WELCOME TO CELEBRATION OF SCHOLARSHIP 2019

From our Provost and Executive Vice President...

Celebration of Scholarship showcases the knowledge production and creative production achieved by Lock Haven University faculty and students. It brings recognition to the University as a distinguished community of scholarship and celebrates our contributions to the arts, letters, social sciences, sciences, and a diversity of professional fields. Moreover, these achievements are both soil and seed of the life-long learning that is a distinction of our graduates and that supports their intellectual, personal, and professional success throughout their careers.

The areas of inquiry and creativity highlighted in the 2019 Celebration of Scholarship show just how pervasive the culture of questioning, critical thinking, and innovation is across all programs and departments at Lock Haven University. The University’s outstanding scholar-teacher faculty are dedicated to mentoring students through engagement together in scholarship and creative work. This partnership is conducted hundreds of times a day, in classrooms and labs, in experiential learning sites out in the community and workplace, in study abroad trips, in online discussions, and over pizza at informal meetings. Celebration of Scholarship in this context is a day set aside to remember, and to celebrate, that the ordinary work engaged in by faculty and students on ordinary days is in fact extraordinary, remarkable, and transformative.

Dr. Donna F. Wilson
Provost and Executive Vice President

From our Faculty...

Welcome to LHU’s thirteenth Celebration of Scholarship, a day to honor the hard work, in-depth research, thought-provoking creations, and powerful performances of our multi-talented student body. This is, indeed, a day to celebrate both mentee and mentor, to cheer on both the success of the individual and the collaborative achievements of the many.

As the 2018/2019 academic year draws to a close, let us applaud the many accomplishments of our student-scholars. In labs, in lecture halls, in small groups, in practice rooms, on stage, through internships, and by the late-night glow of a laptop, learning arrives. Let the energy of epiphany reign! Let the celebration continue!

Marjorie Maddox Hafer
English department
THANK YOU FOR BEING PART OF COS 2019!

Thank you indeed, dear students, for you are the beating heart of this event! Kudos to the 67 faculty sponsors for nurturing research and creative ventures for our students. The pages in this program present a veritable academic banquet, a unique intellectual, artistic and cultural cornucopia, capable of pleasing the most demanding palate. It boasts 26 different disciplines of our institution, 436 poster presenters, 61 research paper presenters, and 41 visual or performing artists.

The incredible force of your young minds and mentors’ expertise, as well as talents, energies and hard work, are concentrated today on our LHU campus, creating the foundation for a bright future that will benefit our society as a whole. You have been forging bridges to link our intellectual capabilities to our creative potentials, our logical understandings to our artistic wonders: bridges capable of connecting not only our minds and emotions, but just as importantly, connecting us as people of diverse beliefs and backgrounds. These bridges will allow our soaring expectations to become reality.

Each year, I continue to feel fortunate to be part of an institution that has shown me an outpouring of support and understanding from every one of its corners. This collective of positive co-existing forces allows the witnessing, appreciating and supporting the wonderful research and creativity of our students and faculty. Congratulations to all participants; you are to be commended for your work!

We all must offer our especial and sincere gratitude to:

Provost and Executive Vice President Dr. Dona Wilson, for her demonstrated commitment to Celebration of Scholarship.
Prof. Dana Washington, for her continuous advice and support with our editing needs.
Prof. Jason Bronner, for his unique leadership in the creation of our COS program cover.
Ms. Destiny Schmidt, designer of the superb COS 2019 program cover.
Ms. Marchal Rote, for her unparalleled support with scheduling our venues.
Ms. Marchal Rote, for her unparalleled support with scheduling our venues.
Ms. Jamie C. Kelly, for her amiability and gracious cooperation with our last-minute printing demands.
Ms. Bernadette Heiney and her team, for securing that our hundreds of posters displayed are properly printed.
Ms. Janaan L. Maggs, for her patience in handling our financial obligations.
The wonderful team of our facilities department, for their extraordinary work making sure everything is in its place.
Ms. Sierra Laughead and Ms. Cierra Young, our student assistants, who, with their organizational skills, creativity, tireless dedication and positive attitude, have secured the success of our event.

Enrique Herrera
2019 COS Coordinator
# Schedule of Events

## Poster Sessions

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>8:30-10:00</td>
<td>Biological Sciences, Chemistry, Computer Science, Health Science, Mathematics, Nanotechnology, Psychology, Social Work and Counseling, Pre-K-Grade 8 Education and Professional Studies</td>
<td>Thomas Field House</td>
</tr>
<tr>
<td>10:30-12:00</td>
<td>Anthropology, Business Administration, Communication, Criminal Justice, English, Health and Physical Education, History, Sociology, Spanish</td>
<td>Thomas Field House</td>
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## Presentations

<table>
<thead>
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<th>Time</th>
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</thead>
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<tr>
<td>8:30-9:30</td>
<td>LHU Ethics Center Essay Contest</td>
<td>Raub 323</td>
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<tr>
<td>8:00-12:00</td>
<td>Environmental Studies Capstone Presentations</td>
<td>Greenberg Auditorium</td>
</tr>
<tr>
<td>8:30-12:30</td>
<td>Honors Capstone Presentations: Global Honors Program</td>
<td>Robinson Hall of Flags</td>
</tr>
<tr>
<td>9:00-10:00</td>
<td>Trade Tensions and the Economic Consequences</td>
<td>Raub 212</td>
</tr>
<tr>
<td>9:00-11:00</td>
<td>Photovoltaics at LHU</td>
<td>ECSC 138</td>
</tr>
<tr>
<td>11:30-12:30</td>
<td>Women and Gender Studies Minor Capstone Presentations</td>
<td>Raub 210</td>
</tr>
<tr>
<td>12:15-1:00</td>
<td><em>Fallen, Not Forgotten: The Life of Captain Lawrence John Ritter</em></td>
<td>PUB MPR</td>
</tr>
<tr>
<td>1:00-1:30</td>
<td>Causes of and Solutions to Problems at Work in Modern America</td>
<td>Raub 425</td>
</tr>
<tr>
<td>1:30-3:30</td>
<td>Cold War America: Individuals and Events</td>
<td>Raub 210</td>
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## Phi Kappa Phi Symposium

<table>
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<th>Location</th>
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<tbody>
<tr>
<td>2:00-5:00</td>
<td>Symposium</td>
<td>Robinson Hall of Flags</td>
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</tbody>
</table>

## Arts and Humanities

<table>
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<tr>
<th>Time</th>
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</thead>
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<tr>
<td>9:00-5:00</td>
<td>Artwork Exhibit by LHU Student Artists</td>
<td>PUB MPR</td>
</tr>
<tr>
<td>11:00-12:00</td>
<td><em>Au Revoir</em></td>
<td>Sloan 321</td>
</tr>
<tr>
<td></td>
<td>6:00-7:00</td>
<td>Countdown Theater</td>
</tr>
<tr>
<td>1:15-2:30</td>
<td>Poetry Workshop</td>
<td>PUB MPR</td>
</tr>
<tr>
<td>2:45-4:00</td>
<td>One-Act Contemporary Spanish Plays: Staged Reading (in English)</td>
<td>PUB MPR</td>
</tr>
<tr>
<td>4:15-5:00</td>
<td>A Lecture-Recital on the <em>Fantasien op. 116</em> by Johannes Brahms</td>
<td>Sloan 121</td>
</tr>
<tr>
<td>5:00-6:00</td>
<td><em>The Crucible</em> Live!</td>
<td>PUB MPR</td>
</tr>
</tbody>
</table>
POSTER PRESENTATIONS
All poster presentations will be held in the Thomas Field House

8:30 AM – 10:00 AM POSTER PRESENTATIONS

BIOLOGICAL SCIENCES

Jennifer Bandura
Independent Study Research
The Effects of Nonylphenol on the Fecundity of Fruit Fly, *Drosophila melanogaster*
Courtney Dukmen
Effects of Usp5 RNAi Expression on Cell Division in *Drosophila melanogaster*
Zachery Stephens

Heather Bechtold
Ecosystem Processes in Aquatic and Terrestrial Environments
Exploring the effects of Deet and Permethrin on aquatic organisms
Alison Nicholas

Jennifer Deitloff
Herpetology
Head Morphology Variation across Pennsylvanian Populations of *Plethodon cinereus*
Katie Fitzgerald

Carina Endres Howell
Independent Student Research in Biology
Annotation and Comparative Analysis of the Thor Gene in Multiple *Drosophila* Species
Howard Nate Rainey
Genomic Analysis of the Metabolic Gene Rheb, Ras Homolog Enriched in Brain
Rachael Meckley
Medicine: The crossroads of evolutionary science and medicine
Benjamin Ronemus

Amy Kutay
Biology Independent Study
Evaluating plant stress due to iron contamination
Rachael E. Meckley
Cheyenne K. Ryan
History of Type I Diabetes Treatments
Megan Graham

CHEMISTRY

Laura Lee

Department of Chemistry Undergraduate Research

1, 3 Sigmatropic Hydrogen and Methyl Migrations in Triazenes and Their Carbon Analogs
  Kayla Elliott
Characterization of a Psychrophilic Lipase from Blue-Green Algae
  Zach Knepp
Characterization of a Thermophilic Lipase from *Sphaerobacter thermophilus*
  Morgan Sutton
Development of High School Thermochemistry Labs and Demonstrations
  Hannah Ostrander
Electrochemistry of Minerals
  Adam Orcutt
Graphical Methods of Endpoint Determination
  Trey Burdge
Road Sediment Analysis for Heavy Metals
  Bradley Cameron
The Spectroscopic Analysis of Scent Compounds for a Chemistry Summer Camp
  Deion Adams
  Bradley Lipka
Synthesis of a Lipid Headgroup Localized Indole Fluorescence Based Molecular Probe
  Erik Strommer

COMPUTER SCIENCE

Mark Jones

Computer Science Senior Capstone

Campus Vibes
  Matthew Behrens
  Brand Brackbill
  Alfredo Gonzalez
  Bryce Hill
Eagle Backup
  Faith Carroll
  Brianna DeAngelis
  Shaun Donohue
  Caroline Rublein
Lower ToGo
  Luke Heidel
  Logan Horst
  Glenn Valerio
  Tanner Wilson
My Media Box
  Zaccaria Cinelli
  Norman Saylor
  Andrew Wagner
OneTouch LHU
  Jarret Dean
  Ryan Fantaskey
  Ethan Kutza
  Colten Lucas
VR Paint
  Abigail Markish
  Zachary Packer
  Nicholas Page
  Jack Rogers

Krish Pillai
  Mobile Virtual Reality Application Development
  A Venture into Android Virtual Reality Development
  Abigail Markish

Susan Strayer
  Operating Systems
  Java Simulation of Operating System Processing
  Caroline Rublein

HEALTH SCIENCE

Fay Cook
  Death Customs around the World
  Buddhist
  Cameron Cochran
  Corina Gottschall
  Olivia Leitzel
  Celtic Views on Death
  Gage Hall
  Kenneth Messner
Japanese Death Culture
Danielle Gleim
Madison Kachinko
Isaiah Luna

Mexican Culture
Hannah Lorf
Alina Pislar
Gabriela Ventura

Muerte étnica mexicana
Sarah Conroy
Sarah Kunes
Sarah Schwarm

Various Diseases
Alzheimer's
Kaitlynne Jones
Kinslee Kriner
Olivia Leitzel

Cold vs. Flu
Jasmine Clemens
Cassidy Hoover
Theresa Perini
Kendra Wakefield

Cystic Fibrosis
Addy Borkowski
Brie Edler
Emma Herbert
Niamh Saxton

Diabetes Mellitus
Taylor Kopp
Anna Neamand
Ping Yuan

Fractures
Ronald Cochran
Dante Kintz
Andrew Larson
Roy McClelland

Lyme's Disease
Mary Ballat
Emalea Mills
Isabella Plaza
Mitral Valve Prolapse
   Meredith Becker
   Payton Bell
   Alayna Genevro
Muscular Dystrophy
   Carly Hill
   Matt Ostrovitch
Prostate Cancer
   Elaina Eckley
   Annaliese Gilbert
   Corina Gottschall

Ashley Lesniak
Health Science Independent Study
   The Physiological Impacts of Load Carriage on Energy Expenditure
   Benjamin Ronemus

Health Science Honors Augmentation
   The Positive and Negative Aspects of Performance-Enhancing Protein Supplements
   Samantha Bohn

Beth McMahon
Epidemiology in Public Health Issues
   An Epidemiological Review of Cardiovascular Disease and Lifestyle Choices
   Angelina Duda
Get the Kids Moving: Combating Childhood Overweight Among Lebanon County Students
   Janice Balmer

LHU Students Partner with Community/Public Health Organizations to Improve Health Status in Surrounding Counties
   Lycoming County Health Improvement Coalition Youth Development Task Force – Adolescents’ Perspective of Youth Risk Behaviors
   MacKenzie David
   Shirell Harrison
UPMC SLIP Program: Reducing Elderly Trauma
   Tabitha Schappell
   Caitlin Sworin
West Branch Drug & Alcohol Abuse Commission & Sticker Shock: Combat Underage Drinking
   Elisa Seip
West Branch Drug and Alcohol Commission: Drug-Free Tomorrow: Increase Prevention, Intervention, and Treatment for Substance Abuse
Catherine Mohn

WIC Loving Support© Peer Counseling Program: Improving Breastfeeding Initiation and Duration Rates
Sharon Valerio

Cheryl Patton

Healthcare Organizational Behavior and Human Resource Management
Climb the Health Pyramid: Diversity, Communication, and Motivation
Janice Balmer
Communication and Motivation
Holly Enders

Jennifer L. Rudella

Youth Risk Behaviors
Key Stakeholders’ Perceptions of Youth Risk Behaviors
Catherine Mohn

Jody Russell

Independent Study
Effect caffeine has on balance and reaction time
Kate Hooper

Clinical Case Studies
Acetabular Labral Tears in Three NCAA Division II Cross Country Runners on the Same Team in the Same Season: A Case Study
Kayla Ward
A Bone Spur Formation on the Cuboid Due to Chronic Injuries in a Collegiate Lacrosse Athlete: A Case Study
Drew Johnson
Effects of Daily Living in a Division II Collegiate Athlete Suffering from Lingering Post-Concussive Symptoms: A Case Report
Brianna Palmer
Insidious Muscle Pain in a Male High School Basketball Athlete Diagnosed with Alpha-1 Antitrypsin Deficiency: A Case Report
Bailee Hilaman
Kidney Laceration in Collegiate Football Player: A Case Report
Alex Miller
Pars Defect in a D1 Wrestler
Samantha Dotterer
Talus Fracture and Osteochondral Lesion in Division III Collegiate Football Player: A Case Study
Taylor Johnston
Unusual Bruising Due to Shin Pain: What’s the Reason?: A Case Study
Mario Serour

Steve Streator

General Medical Conditions in Athletics (ATTR660) Patient Education Posters
Are You a Female Athlete at Risk of Falling into the Triad?
Kayla Ward
Breast Cancer: Not Just for Women
Samantha Dotterer
The Encyclopedia of Anemia
Alex Miller
Gastroesophageal Reflux Disease (GERD): The true meaning of Heartburn
Taylor Johnston
LUPUS Can't Remember The Last Time I Felt Normal Disease
Mario Serour
Lyme's Disease- Wouldn't you be ticked off to have this?
Brianna Palmer
Thyroid Disorders in Athletes
Drew Johnson
Wheezing Instead of Winning: Exercise Induced Asthma
Bailee Hilaman

Health Science Independent Study
Does Kinesiotape Affect Ankle Stability?
Rebecca Leuthold

MATHEMATICS

Jacinth Maynard
Loan Strategies: Which One Works Best For You?
Loan Strategies
Cassidy Lindner

NANOTECHNOLOGY

Indrajith Senevirathne
Nanotechnology Posters
Scanning Electron Microscopy – New Approaches in Imaging Biological Specimens
Sylviana Hanna
Indrajith Senevirathne
Systematic Removal of Self Assembled Monolayers from Au(111) surfaces, investigated via Atomic Force Microscopy and Contact Angle Measurements”
Kelly Gerrity
Indrajith Senevirathne
Utilization of TiO2 Thin Films for the Detection of CO2
Samuel Hogan

PRE-K-GRADE 8 EDUCATION AND PROFESSIONAL STUDIES

Nathaniel S. Hosley
Family, School, & Community Collaboration
Community Involvement in Schools
Kristen Neavling
Rachel White
Brianna White
Family and Community Involvement in Education
Kelly Kratzer
Family, Community, & School Collaboration
Ali Daum
Jennifer Day
Hailey Risley
Amy Watt

PSYCHOLOGY

Sue Boland
Psychology Research
Attachment Style and Responses to Social Transgression
Megan Donachy

Lynn Bruner
Psychology Research
Adverse Childhood Experiences, Parental Suicide, and Childhood Resilience
Kayla McGarr

Mark Cloud
Psychology Research
Functions of Gossip and Tendency to Gossip
Melinda Funk
Erin Kennedy
Psychology Research
Mental Illness in the Criminal Justice System
Sarah Nowak

Tara Mitchell
Psychology Research
Decisive Action: An Evolutionary Explanation of Cognitive Dissonance
David Sweeney

Kevin Morrin
Psychology Research
Correlates of College Students' Self-Esteem and Academic Success: The Developmental Impact of Parenting, Personality, and Attachment Style
Monica Jampo

Cheryl Newburg
Psychology Research and Internship Posters
Gender Differences in Depression Among Athletes
Olivia Hall
Internship at Children and Youth Services
Alyssa Abel
Monica Jampo
Internship at Rockview Penitentiary
Lynn Hakin
Michael White
Internship at Scranton Counseling Center
Josilyn Martin
Literature Review on Treatments for Obsessive-Compulsive Disorder
Josilyn Martin

Andrew Talbot
Psychology Research
Don’t Panic, It’s Organic
Emily Ruffa
Jordyn Thompson
Cimone Weeks
The Effects of Diagnostic Labels on Perception of Sociability and Competence
Brett Arnold
Kody Brown
Nick Lyons
He Said What? Girl, You Better Tweet That!
Amelia Garraway
Austin Miller

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Influence of News Articles on State and Trait Anxiety
   Alyssa Abel
   Angela Bellis
   Brooke Wilk
What’s all the Hype with Gender Stereotypes?
   Kaylee Tombs
   Michael White

SOCIAL WORK AND COUNSELING

Stephen Gitonga
   Let Us Talk About Preventive Mental Health
      The Impact of Stigma on Veterans Coping with Posttraumatic Stress Disorder (PTSD)
         Kaitlynn Timko
      Preventing Depression and Suicide for Individuals with Crohn’s Disease
         Brenda Lamieille
      Self-Care: Preventive Mental Health Through the Looking Glass
         Christopher Lair
      Social Emotional Learning as Prevention
         Jonnie Kifer
      Symbolic Loss Among College Students
         Stephen Gitonga

Steven Granich
   Policy Issues in the U.S.
      Child Abuse and Neglect
         Hannah Paulhamus
      Child Abuse and Neglect in the United States
         Aaliyah Gilbert-Walker
      Child Welfare: Adoption and Foster Care
         Elyssa Hirsch
      Deinstitutionalization: Did it help or hurt the mentally ill?
         Ashlyn Ventris
      Drugs and Alcohol in Children and Youth Populations
         Bailey Rachael
      Factors Contributing to Human Trafficking
         Peyton Risley
      Funding Within the PA Prison System
         Ayanda Jefferson
      The Help For Human Trafficking
         Sadie Umstead
Housing Choice Voucher Program
   Elisabeth Kline
Housing Program Troubles
   Ashley Page
LGBT Healthcare Disparities
   Al Bright
Poverty & Homelessness in Children & Youth
   Richard Reinberg
Racial Discrimination in The Criminal Justice System
   Jasmine Jacobsen
Recidivism in the Criminal Justice System
   Lauren Evans
Substance Abuse and Mental Health Among Adolescents
   Chloé Jennings
Supplemental Nutrition Assistance Program
   Ashley Luna
Supplemental Nutrition Assistance Program
   Emily Pappalardo
Veterans Access to Health Care in Rural Communities
   Richard Bressler
Veteran Mental Health
   Carlos Paniagua
WIC Program: Breastfeeding Support
   Maria Krug
WIC: What is the Program?
   Samantha Patten

Deborah Mills

Rural Social Work Community Assessment
Clearfield
   Ariel Barto, Lauren Evans, Jasmine Jacobsen, Peyton Risley
Jersey Shore
   Kierra Croucher, Elisabeth Kline, Maria Krug, Ashley Page
Renovo
   Bailey Rachael, Elyssa Hirsch, Samantha Patten, Hannah Paulhamus, Kayleann Woods
Mill Hall
   Aaliyah Gilbert-Walker, Ashley Luna, Emily Pappalardo, Richard Reinberg
Slate Run
   Chloe Jennings, Rick Bressler, Maya Wilborn
Snow Shoe
   Ayanda McGill-Jefferson, Carlos Paniagua, Sadie Ulmstead, Ashlyn Ventris

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Self-Harm/Self-Injury
A Presentation at Sugar Valley Charter School
Dr. Debbie Mills, Cardan Robinson

Kristin Vincenzes
Mental Health: Fostering Awareness and Knowledge
Dance and Movement Therapy
Ginna Sanchez
Jeannie Weaver
Lyndsey Weidow
Experiential Learning in Counseling Courses
Karissa Grossman
Kaitlynn Timko
10:30 AM – 12:00 PM POSTER PRESENTATIONS
All poster presentations will be held in the Thomas Field House

ANTHROPOLOGY

Tim Baylor
North American Indigenous Peoples
The Inuit (Eskimo)
  Shaheim Mitchell
The Mohegan
  Inyoung Han
The Niitsitapi (Blackfoot) Confederacy
  Tori McCool

BUSINESS ADMINISTRATION

Marcia Kurzynski
Top Soft Skills Employers Seek
  Communication
    Christian Davis-Stukes
    Christopher Henry
    Jonathan Ross
  Constructive Criticism
    Dakota Lauver
    Mae McGrath
    Donovan St. Jean
  Flexibility
    Derrell Alexander
    Scott Baran
    Elijah Bechdel
    Colin English
    Ty Hunter
    Chloe Kennedy
  Positive Attitude
    Wesley Bletz
    Dillon Good
    Ethan Persa
    Reginald Wilson
    Corey Woomer
    Joe Zgleszewski
Problem-Solving Skills
  Shane Colegrove
  Logan Harter
  Ryan Schessler
Self-Confidence
  Larry Brown
  Shyheim Brown
  Al-Jymere Conover
  David Cox
  Abby Shirer
  Brandi Spackman
Team Environment
  Courtney Barrick
  Arie Miller
  Cassie Querry
  David Rodriguez
  Teague Schmidt
  Tyler Whary
Time Management
  Isaiah Davis
  Derrick Long
  Dontae Mason
  Kyle Ransdorf
  Kyle Winebrenner
  Damian Young
Work Ethic
  Miranda Brown
  Alyssa Erb
  Macy McLaughlin
  Ty Meeker

Gerard Martorell

Family Business Interviews and Understanding
  Brownie’s Signs
    Lorrin Rine
    Tyler Williams
It Is What It Is
  Madeline Berger
  Leikpele Dolo
  Jordan Hall
M&R Contracting, Inc.
  Benjamin Hasson
Cori Myers

Applying the Strategic Management Process to Real World Organizations

AT&T
Danielle Brown
Spencer Gogol
Robert Heck
Alexander Klucker
Carly Ray
David Rosati

Five Below
Georgina Bennett
Jonathan Buytenhuys
Erin Engel
Jarett Priester
Brittany Vinson
Micah Walker

Hankook Tires
Mariah Berthau
Emily Corey
Jordan Hall
Brooke Houseal
Malik Potter
Troy Smith

Lush Cosmetics
John Banes
Jeff Grammas
Brooke Hamm
Breanna Herriman
Haley Predix
Andrew Thomas

MasterCard
Madeline Berger
Leikpele Dolo
Kyle Grady
Michael Meyer
Jesse Stouch
Merck & Co.
  Dylan Freemire
  Austen Hughes
  Tiaira Moore
  Quinten Persun
  Graham Smith
Tyson Foods, Inc.
  James Brewer
  Benjamin Hasson
  Kennedy Parker
  Jalyn Shelton-Burleigh
  Grace Vanderbeck
Warner Music Group
  Austin Hartman
  Samantha Foster
  Anthony Montaro
  Michael Signor
  Rachael Spotts

COMMUNICATION

Constance Reece
  Industry Analysis
  Industry Analysis: Fairfield Inn
    Jessika Borsalino
    Lucas Lenze
  Industry Analysis: Goodwill
    Mark Matthews
    Sarah McClanaghan
    Kayla Schneider
  Industry Analysis: Weis Markets
    Arianna Linder
    TJ Martin

Sharon Stringer
  COMM330 Research Poster
  An Analysis of Disney Princesses Through The Years
    Danielle Arocho
  Gender Analysis of Emmy Award Nominees
    Kayla Schneider
  Hypersexuality in Rap Music
    Alexandria Herrera
Reoccurring Stereotypes in Today's Popular TV Shows  
Roxanne Aretta  
Mark Matthews  
Sexualizing Women in Superbowl Commercials  
Sarah McClenaghan  
Mia Swales

CRIMINAL JUSTICE

Edward Bowman  
**Independent Studies in Criminal Justice**  
Careers in Criminal Justice  
Victoria Guzman  
The Prevalence of SMI in a Rural Jail Population  
Lybi Westover  
SMI & Violent Offending  
Robert Asplund

Katie Ely  
**Independent Study Projects**  
Female Offenders  
Traci Kromko  
An Inside Look at Terrorism  
Dakota Griffis  
Women and the Military  
Alexandra Joncas

Greg Koehle  
**Crime Prevention Through Environmental Design**  
Crime Prevention Through Environmental Design, 1  
Shanno Gallagher  
Crime Prevention Through Environmental Design, 2  
Dylan Gilar  
Crime Prevention Through Environmental Design, 3  
Thomas Hunter  
Crime Prevention Through Environmental Design, 4  
Raul Lopez-Caveda  
Crime Prevention Through Environmental Design, 5  
Hans Wentz  
Crime Prevention Through Environmental Design, 6  
Zackary Zimmerman
Dwayne Marshall

Independent Study Research
Examination of contributing factors of rape among underclassmen college women
Gordon Draine

ENGLISH

Alyce Baker

Honors Augmentation
Pedagogical Implications of the Black Lives Matter Movement
Kayla Shutters

GEOGRAPHY

Todd Nesbitt

Global Honors Course Augmentation
Overconsumption vs. Overpopulation
Addison Storr
Jasmine Wei

HEALTH AND PHYSICAL EDUCATION

Brett Everhart

Using smart device visual communication technology to teach fundamental movement skills and space exploration to preschool children with autism spectrum disorders and communication disorders
Jenny Manning
Alexis Heistand
Kaitlyn Rice
Kylee Lobb

HISTORY

Holle Canatella

Witchcraft in Medieval and Early Modern Europe, Part 2
Christian Demonology
Alexis Walker
Cunning Folk at the Time of the Witch Trials
Rachael Owens
Cunning Folk: Enemies of the Church
Morgan Rager
Early Modern Witch-Hunts: Eastern Europe and Russia vs. Western Europe
Abigail Markish
Evil Castaways to Celebrated Heroes
Kelsey Spangler
Evil in Loudun
Kaleb Watts
"Fair is Foul and Foul is Fair": The Character of the Witch in Renaissance Drama
Amanda Hall
Joan of Arc: Warrior or Witch?
Aspen Bradford
King James and the Mass Murder of Witches
Morgan-Jo Petrencsik
The King James Effect: How His Views on Witchcraft Affected His People
Alyssa Ward
The Loudun Possessions
Shelby Craig
The Many Conspiracy Theories of the Salem Witch Trials
Kylie Tevald
The Nocturnal Ride of the Wild Hunt
Georgina Bennett
Portrayal of Witches in Television and Film
Alyssa Mazzei
Remember the Witches' Sabbath to Keep it Holy: Edited Version of Exodus 20:8
Cheyenne Brickley
Running Wild: The Link Between The Wild Hunt and The Witches' Sabbath
Stephanie Lam
Salem Witch Trials: Immoral Women, Wives, and Mothers
Lauren Fenner
The Sensations of Witchcraft
Jared Bollinger
Witchcraft Compared to Magic Within the Bible
Sarah Belinda
Witchfinder General: The Persecution of the Witches of Essex
Lindsey Walsh
Witchcraft in Northern Renaissance Art
Claire Milliken

World History 1 Honors Augmentation
In the Beginning There Was Darkness
Amy Yeater
Rick Goulet

**History of Cuba**

Cuba, Catholicism, & Communism: How did Catholicism survive an Atheist Government?
  Kathleen Zerbe
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  Dylan Fye
The Cuisine that Symbolizes a Nation's History
  Andrew Genuardi
The History of Cuban Cigars
  Katilyn Hamsher
Human Rights in Cuba
  Casey Damicantonio
The Influence of Slaves and Afro-Cubans on Cuban Architecture
  Katelyn Thompson
Revolutionary Women in Cuba
  Lindsey Walsh
The Transformation of a Leader
  Krystjana Bruce

Laird Jones

**Fascism**

The British Union of Fascists
  Taylor Baldwin
Catholicism and Nazism
  Timothy O'Donnell
Eugenics in Nazi Germany
  Jessica Cain
Fascism and the Art World
  Russell Evie
Fascism and the Mythical Past
  Tristan Shelb
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  Sarah Gower
Nazi Propaganda during the 1936 Summer Olympics
  Bryce Bitner
Is the Movement Fascist?
  Allison Butterly
Volkish Ideology
  Jack Risio
Was Francisco Franco a fascist?
  Sarah Bernhardt
Laxman D. Satya

Environmental History of Asia

Claire Frances Milliken

Environmental History of West Asia

Austin Richard Morder

RECREATION MANAGEMENT

Brian J. Wilt

A Comparison of Total Weight Lifting Time to Total Training Time: A Work-to-Rest Analysis of Strength

Training Programs for Athletes; Part VII

Emma Grace Andrukat

Craig V. Baldwin

Collin Q. Benfield

Leighton M. Chappell

Derek Mark Dragon

Alicia Ann Dudak

Isaac Russell Foust

Patrick A. Kanu

Wade David Laudeman

Kendell R. Lowe

Caleb Michee MacWhinnie

Joel David Martin

Deana Jolee McMillen

Gage Phillip Ocker

Ashley Elizabeth Roeder

Brianna Anyee Simpson

Joseph D. Spallinger

Janelle Marie Swartz

Carly Samantha Walizer

Christopher George Yeshulas

SOCIOLOGY

Greg Walker

Sociological Research

Dungeon Ethics: The Role of Values, Morals, and Ethics in Fantasy Games

James Kohberger

Gendered Behavior of University Students in Co-Ed Spaces

Lisa Hallock
How Education and Race affect Athleticism  
Shaheim Mitchell

How Students use the Library  
Sarah Snyder

The Obsession with Gender  
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Mia Swales

The Relations between Stress and Work  
Rexine Schrum

Social Media: How Age Affects Use  
Hannah Lingle

Student Athletes and Their Relationship with Academics  
Jenna Wismer

Truck Drivers: A Look Inside Their Social World  
Drew Deems

Who is most Affected by Facebook and its Memes?  
Joseph Estudiante

The World of Interaction  
Kalan Smith

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SPANISH

Enrique Herrera

Cultural Expressions of the Hispanic World

Hispanic Celebrations in the United States  
Levi Settle

Hispanic Customs and Traditions in the U.S.  
Lindsay Murray

Hispanic Foods in the United States  
Hannah Scott

The Mayan of Today  
Joshua Cowfer

Our Lady of Guadalupe  
Hannah Wagaman

Music from Peru  
Alyssa Ward

The Pamplona Running of the Bulls  
Luca Zannoni

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Hispanic Culture in Our Globalized World

Carnival of Barranquilla  
Zoe Shelly
The Coca Culture in Andean America
Delmar Blackwell

Flamenco Culture
Cierra L. Young

Soccer in Argentinian Society
Joaquina Orlandini

Hispanic Music in the US
Alexandria Herrera

Lucha Libre
Blake Neal

Damarys López

The Future Speaks Spanish
The Cohabitation between Spanish and Indigenous Languages in Central America: Challenges and Rewards
Chase Taylor Bottorf
McCartney C. Register

D.I.Y. Spanish Immersion
Tess M. Gallagher
Makayla Sementelli

The Economic Value of Speaking Spanish
Rachel M. Amundsen
Dakota S. Heath

The Hispanic Council and its Sabías qué Project
Nicholas A. Hornig
John F. Mallon

Importance of Spanish Language in Election Campaigns in the United States
Nicholas L. Gower
Kylie Jo Young

Instituto Cervantes in the United States
Mickiah Johnson
Rachel K. Kordaz

Judeo-Spanish Academy in Israel
Meyer E. Craig
Hayden P. Smith

New Faces in Latino Entertainment
Jeffrey Alvarez
Sarah E. Bernhardt

The New Hispanic Leaders in US Politics
Lauren E. Fenner
Taylor Alexa Kopp

Reasons to Learn Spanish
Stephanie R. Lam
Malcolm Waters
Spanish Language in China
   Kai Lin Coolbaugh
   Sean Duane

Spanish Language in the United States: Now and in the Future
   Tasha L. Bottorf
   Maria J. D’Onofrio

Spanish-language TV Networks in the United States
   Andrew James Dunn
   Emily Alicia Ruffa

Spanish-language Journalism in the United States
   Ryan T. Houser
   Jaehvaun Tyler
PRESENTATIONS

BUSINESS ADMINISTRATION
9:00-10:00
Raub 212
Ruben Berrios
Trade Tensions and the Economic Consequences
Trade Tensions Between the US and China
Regan Dyke
The Transpacific Partnership: Why did the US pull out?
Anna Reapsome
The Impact of Tariffs and Quotas on Trade
Thomas Haines
What have we learned from the trade war? Are trade wars good and easy to win?
Sarah Morganti
What is Dumping?
McKenna Walter
Are Trade Deficits Bad?
Pedro Peguero

CELEBRATION OF SCHOLARSHIP
12:15-1:00
PUB Multi-Purpose Room
Fallen, Not Forgotten: The Life of Captain Lawrence John Ritter
Rick Bressler

ENVIROMENTAL STUDIES
8:00 -12:00
Greenberg Auditorium
Bob Myers
Environmental Studies Capstone Presentations
Analysis of five Allegheny National Forest stream communities before and after a wood addition (Director: Dr. Steven Seiler)
Kirsten Wilford
Can aragonite saturation be used as a metric of freshwater mussel habitat suitability? (Director: Dr. Daniel Spooner)
Michael Bodnar
Castanea Dam (Director: Dr. Bob Myers)
Michael Probst
Central PA Invasive Plant Public Outreach Project (Director: Dr. Heather Bechtold)
Charly Bloom

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Combatting Japanese Knotweed (Director: Dr. Heather Bechtold)
   Sierra Rider
Detection and Analysis of *E. coli* on the West Branch of the Susquehanna River (Director: Dr. Heather Bechtold)
   Alexis Wittemann
Environmental Importance of the Pennsylvania Game Commission
   Joshua Coleman
Fertility of Sediment Deposits for 2018 Flood (Director: Dr. Heather Bechtold)
   Anson Weidner
Fly Fishing and its Wellness Benefits (Director: Dr. Brian Wilt)
   Alexis Kohr
Hunters as Conservationists
   Curtis Spila (Director: Dr. Bob Myers)
Modern Approaches to Youth Climate Change Education
   Mike Myers (Director: Dr. Bob Myers)
Natural Playscapes and Experiential Learning at Worlds End State Park (Director Dr. Amy Kutay)
   Jade Whipple
Pavlovian Plants (Director Dr. Heather Bechtold)
   Cody Iannozzi
Pennsylvania Stream Conservation (Director: Dr. Steve Seiler)
   Daniel Brumbaugh
Pollinator Gardens (Director: Dr. Bob Myers)
   John Friedline
Pollution in the Chesapeake Bay (Director: Dr. Bob Myers)
   Sara Embick
Restoration efforts in Kettle Creek Watershed (Director: Dr. Heather Bechtold)
   Kelsey Scott
Sense of Place and Lock Haven University's Love Affair with Styrofoam to-go Containers (Director: Dr. Barrie Overton)
   Amanda Hunsberger
Toxins's Effect on Mussels (Director: Dr. Daniel Spooner)
   Amanda Kramer

GLOBAL HONORS
8:30-12:30
Elizabeth Gruber
Honors Capstone Presentations: Global Honors Program
   Amputation
   Kara Wendling
Analysis of Anticoagulation Therapy in Patients with Atrial Fibrillation  
Raechel Rodriguez
Best Practices for Lung Cancer Screening  
Tyra Wiggins
Clinical recommendations and opioid alternatives for pain management of chronic low back pain in older adults  
Lauren Williams
Colorectal Cancer  
Alina Pislar
Eagle Backup  
Caroline Rublein
Entering the Workforce  
Kylee Doyle
Evaluating the Transition to the new eWIC card  
Sharon Valerio
The Female ACL  
Taylor Price
Field Experience at Holy Spirit Geisinger and the use of Non-Invasive Ventilation: A Pertinent Form of Treatment Within Intensive Care Units  
Veronica Morrison
How Does Physical Therapy, Specifically Gait Training, Impact the Mobility and Independence of a Patient with a Unilateral Above-Knee Melanoma
Skin Cancer  
Phaedra Hockman
The Over Diagnosis of ADD  
Nicholas Kuster
Proper Treatment of Anaphylaxis  
Joseph White
Treating hyperhidrosis with Botox  
Veronica Pham
The use of medical marijuana in the treatment of chronic pain  
Samantha Gilbert
Writing Grants to Improve Breastfeeding Rates in Clinton County and Viscosupplementation for Osteoarthritic Knees  
Zoe Shelly

HISTORY
1:30-3:30  Raub 210
Janet Irons
Cold War America: Individuals and Events
Cold War Hollywood Blacklist  
Kyle Jenkins

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The Cuban Revolution and U.S. Backlash
   Dylan Fye
Douglas MacArthur and The Korean War
   Alexis Kohr
How the CIA Affected the 60s
   James Hoffman
John F. Kennedy and Laos
   Connor Poorman
Joseph McCarthy and McCarthyism
   Michael Meyer
Loving v. Virginia
   Allison Butterly
Woodstock and Michael Lang
   Sarah Kunes

PHILOSOPHY
8:30-9:30  Raub 323
Heather M. Erb
   LHU Ethics Center Essay Contest
   Differing Perspectives on Euthanasia and Living Well
   Macy McLaughlin

PHYSICS
9:00-11:00  ECSC 138
Marian Tzolov
   Photovoltaics at LHU
   Fabricating polymer solar cells
      Patrick Gallagher
      Blake Miller
      Grier Sayers
   Real time data on solar electricity generation by the photovoltaic system
      installed at the Sieg Conference Center
      Marian Tzolov

PSYCHOLOGY
1:00-1:30  Raub 425
James Bean
   Causes of and Solutions to Problems at Work in Modern America
   Brain Injury in Sports and How to Reduce It
   Anshu Choudhary
WOMEN STUDIES
11:30-12:30  
Raub 210

Holle Canatella

**Women and Gender Studies Minor Capstone Presentations**

Female Enslavement in Victorian Literature
Morgan-Jo Petrencsik
ARTS AND HUMANITIES

COMMUNICATION AND ENGLISH
5:00-6:00
PUB Multi-Purpose Room
Helen Prien and Dana Washington
*The Crucible, Live!*
LHU students and faculty
Through the use of oral interpretation, performers will present a thoughtful re-mix of the pieces in the 2018-2019 volume of *The Crucible*.

ENGLISH
1:15-2:30
PUB Multi-Purpose Room
Marjorie Maddox Hafer
*In Our Own Words: A Reading by Students in the Spring 2019 Poetry Workshop*
Rachel Amundsen
Isabelle Collier
Emily Diaz
Raven Fortson
Dylan Myers
Stone Shupe
Kayla Shutters
Hayden Smith
Lacey Snyder
Symone Terrell
Kiara Tinnin

SPANISH
2:45-4:00
PUB Multi-Purpose Room
Damarys López
*One-Act Contemporary Spanish Plays: Staged Reading (in English)*
*Shut Up, Don't Bother Me, and Pay on Your Way Out, Lady* by Lidia Falcón
Caleb A. Bookhammer
Trinity Sumrall
*Ana, March Eleventh* by Paloma Pedrero
Daisha J. Allen
Patricia A. Barth
Madison L. Bitner
Lauren R. Cole
Sarah E. Kozlowski

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False Charges by Lidia Falcón
   Madison L. Bitner
   Caleb A. Bookhammer
   Lauren R. Cole

The Good Neighbour by Juan Mayorga
   Patricia A. Barth
   Alexis L. Walker

Photographic Memory by Beth Escudé
   Sarah E. Kozlowski
   Trinity Sumrall
   Alexis L. Walker

VISUAL AND PERFORMING ARTS

ART AND DESIGN
9:00-5:00
   PUB Multi-Purpose Room

Jason Bronner
   Artwork by student artists included in the 2019 edition of The Crucible and examples of paintings from ART330, Introduction to Painting, and ART425, Special Problems: Painting
   Jeffrey Alvarez
   Roi Bliler
   Jennifer Branetzki
   Emily Diaz
   Bethany Fuller
   Shatana Griffin
   Amber Jackson
   Jessica Long
   Paula McHenry
   Daniel Page
   Nick Pompeo
   Danielle Sander
   Destiny Schmidt
   Symone Terrell
   Cheyenne Winn

MUSIC
4:15-5:00
   Sloan 121

David T. Curtin
   A Lecture-Recital on the Fantasien op. 116 by Johannes Brahms
Au Revoir is a play written by Robert Kolterman and directed by Christian Girton. Both are currently Lock Haven University sophomores with a shared passion for theater and film. This presentation is an excerpt from a work in progress developed by Robert and Christian with significant input during the rehearsal process from their cast.

The plot focuses on the lead character, Sarah, and her efforts to reunite an old group of friends. This excerpt features two of Sarah’s friends, a character named Hollywood running from his past, and Brooklyn, the only person Hollywood remains in contact with from the old group. The excerpt highlights problems that arise when Hollywood’s past unexpectedly catches up with him.
**ΦΚΦ 2018 Spring Student Symposium**

John Reid

Robinson Hall of Flags

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Student Presenters</th>
<th>Department</th>
<th>Faculty Sponsor</th>
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<tr>
<td>2:10</td>
<td>Opening Remarks</td>
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<tr>
<td>2:15</td>
<td>Distinguishing Morphological Differences in the Head Shape of Blue-Ridge Two-Lined Salamander</td>
<td>Howard Rainey</td>
<td>Biology</td>
<td>Dr. Jennifer Deitloff</td>
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<tr>
<td>2:30</td>
<td>Absorption and Emission of Light from Materials</td>
<td>Derek Grove</td>
<td>Geology &amp; Physics</td>
<td>Dr. Marian Tzolov</td>
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<tr>
<td>2:45</td>
<td>Purification and Characterization of a Lipase from <em>Sphaerobacter thermophilus</em></td>
<td>Morgan Sutton</td>
<td>Chemistry</td>
<td>Dr. Kyle Root</td>
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<tr>
<td>3:00</td>
<td>Assessing the Water Quality in Big Fishing Creek Watershed in Relation to the TMDL for the Chesapeake Bay</td>
<td>David J Fehlman</td>
<td>Geology &amp; Physics</td>
<td>Dr. Md. Khalequzzaman</td>
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<tr>
<td>3:15</td>
<td>The Hurt Business</td>
<td>Noah Ellison</td>
<td>Business and Computer Science</td>
<td>Dr. Robert Szarka</td>
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<tr>
<td>3:45</td>
<td>Judges’ Deliberation Award and Closing Remarks</td>
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</table>
COS 2019 TEAM

Administration
Donna Wilson
Janaan L. Maggs

Artwork Coordinator
Jason Bronner

Coordinator
Enrique Herrera

Cover Design
Destiny Schmidt

Event Support Crew
Sarah E. Belinda
Tess M. Gallagher
Sarah Gower
Mayer Craig
Sierra Laughead
Cierra L. Young

Facilities Coordinator
Marchal Rote

Phi Kappa Phi Symposium
John Reid

Printing Assistance
Jamie C. Kelly

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Sierra Laughead
Cierra L. Young

Website Support
Jesse Turri

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