeling and Optimal Design
Vahid Disfani, PhD
UNIVERSITY CENTER - LEVEL 3 - CHICKAMAUGA ROOM

class, activity, or session in progress

morning session - 9:00 AM - 11:00 AM

Linda Frost, PhD, Moderator

9:15 – 9:30 am  The Development and Implementation of a Domestic Violence Nurse Examiner Program
Priscilla Simms-Roberson, DNP, APRN, NP-C, SANE-A

9:30 - 9:45 am  A Direct Algorithm for the Vertical Generalized Linear Complementarity Problem with P-matrix
Aniekan Ebiefung, PhD

9:45 - 10:00 am  Memorializing Migration: Immigrant Patronage, Public Memory and the Syrian Monument to Argentina (1910)
Olivia Wolf, PhD

10:00 – 10:15 am  Reasons for rarity? Exploring adaptive and aclimatatory constraints of southeastern endemics in the face of contemporary environmental change
Jennifer Boyd, PhD

10:15 – 10:30 am  Using topology to understand polymer mechanics and function
Eleni Panagiotou, PhD

10:30 - 10:45 am  Midnight Vallenato and Other Stories
Edwin Murillo, PhD

afternoon session - 1:00 PM - 3:00 PM

Jennifer Boyd, PhD, Moderator

1:15 - 1:30 pm  Reading Communist Manifesto(s)
Heath Shultz, MFA

1:30 - 1:45 pm  Simulating intelligent mob behavior using a shared potential field or: How I learned to stop computing and admire the ducks
Craig Tanis, PhD

1:45 - 2:00 pm  Inspiring Students through Modeled Behavior
Kevin Doyle, PhD, LPC, NCC

Cleveland State Community College Session

Victoria Bryan, PhD, Moderator

9:15 – 9:30 am  Grilling “The Great Gatsby”
Destiny Dodson Jones, Hannah Hall, Maria Tellez

9:30 - 9:45 am  AI Predicting Alzheimer’s
David Shephard, Josh Couch

9:45 - 10:00 am  The Significance of Washington’s Farewell Address and The Monroe Doctrine
Harshil Patel, Nate Harrell

10:00 – 10:15 am  Gender Roles in History
Emily Pritchett, Bradley Hayes, Savannah Renfro

afternoon session - 1:00 PM - 3:00 PM

Cleveland State Community College Session

Victoria Bryan, PhD, Moderator

1:00 - 1:15 pm  Human Trafficking: Tennessee
Sadie Lane

1:15 - 1:30 pm  Differences in Marketing: Luxury and Drugstore Cosmetic Brands
Katelyn Gardner

1:30 - 1:45 pm  War Prayer from an Outcast’s Lens
David Tullock

1:45 - 2:00 pm  Oppression of Women in “The Yellow Wall-Paper”
Gerald Reidenbach

2:00 - 2:15 pm  A Short Reading of “Leave Hope Here”
Savannah Buffington

2:15 - 2:30 pm  Marxist Themes in Faulkner’s “Barn Burning”
Arielle Gearhart

2:30 - 2:45 pm  The Significance of Washington’s Farewell address and The Monroe Doctrine
Kaveri Patel

“Undergraduate research provides an opportunity to apply new knowledge in a real-world setting.”
morning session - 9:00 AM - 11:00 AM

Talia Welsh, PhD, Moderator

9:00 – 9:15 am Mary in the Quran: A Case for Prophethood and an Analysis of Fluidity and Transcendence of Traditional Gender Roles
Norah Soufraji

9:15 – 9:30 am We Live Inside a Dream: David Lynch’s Dream Factory and What it Means for Reality
Aaron Mays

9:30 – 9:45 am Aristotle, Aquinas, and Locke: A Synthesis of Natural Law Philosophy in American Jurisprudence
Allison Cyrus

9:45 – 10:00 am The Digital Delusion: A Postphenomenological Analysis of Digital Embodiment
David King

10:00 – 10:15 am Domestic Imperialism: the Reversal of Fanon
Landon Finke

10:15 – 10:30 am “Scatty and Sadness”
Turner Phillips

10:30 – 10:45 am American Evangelicals and the social and political issues that concern them
Joshua Powell

10:45 – 11:00 am How Idealism Resolves the Mind-Body Problem

undergraduate student lightning pitch competition

3:00 - 4:30 PM | UNIVERSITY CENTER - LEVEL 2 - AUDITORIUM

presenters:

Stephanie Adams  
Art  
PARK IT.

Ethan Boyd  
Biology, Geology, & Environmental Science  
Dogma Dance Off: Charity Through the Celebration of the Local Arts

Haiven Camenisch  
Engineering  
Endotoxin Bioseparation Technologies for Plasmid DNA Vaccine Manufacturing

Samuel Clark  
Engineering  
Augmented Reality for Visualizing Civil Infrastructure

Nathan Collyer  
Social, Cultural, & Justice Studies  
Geography of Chattanooga: Engaging Community with Place Using Story Maps

Nathan Collyer  
Social, Cultural, & Justice Studies  
The Tale of Two Mountains: Applying a Social-Ecological Systems Framework to Analyze the Conservation Outcomes for Cameron Hill and Stringer’s Ridge

Kyler Eskridge  
Engineering  
Machine learning to predict transformer failure

Anthony Iorio  
Political Science & Public Service  

Dakila Ledesma  
Computer Science & Engineering  
VIGOR, A Virtual, Individualized and Generative Orchestrator for Rehabilitation

Steven Sawyer, Patrick Craig  
Engineering  
Nanomaterial Characterization and Treatment in Urban Stormwater Runoff

William Stuart  
Biology, Geology, & Environmental Science  
Creating a Detailed Site Map of a Unique Closed Depression on the Cumberland Plateau

judges:

Ms. Twyler Boykin  
Program Director, Upward Bound Math Science, The University of Tennessee at Chattanooga

Dr. Richard Brown  
Executive Vice Chancellor for Finance and Administration, The University of Tennessee at Chattanooga

Ms. Haley Doss  
Venue Manager & Executive Assistant, River City Company

Dr. T.R. Grayson-Eubanks  
Infection Prevention Director, Erlanger Health System

Dr. Jorge Pérez  
Associate Vice President; Office of Academic Affairs and Student Success, The University of Tennessee, Knoxville

Mr. David Steel  
Director of Civic Engagement, The University of Tennessee at Chattanooga

“Undergraduate research provides an opportunity for the student to expand their mind by opening them up to challenges.”

Holt 204
12:30 – 1:30 pm
Holt 204
1:50 – 2:50 pm
Holt 204
## Day 2 - April 10

<table>
<thead>
<tr>
<th>Time</th>
<th>Morning Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00</td>
<td>Registration &amp; Information - Tennessee Room Hallway</td>
</tr>
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<td>10:00</td>
<td>Podium &amp; Panel Presentations - Breakout Rooms</td>
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<tr>
<td>11:00</td>
<td>Noon - Breakout Rooms</td>
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<table>
<thead>
<tr>
<th>Time</th>
<th>Afternoon Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00</td>
<td>Day Two Luncheon - Chattanooga Rooms</td>
</tr>
<tr>
<td>2:00</td>
<td>Graduate Student 3 Minute Thesis Competition - Auditorium</td>
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<tr>
<td>3:00</td>
<td>Faculty Pitch Competition - Auditorium</td>
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<td>4:00</td>
<td>Reception - Library – 4th Floor</td>
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### Day Two Luncheon

11:00 AM - 12:30 PM | University Center - Level 2 - Chattanooga Rooms

- **Mayor Andy Berke**  
  Mayor of Chattanooga
- **Dr. Joanne Romagni**  
  Vice Chancellor for Research and Dean of the Graduate School
- **Dr. Steven Angle**  
  Chancellor, The University of Tennessee at Chattanooga
- **Dr. George Hynd**  
  Interim Provost, The University of Tennessee at Chattanooga
day 2 - april 10

morning poster & display presentations
9:00 am - 11:00 am | university center - level 2 - tennessee room

arts & sciences
william adair
korede ajumobi
deanna beasely, phd
kristen jennings black, phd
richard blanton
brittany branda
christopher branson
bethany bry
celeste bremmer
rachel browder

stelios chatzimanolis, phd
william hunt, msn

nyssa hunt, ms
taylor hudson
lingji rong, phd
andrew ledoan, phd
zhach mccoy
erin melhorn, otd, otr/l
charlie mix
candace murphy
lisa nanni
modupe omojalo
kailor ragers

zachary rush
jeremy strickler, phd
riley tiro
shawn trivette, phd
lauren williams

holland youngman
alexandra zelin, phd

business
sakineh khalili
taylor sawyer
david witt, ms, mba

engineering & computer science
areeg ahmed
amani altarawneh
babatunde atolagbe
jeal reddy bathi, phd, pe
ahmed elfatayeb
austin harris
ahmed ibrahim

saroj khanal
daniel loveless, phd
said medury
farog mahmoud
maxwell omwenga
bharat patel
mitch prewitt

donald reising, phd
jose stowell
hector suarez
syed mahmood tareq
connor woods
chen xu

health, education & professional studies
tyler albright
jeni alexander
jennifer archer
micaela bailey
joan bang
hensley barnes
perry barnhill
olivia batichelor
brooke bates
adria bautista
amanda benjamin
lacie black
mary jo blanton, msn,
FNp-Bc
nicholas boel, phd
lauren brakebill
ronnie bridges
mason briles
kristi brown
mackenzie brown
pamela camp, msn,
FNp-c
ashleigh caves
jenna cecil
madelyn chadwell

aleise cline
makayla colbert
sandy cole, ms, eds
anna cornett
kathleen craig
ryan crane
mary crutchfield
elica cruz, phd, ot/l
kendra dunan
amanda durall, mph
elizabeth dyer
lauren easter
jennifer eills, phd
brooke epperson
brianna ewin
ashley ferguson
edeni fernandini
tyler forrest
sandra french
kaylee gardiner
drew gether
rokosolina grya
kenneth grubbs
susan hammond
whitney hardlin

abby morehead
brittany haskell
sarah hathcock
shelly heemsstra
shannon hendrix
jenny holcombe, phd
luney hugheon
eric hungenberg, phd
garrett jackson
joanie jamison, dnp
FNp-Bc
valerie jensen
rolla jilin
sydney joseph
alyssa johnson
quentin johnson
farron kilburn, ma
sally langager
lee anne laplue
garrett lesher
hayley lumpkin
malory maddox
lauren manzo
rick mason
emily mclemore

ahmed ibrahim

health, education & professional studies

afternoon poster & display presentations
1:00 pm - 3:00 pm | university center - level 2 - tennessee room

arts & sciences
korede ajumobi
bethany braz
alex brit
amy brock-hon, phd
ann buggey, mfa
amanda clarke, phd
michael corley
hill craddock, phd
keith daniels
trent deason

amber doolittle
susan eckelmann, phd
lydia fogo johnson
james fulks
kathryn graeff
ashley grillo
sumith gunasekera,
phd
katelyn hancock
jade harry

kevin hon
nyssa hunt, ms
karen jones, phd
shannon mccarriager,
phd
meg miller
charlie mix
brian o’leary, phd
tyler perry
abigail rogers

kaila rogers
arra saram, mba, ms
megan stepanik
erin taylor
thuy truong
thomas vorwerk
amanda warner
lakmali weerasena, phd
collin wilbanks

business
connor barnett
mckenna blevins
hunter holzhauer, phd
kyle smith
casey szatowski
brandon suders
ben trussel
maddie wade
stephen zurb

engineering & computer science
areeg ahmed
amani altarawneh
babatunde atolagbe
jeal reddy bathi, phd, pe
ahmed elfatayeb
austin harris
ahmed ibrahim

saroj khanal
daniel loveless, phd
said medury
farog mahmoud
maxwell omwenga
bharat patel
mitch prewitt

donald reising, phd
jose stowell
hector suarez
syed mahmood tareq
connor woods
chen xu

health, education & professional studies

aaron albright
jeni alexander
jennifer archer
micaela bailey
joan bang
hensley barnes
perry barnhill
olivia batichelor
brooke bates
adria bautista
amanda benjamin
lacie black
mary jo blanton, msn,
FNp-Bc
nicholas boel, phd
lauren brakebill
ronnie bridges
mason briles
kristi brown
mackenzie brown
pamela camp, msn,
FNp-c
ashleigh caves
jenna cecil
madelyn chadwell

aleise cline
makayla colbert
sandy cole, ms, eds
anna cornett
kathleen craig
ryan crane
mary crutchfield
elica cruz, phd, ot/l
kendra dunan
amanda durall, mph
elizabeth dyer
lauren easter
jennifer eills, phd
brooke epperson
brianna ewin
ashley ferguson
edeni fernandini
tyler forrest
sandra french
kaylee gardiner
drew gether
rokosolina grya
kenneth grubbs
susan hammond
whitney hardlin

abby morehead
brittany haskell
sarah hathcock
shelly heemsstra
shannon hendrix
jenny holcombe, phd
luney hugheon
eric hungenberg, phd
garrett jackson
joanie jamison, dnp
FNp-Bc
valerie jensen
rolla jilin
sydney joseph
alyssa johnson
quentin johnson
farron kilburn, ma
sally langager
lee anne laplue
garrett lesher
hayley lumpkin
malory maddox
lauren manzo
rick mason
emily mclemore

ahmed ibrahim

health, education & professional studies

aaron albright
jeni alexander
jennifer archer
micaela bailey
joan bang
hensley barnes
perry barnhill
olivia batichelor
brooke bates
adria bautista
amanda benjamin
lacie black
mary jo blanton, msn,
FNp-Bc
nicholas boel, phd
lauren brakebill
ronnie bridges
mason briles
kristi brown
mackenzie brown
pamela camp, msn,
FNp-c
ashleigh caves
jenna cecil
madelyn chadwell

aleise cline
makayla colbert
sandy cole, ms, eds
anna cornett
kathleen craig
ryan crane
mary crutchfield
elica cruz, phd, ot/l
kendra dunan
amanda durall, mph
elizabeth dyer
lauren easter
jennifer eills, phd
brooke epperson
brianna ewin
ashley ferguson
edeni fernandini
tyler forrest
sandra french
kaylee gardiner
drew gether
rokosolina grya
kenneth grubbs
susan hammond
whitney hardlin

abby morehead
brittany haskell
sarah hathcock
shelly heemsstra
shannon hendrix
jenny holcombe, phd
luney hugheon
eric hungenberg, phd
garrett jackson
joanie jamison, dnp
FNp-Bc
valerie jensen
rolla jilin
sydney joseph
alyssa johnson
quentin johnson
farron kilburn, ma
sally langager
lee anne laplue
garrett lesher
hayley lumpkin
malory maddox
lauren manzo
rick mason
emily mclemore

ahmed ibrahim

health, education & professional studies
podium & panel presentations

UNIVERSITY CENTER - LEVEL 2 - FOUNDATION ROOM

morning session - 9:00 AM - 11:00 AM

Shewanee Howard-Baptiste, PhD, Moderator

9:15 – 9:30 am Active Learning in the Humanities: A Study of Shakespeare Pedagogy with Secondary Students Joyce McPherson

9:30 – 9:45 am Seeing you from your point of view: Perspective-taking and first impression accuracy Kathryn Graeff

9:45 – 10:00 am Identifying Success Patterns within Students to Predict College and Career Readiness Timothy Barczak

10:00 – 10:15 am Defining Authoritarianism in America: Why Philosophy Matters Jesse Leslie

10:15 – 10:30 am Speculation and Wheat Joshua Lawson

afternoon session - 1:00 PM - 3:00 PM

Brad Harris, PhD, Moderator

1:15 – 1:30 pm Identification of Elite Athletes with Perception-Action Coupling Impairment Gary Wilkerson, EdD, ATC

1:30 – 1:45 pm Hybrids, Multimodals, and the Space of Composition Jeannie Parker Beard, PhD

1:45 – 2:00 pm Depression Since Prozac: Finding the True Self Russell Helms, MPH/MFA

2:00 – 2:15 pm Assessing Residents’ Satisfaction with Housing and Community Environments in the Neighborhoods of Chattanooga Eun Kim, PhD, LEED AP

2:15 – 2:30 pm Urban Electric Vehicle Charging Markets: Computational Modeling and Optimal Design Vahid Disfani, PhD

podium & panel presentations

UNIVERSITY CENTER - LEVEL 2 - RACCOON ROOM

morning session - 9:00 AM - 11:00 AM

Fernando Alda, PhD, Moderator

9:15 – 9:30 am Effective Hyperbolic Strain-Softened Shear Modulus for Driven Piles in Clay Don Warrington, PhD, PE

9:30 – 9:45 am Identification of Shared Professional Values in the Profession of Athletic Training Marisa Colston, PhD, ATC

9:45 – 9:55 am Simulation of airflow through dense urban neighborhoods Kidambi Sreenivas, PhD

10:00 – 10:15 am Residency and Remix: Developing a new body of work Katie Hargrave, MFA

10:15 – 10:30 am Network-based association study of protein sets Haobo Guo, PhD

10:30 – 10:45 am Improvement Science applied to Doctor of Nursing Practice Education: the role of FOCUS-PDCA in continuous program improvement Susan Thul, DNP, APRN, CNM, Joanie Jackson, DNP, APRN, FNP-BC, Bernadette DePrez, DNP, MBA, RN

afternoon session - 1:00 PM - 3:00 PM

Greg O’Dea, PhD, Moderator

1:00 – 1:30 pm The Craft of Creative Writing Jacqueline Scott, Elizabeth Benn, Jared Steiman, Shannon Sweeney, and Faith Roberts

1:30 – 1:45 pm Break

1:45 – 2:15 pm A View from the Trenches: Commemorating the Centennial of WWI Jonathan McNair, DMA, Alison Allerton, DMA, Susan Eckelmann Berghel, PhD, Joanie Jackson, DNP, APRN, FNP-BC, Edwin Murillo, PhD, Aaron Shaheen, PhD, Jeremy Strickler, PhD

2:30 – 3:00 pm Perspectives on Metropolitan Government in Chattanooga Chris Acuff, PhD, Michael Boehm, Hope Cody, Jim Frierson, Mallory Treece
podium & panel presentations
UNIVERSITY CENTER - LEVEL 3 - CHICKAMAUGA ROOM
afternoon session - 1:00 PM - 3:00 PM
MOCS I Planning Committee: Jenny Holcombe, PhD, Emily Thompson, MSI, Chapel Cowden, MSIS, Shawn Trivette, PhD, & DeAnna Beasley, PhD
PT students volunteering with Ironman Foundation
Betsy Myers, PT, DHS, MHS, MPT, OCS, CW, CLT
Henry “Rardy” Spratt, PhD & David Levine, PT, PhD, DPT, OCS, CCRP, Cert. DN, FAAPA
Assessing Bacterial Colonization
Scrappy’s Keyboards@The Library
Making Knowledge Accessible: Nerd Night Chattanooga
Divori Kimbro, PhD
Chronic Disease Self-Management Program
Balance Matters program in the Community
The Bloom Project
Testing the citizen-centric model: What multi-stakeholder engagement can illuminate about developing smarter city initiatives
Chandra Ward, PhD
UTC School of Nursing Community Engagement Activities
After school nutrition and physical activity program
Farren Kilburn, MA
Kara Hamilton, PhD, Melissa Powell, MED, RD, Shewannee Howard-Baptiste, PhD, Melissa Graham, Carlene Nord, PhD, Enjelica Reid, Ryan McCollough, & E’tienne Easley
Karissa Feyer, PhD
Greg Heath, DHSc, MPH, Eric Asboe, & David Johnson
Q&A
A community-university partnership to expand and evaluate a youth soccer program in Chattanooga
If you just build it, they probably won’t come: Steps to engaging community sectors in healthy urban planning

DAY 2 - APRIL 10 20
Join us on Day 2 of Research Dialogues 2019 for a discussion on UTRF & TECHNOLOGY TRANSFER AT UT

The University of Tennessee Research Foundation (UTRF) will host an informational session at UTC’s Research Dialogues 2019 to discuss an overview of UTRF services and the technology transfer process at UT. You will have the opportunity to ask questions and learn more about how the process works.

UTC University Center, Signal Mountain Room
1:30 PM - 3:00 PM

Discussion Topics Include:

- Overview of UTRF
- Intellectual Property
- The Technology Transfer Process at UT
- Invention Disclosure Enterprise Application
- Resources for Researchers & Entrepreneurs

The University of Tennessee Research Foundation is a non-profit 501(c)(3) organization responsible for the commercialization of intellectual property developed at the University of Tennessee. UTRF seeks partnerships with corporations, entrepreneurs, and investors to move innovations from the lab to the marketplace.

For more information please contact UTRF at utrf.tennessee.edu • 865-974-1882 • utrf@tennessee.edu
graduate student
3 minute thesis competition

9:00 AM - 11:00 PM | UNIVERSITY CENTER - LEVEL 2 - AUDITORIUM

presenters:

Courtney Alley
Biology, Geology, & Environmental Science
A Reevaluation of Tennessee Non-Native Plant Species Using Online Herbarium Specimen Data to Develop Species Distribution Models

Morgan Andrews
Psychology
Perceptions of Juvenile Confessions

Mehran Ghafari
College of Engineering and Computer Science
Computational Method for Monitoring Cell Division

Nisarg Hansaliya
Mechanical Engineering
Effects of Optically-Transparent Thermally Insulated Silica Based Aerogel in a Solar Thermal Receiver

Sarah Kelehear
Biology, Geology, & Environmental Science
All the things we don’t know about the four-toed: modeling the distribution of a cryptic, habitat-specific, salamander

Daniel Mallman
College of Engineering and Computer Science
Air Piano & Stage Genies: An Engaging, Compelling Computer Science Curriculum

Sai Medury
College of Engineering and Computer Science
Secure Certificate Revocation as a Peer Service

Tyler Perry
College of Health, Education, and Professional Studies
Crossed and Uncrossed Visuomotor Reaction Time Training

Erin Taylor
Biology, Geology, & Environmental Science
Spatial Habitat Modeling of American Chestnut (Castanea dentata) and Distribution in the Southeast United States

Aaron Wilson
College of Engineering and Computer Science
Automatic Classification of Electrical Disturbances

judges:

Dr. Adera Causey
Curator of Education, Hunter Museum, Chattanooga

Ms. Jennifer Crutchfield
Director of Public Relations & Community Engagement, WTIC

Mr. Marc Holcomb
Program Coordinator, Career Services, The University of Tennessee at Chattanooga

Dr. Jan Keys
Senior Vice President and Chief Nurse Executive, Erlanger Health System

Dr. Theresa Liedtka
Dean of the Library, The University of Tennessee at Chattanooga

Ms. Kristina McClure
Project Specialist, Upward Bound Math Science PRISM, The University of Tennessee at Chattanooga

Ms. Melanie Ribaric
High Impact Practices Specialist, Chattanooga State Community College

Mr. Andrew Rogers
Director of Research and Applications Strategy, The Enterprise Center

Mr. Stephen Rumbaugh
Creative Services Director in the Office of Communications & Marketing, The University of Tennessee at Chattanooga

Ms. Valara Sample
Director of Housing and Residence Life, The University of Tennessee at Chattanooga

Dr. Donna Seagle
Associate Professor/Director, Faculty Instruction & Professional Development, Chattanooga State Community College

Ms. Rebecca Suttles
Director of Scholarships Community Foundation of Greater Chattanooga

faculty pitch competition

3:00 - 4:30 PM | UNIVERSITY CENTER - LEVEL 2 - AUDITORIUM

presenter:

Fernando Alda, PhD
Biology, Geology, & Environmental Science
These fishes will shock you!

Jessica Aucther, PhD
Political Science & Public Service
Peacebuilding and Memorialization in Nairobi, Kenya

Christopher Cunningham, PhD
Psychology
Finding and sustaining motivation and a sense of meaning in medicine

Kevin Doyle PhD, LPC, NCC
School of Professional Studies
Building Motivation: The Key to Sustainable Change

Sumith Gunasekera, PhD
Mathematics
Mathematics and Statistics - Who is the Winner?

Jeannie Hacker-Cerulean, MA
Performing Arts
Arts Advocacy

Azad Hossain, PhD
Biology, Geology, & Environmental Science
Developing a Model to Map the Potential Areas for Landslide Hazards in Hamilton County, TN using GIS and Remote Sensing

Andrew O’Brien, MFA
Art
Drift Alignment: Artist Book Proposal

Lakmali Weerasena, PhD
Mathematics
Mathematical Modeling and Conservation Biology

Olivia Wolf, PhD
Art
South-South Dialogues in the Arts

Sungwoo Yang, PhD
Civil & Chemical Engineering
Air Glass for Solar Energy Harvesting and Smart Building

judges:

Ms. Jennifer Andrews
Program & Engagement Manager, Chattanooga 2.0

Ms. Stefanie Crowe
Director of Wealth, Knowledge & Happiness, Stone Bridge Asset Management

Dr. William Crowe
Assistant Vice President, Erlanger Health System

Dr. Karen Brinkley Etzkorn
Research and Special Projects Manager, The University of Tennessee, Knoxville, Office of Academic Affairs and Student Success

Mr. Ken Hays
President and Chief Executive, The Enterprise Center

Dr. Irene Loomis
Professor of Mathematics (Retired), The University of Tennessee at Chattanooga

Ms. Kristina McClure
Clinical Administrator, Children’s Hospital at Erlanger

Ms. Kristina Montague
Managing Partner, JumpFund

Ms. Leslie Phelps
Clinical Administrator, Children’s Hospital at Erlanger

Ms. Robin Posey
Director of Community Impact, Community Foundation of Chattanooga

Ms. Jennifer Skjellum
Director of Programs, The Company Lab

Mr. Tony Young
Executive Director, Chambliess, Bahner & Stophel, PC.
conference closing reception

5:00 – 7:00 PM | 4TH FLOOR - UTC LIBRARY

The UTC Clarinet Ensemble
Nikolasa Tejero, UTC Associate Professor and Clarinetist, Bb clarinet
Wanda Dugger, Bb clarinet
Kyle Patton, Bb clarinet
Diego de Cordova, Bass clarinet

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Research Dialogues 2019

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(423) 425 - 5569

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by Appointment

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Chattanooga, TN 37403

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utc.edu/research-dialogues