Christina Stoehrel, a graduate student in biology, and her adviser, biology professor Kathy Gould Mathews, study plant samples.
Dear Participants,

Welcome to the Nineteenth Annual Graduate Research Symposium. Since 1992, the Graduate Research Symposium, sponsored by Graduate School and Research, has provided graduate students the opportunity to showcase their scholarly research and projects. I want to express my sincere appreciation to you for sharing your scholarly and creative work. In addition, I congratulate all the participating faculty and staff mentors for supporting and encouraging our presenters to participate in this meaningful experience.

For many of you, this will be your first opportunity to share empirical findings and creative works with the academic community. Today, you take the first step in becoming recognized as a scholar in your chosen discipline. The skills that you learn as part of the research process and your ability to convey that research in writing and in person will enable you to establish your authority within your discipline and improve the world in which we live.

I congratulate you on this significant milestone in your academic development. It is my hope that your experience today inspires you to continue to contribute to our understanding of the significant issues facing our region, state, and world and propels you to take action.

I look forward to meeting each of you and having the opportunity to talk with you about your important work and your plans for the future. A celebration has been planned in your honor in the University Center Grand Room starting at 5pm. Please join your colleagues.

Scott E. Higgins
Dean, Graduate School and Research
"If you have knowledge, let others light their candles in it."

– Margaret Fuller
We are not what we know but what we are willing to learn.

– Mary Catherine Bateson
12:30–1:45pm (continued)

FINE & PERFORMING ARTS & HUMANITIES

We are located in the Fine Arts & English UC 214 | Cardinal Room

JOAN BYRD, Art Design, Moderator

Competing Land Use Values: Community versus the Self in Literature of the American South
Presenter: Leslie Ferguson-Oles
Sponsor: Mae Claxton

The Capitalist Agenda and Animal’s People: Profit in Poison
Presenter: Brian Hough
Sponsor: Laura Wright

Moving Out of State: Reasonable
Presenter: Scott Hubener
Sponsor: Cathy Griffin

Over Consumption in America
Presenter: Frank Vickery
Sponsor: Joan Byrd

HUMANITIES | History | UC 215 | Catamount Room

RICHARD STARNES, History, Moderator

Forget Me Not: Victorian Era Perceptions of Death in Photography, Religion, and Literature
Presenter: Hilary Lindler
Sponsor: Alexander Macaulay

Slave Deaths through the Eyes of Plantation Mistresses
Presenter: Norrie Meus
Sponsor: Richard Starnes

Elite Georgia Women’s Civil War Plight: Maintaining Distinguished Positions and Idyllic Images
Presenter: Kaylynn L. Washnock
Sponsor: Richard Starnes

Slavery in Twentieth-Century U.S. History Textbooks
Presenter: Harrison Williams
Sponsor: Alexander Macaulay

12:30–1:45pm (continued)

SOCIAL SCIENCES | Psychology | UC 232A | Multipurpose Room

DAVID MCCORD, Psychology, Moderator

The Relationship between Personality and Depression
Presenter: Adam D. Hicks
Sponsor: David McCord

Anxiety and Depression: Personality Differences
Presenters: Adam D. Hicks and Trevor Dennie
Sponsor: David McCord

Correlations between CAP Abuse Scale and MMPI-2-RF Scales in a Clinical Setting
Presenter: Brittni Morgan
Sponsor: David McCord

ENGINEERING & TECHNOLOGY | Technology | UC 232B | Multipurpose Room

JAMES ZHANG, Engineering & Technology, Moderator

Optical Assembly of Far-Field Super-Resolution Imaging via Optical Gain
Presenter: Joshua Deaver
Sponsor: Bill Yang

A Novel Implementation of Passive Sonar
Presenter: William Gall
Sponsor: James Zhang

Activity Recognition Using Grey-Markov Model
Presenter: Kirke L. Shouse
Sponsor: James Zhang

Performance Analysis of Ultra Wideband Communication Systems
Presenter: LakshmiNarasimhan SrinivasaRaghavan
Sponsor: James Zhang

HEALTH | Physical Therapy | UC 315 | Theater

DAVE HUDSON, Physical Therapy, Moderator

Gender Differences in the Relationship between Alignment of the Lower Extremity and Plantar Pressures of the Foot
Presenters: Laura Flynn and Chris Wilson
Sponsor: Dave Hudson

The Relationship between Static Foot Structure and Plantar Force Patterns
Presenters: Lauren Parker and Mary Ann Pascutti
Sponsor: Dave Hudson

Establishing Validity of the Western Athletic Knee Scale
Presenters: Spencer Shugart, Eric Collins, and Michelle Ziegler
Sponsor: James Scifers

“I never see what has been done; I only see what remains to be done.”

– Marie Curie
2–3:15PM

HUMANITIES | History | UC 209 | Rogers Room
ALEXANDER MACAULAY, History, Moderator

Cataloochee Valley, NC: Pioneer Settlement, Park, and Heritage Tourism Site

Presenter: Sarah Beth Lee
Sponsor: Alexander Macaulay
NC-RESEARCH

Singing in the Mountains:
The Ginseng Economy in the Southern Appalachians, 1865-1900

Presenter: Thomas Luke Manget
Sponsor: Richard Starnes
NC-RESEARCH

‘Every Necessary thing’: The Carolina Deerskin Trade
and the Erosion of Cherokee Culture in the Early and Mid-18th Century

Presenter: J.G. Benjamin Pullin
Sponsor: Alexander Macaulay
NC-RESEARCH

HUMANITIES | English | UC 212 | Dogwood Room
MIMI FENTON, English, Moderator

Bringing Letters to Life: The Art of Textual Editing

Presenters: Brian C. Graves, David M. Starnes, and Amy P. Walker
Sponsor: Mimi Fenton
NC-RESEARCH

Exploring the Ethics of Scholarship and Research

Presenters: Mai Xiong, Bobby Willover, and Josie Javens
Sponsor: Mimi Fenton

SCIENCE & HEALTH
Applied Mathematics, Chemistry, & Nursing | UC 214 | Cardinal Room
ERIN MCNELIS, Mathematics & Computer Science, Moderator

Determination of Trace Element Provenance, Rio Loa Basin, Northern Chile

Presenter: Leslie Rae Wilson
Sponsor: Jerry Miller
NC-RESEARCH

What Pharmacologic Characteristics of Propofol Contribute to Its Use as a Drug of Abuse?

Presenters: Erica Edgington and Amelia Hinds
Sponsor: Claire DeCristofaro

Mathematical Model for Tissue Invasion by Cancerous Cells

Presenter: Lindsay Grayson
Sponsor: Erin McNelis
NC-RESEARCH

A Nurse Educator's Perspective on Global Training of Community Health Workers

Presenter: Elizabeth Sexton
Sponsor: Sharon Metcalfe

2–3:15PM (continued)

SOCIAL SCIENCES | Psychology | UC 215 | Catamount Room
ALVIN MALESKY, Psychology, Moderator

Prevalence of Electronic Bullying in a College Population

Presenter: Susan Al’Khafaji
Sponsor: Leonardo Bobadilla

Cyberharassment, Self Esteem, and the College Population

Presenter: James McAbee
Sponsor: Alvin Malesky

The Effects of Corporal Punishment and Childhood Maltreatment on Adult Personality Traits

Presenter: David Solomon
Sponsor: Kia Asberg

SOCIAL SCIENCES | Public Affairs | UC 232A | Multipurpose Room
CHRIS COOPER, Political Science & Public Affairs, Moderator

Efforts to Reduce Motor Vehicle Collisions

Presenter: Josh Hill
Sponsor: Chris Cooper

County Manager Salaries

Presenter: Thomas L. Jones
Sponsor: Chris Cooper

Proactive Policy for Online Learning Accessibility: Equal Access for Disabled Users

Presenter: Josie Lane
Sponsor: Chris Cooper

The Role of Planning in Strategic Community Development: A Cashiers Community Development Plan

Presenter: Paige E. Roberson
Sponsor: Chris Cooper

“...The most exciting phrase to hear in science, the one that heralds new discoveries, is not ‘Eureka!’ but rather ‘hmm...that’s funny.’”

– Isaac Asimov
(American Novelist and Biochemist, 1920-1992)
“The truth will set you free. But first, it will piss you off.”

– Gloria Steinem
We see that the document is a program for the 19th Annual Graduate Research Symposium at Western Carolina University. The program details various research presentations and symposium events. The content includes:

- **Humanities**
  - Presentations on folk traditions as identity in Their Eyes Are Watching God, a good ceremony: Drinking and colonization in Leslie Silko's Ceremony, and the past it did not happen: Ritual memory time in Zakes Mda's Heart of Redness.

- **Social Sciences**
  - Presentations on comparison of DSM-IV and Proposed DSM-V diagnostic criteria for cannabis use, Amazon's MTurk: A Flawed Source of Participants in Psychology Studies, compatibility of the DSM-IV-TR alcohol use disorder and Proposed DSM-5, and can the affect misattribution procedure detect deception.

- **Education**
  - Presentations on Do Not Be Conformed to This World: Practicing Christianity in a Public Residential University Setting, Superintendents' Perceptions of Their Role in Developing Teacher Leadership, and the relationship between disc golf and walking benefits.

- **Reception & Awards**
  - A reception in honor of graduate students, their mentors, and the graduate programs at Western Carolina University will be held.

The program also includes the quote: “Research is to see what everybody else has seen, and to think what nobody else has thought.” - Albert Szent-Györgyi (Hungarian Biochemist, 1937 Nobel Prize for Medicine, 1893-1986).

The document provides a comprehensive overview of the symposium, highlighting various research topics and their presenters, along with the venues and schedules for each event.
6:30–8:00PM

**SCIENCES & SOCIAL SCIENCES**
Math, Psychology, & Public Affairs | UC 215 | Catamount Room
THOMAS FORD, Psychology, Moderator

- **Matrix Decomposition with Applications**
  Presenter: Megan Cavanah
  Sponsor: Erin McNelis

- **The Role of Context in the Interpretation of Sexist Humor**
  Presenter: Jared A. Gray
  Sponsor: Thomas Ford

- **Evaluation of Afterschool Programs through Student Surveys**
  Presenter: Sarah McCord
  Sponsor: Chris Cooper

- **Investigation of Personality Trait Norms for Master Teachers**
  Presenter: James Taurasi
  Sponsor: David McCord and Dale Carpenter

**SCIENCES & HEALTH**
Chemistry, Biology, & Health Sciences | UC 232B | Multipurpose Room
PAUL DEZENDORF, Health Sciences, Moderator

- **Rheological Characteristics of Aqueous Wax Emulsions Used for the Controlled Release of Pheromones as an Alternative to the Use of Pesticides for Insect Pest Management**
  Presenter: Stephen Ballew
  Sponsor: Cynthia Atterholt

- **Arsenic and Old Pteridophytes: Assessment of Native Ferns for Phytoremediation Feasibility of Arsenic**
  Presenter: Jessica L. Jaynes
  Sponsor: Beverly Collins
  NC-RESEARCH

- **Behavioral Problems in Children: Homeopathy versus Ritalin**
  Presenter: Meghan Kelley
  Sponsor: Ted Chiappelli

- **Are Winter Babies Left out in the Cold?**
  Presenter: Sonya McCall
  Sponsor: Ted Chiappelli