MONDAY, APRIL 15

8:30-10 a.m. & 11:30 a.m.-4 p.m.  
Jerry Falwell Library, Upper Atrium  
Registration

8:30 a.m.—  
Jerry Falwell Library, Lower Atrium  
11:30 a.m.  
Poster Set-Up

11:45 a.m.—  
Jerry Falwell Library, Upper Atrium  
1 p.m.  
Welcome and Keynote Speaker: Dr. Byron Spradlin:  
"The Role of Artists, Imagination, & Creativity in Research"  
(See Page 5)

1-4 p.m.  
Jerry Falwell Library, Lower Atrium  
Poster Session  
(See Pages 7-12 for list of presenters)

7 p.m.  
DeMoss Hall, Room 4412  
Speaker: Dr. Nathaniel Jeanson: “Probing the mysteries of the history of civilization with new tools: A story of false starts, unexpected twists, and profound discoveries”

TUESDAY, APRIL 16

8:15 a.m  
CNS 352  
Speaker: Dr. Nathaniel Jeanson:  
“A Global Human Y Chromosome Molecular Clock”

10 a.m.—  
Jerry Falwell Library, Upper Atrium  
3:30 p.m.  
Registration

Noon–3 p.m.  
Jerry Falwell Library  
Oral Presentations Residential and Online: Undergraduate and Graduate  
(See Pages 12-14 for list of presenters)

WEDNESDAY, APRIL 17

9-10 a.m. &  
Jerry Falwell Library, Upper Atrium  
11:30 a.m.-4 p.m.  
Registration

Noon-3 p.m.  
Jerry Falwell Library  
Oral Presentations Residential and Online: Undergraduate and Graduate  
(See Pages 14-17 for list of presenters)
THURSDAY, APRIL 18

9-10 a.m. & 11:30 a.m.-4 p.m.  
Jerry Falwell Library, Upper Atrium  
Registration

Noon-3 p.m.  
Jerry Falwell Library  
Oral Presentations Residential and Online: Undergraduate and Graduate  
(See Pages 17-21 for list of presenters)

FRIDAY, APRIL 19

9-10 a.m. & 11:30 a.m.-4 p.m.  
Jerry Falwell Library, Upper Atrium  
Registration

Noon-3 p.m.  
Jerry Falwell Library  
Oral Presentations Residential: Undergraduate and Graduate  
(See Pages 22-24 for list of presenters)

EVENT LOCATIONS:
Active Learning Classroom – JFL 171  
Terrace Conference A – JFL 001A  
Terrace Conference B – JFL 001B  
Scholars Lounge – JFL 380
Since surrendering his life to Christ at 19, Dr. Byron Spradlin has served as a musician, recording artist, published songwriter (ASCAP & NARAS), youth pastor, worship pastor, evangelist, church planter, senior pastor, Bible teacher, professor, and artists-in-missions strategist.

He holds a Master of Divinity degree (heavy in missions and biblical languages) from Western Seminary in Portland, Ore. At Western, he served as adjunct faculty for two years and co-founded the Master of Church Music degree, which he also received. Dr. Spradlin also holds a Master of Theology (abd) at Fuller Seminary (Pasadena, Calif.).

In 2012, he was awarded the Doctor of Ministry in Worship Studies from Liberty University's Liberty Baptist Theological Seminary (Lynchburg, Va.). He also teaches courses in the Worship Studies Department at Liberty University.
Nathaniel T. Jeanson earned his B.S. in Molecular Biology and Bioinformatics from the University of Wisconsin-Parkside and his Ph.D. in Cell and Developmental Biology from Harvard University. His research findings have been presented at regional and national conferences, and have been published in peer-reviewed journals, such as Blood, Nature, and Cell. Since 2009, he has been actively researching the origin of species, both at the Institute for Creation Research and at Answers in Genesis. He is the author of "Replacing Darwin: The New Origin of Species."
1–4 p.m.  

Jerry Falwell Library, Lower Atrium  
Poster Session: Undergraduate and Graduate

> Ann Hoang⁹  
  A Comparison Between Male and Female Lab Rats in Operant Conditioning

> Abigail Brewer¹⁸  
  Privacy Surrender for Security Theory (PSST)

> Abigail McCarty²⁶  
  The Validity of Wearable Technology for Velocity Based Training

> Abigail Sager⁵⁷  
  The Effects of Play Therapy on Hospitalized Children

> Abigail Vickers⁵  
  O-GlcNAcylation and Activity of Succinate Dehydrogenase

> Abigail Wibbing⁶²  
  The Impact of Childhood Sexual Abuse on Sexual Satisfaction through Sexual Shame and the Moderating Role of Self Forgiveness

> Alexandra Reddy²²  
  Microplastic Presence and Frequency in Crayfish Within Urban and Rural Streams

> Allison Riegel²⁹  
  Exfoliated Graphite Resistance Based Pressure Sensor for Mapping Plantar Pressure

> Ashley Lamoureux²⁹  
  Profiting from Mass Incarceration: The History and Development of the Private Prison Industrial Complex in the United States

> Ashley Puskar⁶¹  
  The Impact of Early Literacy Experiences on Pre-Field Teachers’ Success in Learning Phonics and Beliefs about Teaching Literacy

> Bethany Wildeman¹⁵  
  Microbiome Characterization of the Cave Salamander as Potential Defense Against Emerging Infectious Diseases

> Brianna Cunningham⁶²  
  Bacterial Succession During Decomposition

> Britton Upchurch⁹  
  Impact of Dietary Folate Deficiency on Behavioral and Genetic Outcomes

> Byron Penner⁶⁶  
  Comparison of the Autumn Hawk Flight Composition Between a Piedmont and an Appalachian Ridge Lookout

> Cali Anderson³⁴  
  Evaluation of the Effectiveness of Biosand Water Filters in Removing Fecal Coliforms Over Time (Years) in Rural Rwanda

**Superscript denotes student’s program. See Page 27 for key.**
Jerry Falwell Library, Lower Atrium
Poster Session: Undergraduate and Graduate

› **Carrington Crossland**
  Integration of Intentional Research Assignments into Select Nursing Courses

› **Charlkesha Alexandre Rahming**
  Low Dose Caffeine Attenuates the Positive Effects of Anaerobic Exercise on Heart Rate Variability (HRV)

› **Chase Anderson**
  Design, Synthesis, and Screening of Non-Estrogenic Bisphenol A mimics

› **Christine McCarraher**
  State Qualifications for an American Sign Language Interpreter

› **Christopher MacKay**
  Impact of Rainfall on Coliform and Parasite Levels in Local Groundwater

› **Cody Clarke**
  Development of Exfoliated Graphite-Based Human Breast Probe Sensor

› **Connor Ellis**
  Towards the Synthesis and Evaluation of a Novel DNA Intercalator

› **Cortney Dowling**
  Automated Derivatization of Amino Acids with Agilent 1260 Infinity II LC System

› **Dalton Sype**
  The Effects Shame Has on Alexithymia, Depression, and the Potential for Self Forgiveness Serving As A Moderator

› **Elizabeth Hutton**
  Effect of Whole-Body Vibration on Rectus Femoris During Body Weight Squats

› **Emily Oglesby**
  The Creation of a Plasmid Vector for the Amplification of the IFN-g gene for use as a Vaccine Strain

› **Emily Outridge**
  Bridging the Gap: Art Therapy Intervention for Anesthesia Induction for Pediatric Patients

› **Emily Parrow**
  Historic Ivy Cliff and Plantation Life in Antebellum-Era Virginia

› **Eric Holland**
  Tandem Reactions: Synthesis of Substituted Benzaldehydes

› **Evan Whitmoyer**
  Measuring Greatness in the NBA
Jerry Falwell Library, Lower Atrium
Poster Session: Undergraduate and Graduate

- **Gabrielle Tiesma**
  Cognitive, Psychological, and Neurological Effects of Early Life Trauma and the Impact on Adoptees

- **Genevieve Barnett**
  Addressing Diabetes in San Francisco de La Paz Using Health Education

- **Genevieve Weaver**
  American Sign Language Interpreting for Deaf Individuals with Disabilities

- **Grace Arntz**
  Theoretical Studies on the Transition Dipole Moments of Bromoethanol

- **Haakon Nelson**
  Characterizing the Cutaneous Microbiome of the Peaks of Otter Salamander (Plethodon hubrichti) in the Context of Infectious Disease

- **Isabella Caramante**
  HPLC Analysis of Amino Acids Formed by Urey-Miller-Type Experiments

- **Jackson Roy**
  Promotions and Game Attendance: A Case Study of Collegiate Hockey in the South

- **Jacob McMunn**
  Development of Composite Materials with Embedded Structural Health Monitoring Systems

- **Jacqueline Baumann**
  Motif Analysis Using HOMER of Microarray Data of Mice Under a Folic Acid Diet

- **Jake Dyess**
  Research and Review of Eudragit® Polymers in the Development of pH Targeted Pharmaceutical Delivery

- **Janine Hazel**
  Past is Present in Attachment: Pathways Between Childhood Sexual Abuse and Couples' Satisfaction

- **Jenna Donelson**
  Solenopsis Invicta Lipidomics—Fatty Acid Profiling of the two Social Forms of the Red Imported Fire Ant

- **Jesse Gauldin**
  Assessing Global Engagement at Liberty University

- **Jolene Wyman**
  The Moderating Role of Forgiveness on the Relationship of Bisexuality and Depression

- **Jubin Kang**
  The Effect of Temperature on the Susceptibility of Eastern Newts to Two Lethal Pathogens

**Superscript denotes student's program. See Page 27 for key.**
Jerry Falwell Library, Lower Atrium
Poster Session: Undergraduate and Graduate

› Julianna Campbell
  Metabolism of 5-Fluorooxindole by Human Liver Cytochrome P450 Enzymes

› Kaleb Bohrnstedt
  Unraveling the Roles of Crayfish Ectosymbionts

› Kimberly Harris
  Racial Microaggressions (RMAS): Identifying, Addressing, and Treating Race Related Trauma from a Christian Perspective

› Larry Thompson
  Enhancing the Mechanical Properties Bacteria Cellulose using Fiber and Plasticizer Reinforcement

› Mara Weigner
  Characterization of a Temperature Sensitive Rescue Mutation in C. Neoformans

› Marelis De La Cruz
  Double Burden of Malnutrition in Low-income and Middle-income Countries: Literature Review

› Marissa Swope
  The Motivations Behind the Diplomacy of the Marshall Plan: An Analysis on U.S. Foreign Policy in a Post-War Economy

› Markeitha Christian
  Defining Sex: A Reciprocal Gift Designed by God

› Mary Oliver
  Comparing Compassionate Love for Humanity andEmpathy as Predictors of Forgiveness

› Melissa Hosek
  Special Education in China: How Culture Affects Special Education

› Moriah Wierschem
  The Weight of Ruptured Relationships: A Mediation Model for Attachment, Shame-Proneness, Alexithymia, and Depression

› Nadya Prince
  Presence of Dirofilaria Immitis in Mosquitoes Around Lynchburg, VA

› Noelle Addair
  Peroxidase or Peroxygenase: the pH-Dependent Mechanism of Dehaloperoxidase

› Olivia de Araujo
  Genetics of an Isolated Population of Plethodon Hubrichti

› Paul West Okojie
  Health Care Options and Factors Influencing Health Seeking Behavior in a Rural Nigerian Community
1–4 p.m.  Jerry Falwell Library, Lower Atrium  
Poster Session: Undergraduate and Graduate

- **Peter Harrison**
  Synthesis of Bisphenol A Based Epoxy Resins using Microscale Techniques

- **Rachel Beiler**
  Urban Populations of Queen Snakes (Regina Septemvittata) and Northern Watersnakes (Nerodia sipedon sipedon)

- **Rachel Kohler**
  Rosette Formations on Acid-Etched Titanium

- **Rachel Nas**
  Estrogen-Mimicking Cellular Mechanism and Toxicologic Developmental Effects of BPA Derivatives

- **Sarah Jackson**
  “Flight” and “Time of Light”: The Impact of Poetry Sequences on Author and Audience

- **Sarah Stewart**
  Toward a Biblical Sexual Ethic: How a Renewed Understanding of the Doctrine of the Image of God is an Important Response to the Ideas of the Sexual Revolution and the Self-esteem Movement

- **Savannah Dunn**
  Peaks of Otter Salamander (Plethodon Hubrichti) Condition: Optimal Elevations for this Montane Species of Salamander

- **Savannah Nalls**
  Democratization in the Middle East: Natural Resource Dependency & Islamic Exceptionalism

- **Shelby Askins**
  The Santa Maria del Fiore Dome: Filippo Brunelleschi Construction Methods

- **Sierrah Fulmer**
  Increasing International Awareness in the Organic Chemistry Laboratory

- **Taylor Caldwell**
  Tech for Understanding: An Introduction to Assistive Technology in the Classroom

- **Thomas Donica**
  Low-Cost Biaxial Skin Sensors for Large Strain Measurement

- **Vhuthuhawe Madzinge**
  Low Dose Caffeine Consumption Improves Power Output, Reduces Fatigability and Cardiovascular Strain During Anaerobic Exercise

- **Victoria Wilson**
  Risk Factors Associated with Weight Change in Undergraduate, Graduate, and Medical Students

**Superscript denotes student’s program. See Page 27 for key.**
MONDAY, APRIL 15

1–4 p.m. Jerry Falwell Library, Lower Atrium
Poster Session: Undergraduate and Graduate

› **Vincent Valeriano**
  BMI and Average Steps Completed During a Six-minute Step Test in Mid Michigan Middle School Students

› **Vincent Valeriano**
  Impact of Home Repairs on Asthma, Falls, and Health-Related Quality of Life: An Evaluation of the Work of Appalachia Service Project

› **William Norris**
  Trends in the National Foster Care System

TUESDAY, APRIL 16

Noon-3 p.m. Jerry Falwell Library, Active Learning Classroom, Scholars Lounge, Terrace Conference Room A/B
Oral Presentations
Residential & Online: Undergraduate and Graduate

› **Sarah Blanke**
  Artforms Embodied: A Collaborative Fashion Exhibition of the Visual Arts
  *Terrace Conference Room A - Noon*

› **Brodie Robinson**
  Cleanse Us Our Sins: Investigating the Christian Vocabulary in Aristotle's Poetics
  *Terrace Conference Room B - Noon*

› **George Sherman**
  Relationships Between Placement Criteria and Students' Emporium-Based Developmental Math Final Grades
  *Active Learning Classroom - Noon*

› **Rachel Solsman**
  A Feminine Future: Isabel Allende, Feminism, and Latin American Culture
  *Scholars Lounge - Noon*

› **Isabella Warner**
  Designing for Scoliosis: Special Occasion
  *Terrace Conference Room A - 12:30 p.m.*

› **Allison Zuck**
  Parenting Through the Ages: An Investigation into Familial Grief in The Iliad and Modern Times
  *Terrace Conference Room B - 12:30 p.m.*

› **Britton Devier**
  The Relationship Between Alternative Career and Technical Education (CTE) Teacher Licensure Requirements and CTE Teacher Shortage
  *Active Learning Classroom - 12:30 p.m.*
TUESDAY, APRIL 16

Noon–3 p.m. 
Jerry Falwell Library, Active Learning Classroom, Scholars Lounge, Terrace Conference Room A/B
Oral Presentations
Residential & Online: Undergraduate and Graduate

› Krista Everson
Anne Boleyn: Bewitching Us Since 1536
Scholars Lounge - 12:30 p.m.

› Emily Wilson
Housing Considerations of the Aged: Designing for Memory Loss
Terrace Conference Room A - 1 p.m.

› Catherine Meijer
The Dialectic of Victorian Women in Mrs. Warren’s Profession
Terrace Conference Room B - 1 p.m.

› Amy Bennett
Contempt: The Silent “C” in PTSD
Active Learning Classroom - 1 p.m.

› Bessie Blackburn
The Manichean Mindset In Augustinian Theology: Dualism, Evil, and the Solution
Scholars Lounge - 1 p.m.

› Annaclaire Schmiedel
The Passion Project: Furthering a Holistic Biblical Theology of Passion and Purpose Through Visual Storytelling
Terrace Conference Room A - 1:30 p.m.

› Cale Baker
Terrace Conference Room B - 1:30 p.m.

› Dandrea Bolden
Attention Problems in Low-Income African American Children: Is it ADHD or Child Traumatic Stress?
Active Learning Classroom - 1:30 p.m.

› Stephen Davis
Magical Battlegrounds: The Creation of Disneyland and The Culture of Cold War America
Scholars Lounge - 1:30 p.m.

› Victoria Swart
Setting the Backdrop: Analyzing the Collection and Implementation of Cross Cultural Research in Screenwriting Setting Development
Terrace Conference Room A - 2 p.m.

› Lura Martinez
Paranoia and Prejudice: Motivations for U.S. Internment of Japanese-Peruvians during World War II
Terrace Conference Room B - 2 p.m.

**Superscript denotes student’s program. See Page 27 for key.**
TUESDAY, APRIL 16

Noon–3 p.m.  Jerry Falwell Library, Active Learning Classroom, Scholars Lounge, Terrace Conference Room A/B
Oral Presentations
Residential & Online: Undergraduate and Graduate

› Erica Harrison98
   Satisfaction of Nontraditional Students in Health Sciences: A Causal Comparison Study Investigating Institutional Effectiveness
   Active Learning Center - 2 p.m.

› Alex Donley24
   Ivan and His Doubles: The Failure of Intellect in "The Brothers Karamazov"
   Scholars Lounge - 2 p.m.

› Matthew Schultz104
   Creature of Habit: Presentation
   Terrace Conference Room A - 2:30 p.m.

› Faith Olohije Ekoh33
   Caffeine Consumption Antagonizes the Cardiovascular Response During Underwater Diving
   Terrace Conference Room B - 2:30 p.m.

› Carolyn Stapp17
   Experiencing Creation: Correlations Between Meditative Forest Experiences and Mental Health
   Active Learning Center - 2:30 p.m.

› Paige Andrews57
   A Risk-Benefit Analysis of Home Birth and Holistic Hospital Interventions
   Scholars Lounge - 2:30 p.m.

› Brittany Brockenbrough17
   Post-traumatic Stress Disorder Among Domestic Violence Survivors
   Active Learning Classroom - 3 p.m.

WEDNESDAY, APRIL 17

Noon–3 p.m.  Jerry Falwell Library, Active Learning Classroom, Scholars Lounge, Terrace Conference Room A/B
Oral Presentations
Residential and Online: Undergraduate and Graduate

› Madison Koppold14
   Gang Formation: Female Juveniles
   Terrace Conference Room A - Noon

› Mikayla Hudson82
   The Birth of Costumbrismo: The Causes and Effects of Spain’s Changing Social Culture
   Terrace Conference Room B - Noon
**WEDNESDAY, APRIL 17**

**Noon–3 p.m.  Jerry Falwell Library, Active Learning Classroom, Scholars Lounge, Terrace Conference Room A/B**

Oral Presentations  Residential and Online: Undergraduate and Graduate  

- **Kelly Alves**<sup>108</sup>  
  A Phenomenological Study of the Experiences of Middle School Teachers Working with Girls with High Functioning Autism  
  *Active Learning Classroom - Noon*  

- **Reagan Treadwell**<sup>9</sup>  
  Return of Aflatoxin Production in Aspergillus Flavus and Aspergillus Parasiticus after Serial Passaging  
  *Scholars Lounge - Noon*  

- **Drake Deornellis**<sup>24</sup>  
  Once Upon a Time on Mango Street  
  *Terrace Conference Room A - 12:30 p.m.*  

- **Seth Pryor**<sup>60</sup>  
  A Trinitarian Theology of Hell  
  *Terrace Conference Room B - 12:30 p.m.*  

- **Angela Ruark**<sup>58</sup>  
  The Effect of Expressive Writing on the Math Anxiety Scores of Middle School Students Enrolled in a Public School in East Texas  
  *Active Learning Classroom - 12:30 p.m.*  

- **Megan Pizzo**<sup>9</sup>  
  Pollution Tolerance of Crayfish Ectosymbionts (Branchiobdellidans)  
  *Scholars Lounge - 12:30 p.m.*  

- **Duong Ngo**<sup>63</sup>  
  Causa sui and Ultimate Moral Responsibility: A Response to Strawson’s Basic Argument  
  *Terrace Conference Room A - 1 p.m.*  

- **Jonathan Harris**<sup>64</sup>  
  Denominational Divisions and the Road to Civil War  
  *Terrace Conference Room B - 1 p.m.*  

- **James Pickett**<sup>65</sup>  
  Military Programs Effects on Couples’ During Long Separations  
  *Active Learning Classroom - 1 p.m.*  

- **Alec Basile**<sup>9</sup>  
  Design, Synthesis, and Screening of Non-estrogenic Bisphenol A Mimics  
  *Scholars Lounge - 1 p.m.*

**Superscript denotes student’s program. See Page 27 for key.**
Noon–3 p.m. 

Jerry Falwell Library, Active Learning Classroom, Scholars Lounge, Terrace Conference Room A/B

Oral Presentations
Residential and Online: Undergraduate and Graduate

› Esther Karram	extsuperscript{66}
The Twisted Tao of Truth: Corruption and the Hope of Emotion
Terrace Conference Room A - 1:30 p.m.

› Josiah Proia	extsuperscript{28}
The Men and Religion Forward Movement in Virginia, 1911-1912
Terrace Conference Room B - 1:30 p.m.

› Danielle Sims	extsuperscript{17}
Pastoral Changes in Asian American Church
Active Learning Classroom - 1:30 p.m.

› Thomas Siff	extsuperscript{3}
Pheophorbide Esters A and B Isolated from Acai Berries as Activators of Apoptosis
Scholars Lounge - 1:30 p.m.

› Kayla Sargent	extsuperscript{67}
The American Way: A New Solution for American Immigration Courts
Terrace Conference Room A - 2 p.m.

› Beth Passburg	extsuperscript{68}
The Story of a Well Written Screenplay
Terrace Conference Room B - 2 p.m.

› Jennifer Vinces-Cua	extsuperscript{20}
Empower(ed) Families: Supportive Treatment for Caregiver Burnout for Parents of Adolescents with Eating Disorders
Active Learning Classroom - 2 p.m.

› Khang Nguyen	extsuperscript{69}
Submultiplicative Constant
Scholars Lounge - 2 p.m.

› Marissa Swope	extsuperscript{70}
The Motivations Behind the Diplomacy of the Marshall Plan: An Analysis on U.S. Foreign Policy in a Post-War Economy
Terrace Conference Room A - 2:30 p.m.

› Zane Richer	extsuperscript{67}
Of Covenants: How Biblical Frameworks Informed American Constitutional Design
Terrace Conference Room B - 2:30 p.m.
WEDNESDAY, APRIL 17

Noon–3 p.m.  
Jerry Falwell Library, Active Learning Classroom, Scholars Lounge, Terrace Conference Room A/B  
Oral Presentations  
Residential and Online: Undergraduate and Graduate

› Lauren Carter\(^{37}\)  
Peer Mentorship in Nursing Schools: A Pilot Study  
Active Learning Classroom - 2:30 p.m.

› Addie Lauder\(^{11}\)  
Method Development for the Determination of the Amino Acid Profile of Algae via HPLC  
Scholars Lounge - 2:30 p.m.

THURSDAY, APRIL 18

11 a.m.–2 p.m.  
Jerry Falwell Library, Active Learning Classroom, Scholars Lounge, Terrace Conference Room A/B  
Oral Presentations  
Residential and Online: Undergraduate and Graduate

› Jordan Washington\(^{2}\)  
Public Perspectives and Their Impacting Views on ASL/English Interpreting  
Terrace Conference Room A - 11 a.m.

› Emily Page\(^{71}\)  
The Lord Gives Grace to the Humble: יִנֲע in the Narratives of Genesis  
Terrace Conference Room B - 11 a.m.

› Casey Mahoney\(^{15}\)  
Molecular Investigation of Amphibian Pathogens in Lee County, VA.  
Active Learning Classroom - 11 a.m.

› Donald Honeycutt\(^{69}\)  
Simplifying Mathematical Composition on Electronic Platforms  
Scholars Lounge - 11 a.m.

› Samantha Lipscomb\(^{39}\)  
Modifying Spending Behavior  
Terrace Conference Room A - 11:30 a.m.

› Jennifer Pretzer\(^{66}\)  
Burning the Bridges She's Crossed: The Migrant as Deserter of Roots in Jasmine  
Terrace Conference Room B - 11:30 a.m.

› Kristen John\(^{15}\)  
Characterization of pH-responsive Genes in Cryptococcus Neoformans  
Active Learning Classroom - 11:30 a.m.

**Superscript denotes student’s program. See Page 27 for key.
11 a.m.– 2 p.m.

Jerry Falwell Library, Active Learning Classroom, Scholars Lounge, Terrace Conference Room A/B

Oral Presentations

Residential and Online: Undergraduate and Graduate

› Catherine Read⁹
  Identification of Anti-fungal Probiotics from Amphibian Skin Microbiome to Mitigate the Effects of Chytridiomycosis
  Scholars Lounge - 11:30 a.m.

› Mai Chi Nguyen⁶⁹
  On the Kaleidoscopic Nature of Vietnamese Tones
  Terrace Conference Room A - Noon

› Brodie Robinson⁶⁶
  Cleanse Us Our Sins: Investigating the Christian Vocabulary in Aristotle's Poetics
  Terrace Conference Room B - Noon

› Luke Fischer⁹
  Microbial Assemblages in Association with Crayfish Ectosymbionts
  Active Learning Classroom - Noon

› Hannah Thompson⁶⁶
  A Murine Model of Shigellosis: Pathophysiology of Shiga Toxin-2 Secreting Citrobacter Rodentium
  Scholars Lounge - Noon

› Victoria Wilson⁷⁴
  Risk Factors Associated with Weight Change in Undergraduate, Graduate, and Medical Students
  Terrace Conference Room A - 12:30 p.m.

› Caitlin Yeaton⁷⁶
  A Case Study of English /j/
  Terrace Conference Room B - 12:30 p.m.

› Bethany Matsick⁶³
  Twisted Hermitian Codes in the McEliece Cryptosystem
  Active Learning Classroom - 12:30 p.m.

› Ashley Lamoureux⁷⁹
  Profiting from Mass Incarceration: The History and Development of the Private Prison Industrial Complex in the United States
  Scholars Lounge - 12:30 p.m.

› Morgan Margerison⁶²
  Perspectives of Indian Internationals on Mental Health and Its Integration with Christian Mission
  Terrace Conference Room A - 1 p.m.
11 a.m.–2 p.m.  
Jerry Falwell Library, Active Learning Classroom, Scholars Lounge, Terrace Conference Room A/B, Center for Music and the Worship Arts, Concert Hall  
Oral Presentations  
Residential and Online: Undergraduate and Graduate

› Elisa Palumbo66  
Unsatisfied Cravings: The Migrant’s Attempt to Recreate Home  
Terrace Conference Room B - 1 p.m.

› Nicholas Eisele9  
The Characterization of the Microbiome for the Northern Two-lined Salamander (Eurycea Bislineata) and its Ecological Interactions with the Pathogen Batrachochytrium Dendrobatidis  
Active Learning Classroom - 1 p.m.

› Ben Williamson77  
Abortion, Infanticide, Personhood and Potential: Why Defenders of Abortion and Infanticide cannot Principally and Consistently Reject Enslaving Actual Human Persons as Seriously Morally Wrong  
Scholars Lounge - 1 p.m.

› Megan Gonzalez26  
The Acute Effects of Moderate Intensity Aerobic Exercise on Short-Term Memory in College Students  
Terrace Conference Room A - 1:30 p.m.

› Mark Myrdal64  
The American Society of Equity: The Rise and Fall of a Farmer’s Organization  
Terrace Conference Room B - 1:30 p.m.

› Megan Duggins9  
Prevalence of Batrachochytrium Dendrobatidis (Bd) within the Eastern Newt (Notophthalmus viridescens) Population in Lynchburg, Virginia  
Active Learning Classroom - 1:30 p.m.

› Tanesha Higgins78  
Voices of the Hibakusha: The Impact of Their Struggle  
Scholars Lounge - 1:30 p.m.

1–2 p.m.  
Center for Music and the Worship Arts, Concert Hall  
Performing Arts Presentations

› Emily James68  
55 strong

› Rebekah Sharpe109  
Every Brilliant Thing: The Rippling Effects of Mental Illness & Suicide on Family

**Superscript denotes student’s program. See Page 27 for key.**
Three-Minute Thesis (3MT®) celebrates the exciting research conducted by Ph.D. students around the world. Developed by The University of Queensland (UQ), the competition cultivates students' academic, presentation, and research communication skills. Presenting in a 3MT competition increases their capacity to effectively explain their research in three minutes, in a language appropriate to a nonspecialist audience.

This will be an opportunity for Liberty's bachelor's, master's, and doctoral students to concisely summarize and clearly communicate a well-conceived thesis/dissertation project, compelling data collected, and a novel story that represents their research. This year's participants are listed below:

**Undergraduate**

- **Alicia Finnigan**
  Leading by Example: Nonverbal Leaders in Sports

- **Er Yearn Jang**
  A Study of the Connect Between the Affordable Care Act and the Economic Burden of the US Produced by the Opioid Epidemic

- **Kerry Good**

- **Marrisa Swope**
  Modern Misconceptions on the Wall of Separation: An Analysis on the Influence and Misinterpretation of Jefferson’s Separation of Church and State

- **Nathan Sexten**
  Anthropology Embedded in Worldview Studies: Modernity’s Failure and the Response of Christian Philosophy of Life in a Postmodern Age of Expressivism

- **Zane Richer**
  Of Covenants: How Biblical Frameworks Informed American Constitutional Design

**Graduate**

- **Abigail Shimer**
  “The South’s Greatest Vindication”: Mildred Lewis Rutherford and the Belief of Southern Superiority

- **Caitlin Curtis**
  American Involvement in the Baghdad Pact

- **Caroline Dunmire**
  Audiating and Vocalizing Voice-Leading in Seventh Chords: Harmonic Recognition in Freshman Ear-Training Courses

- **Christopher Sneeringer**
  James Madison, an Early American Entrepreneur: The Plantation Owner and Farmer
Graduate (cont.)

- Hannah Nelson\textsuperscript{86}
  Comparison of Maximal Aerobic Capacity Between the Treadmill and a Skiing Ergometer

- Russell Lowell\textsuperscript{86}
  Correlation of 2-Dimensional Analysis of the Modified Landing Error Scoring System (LESS) and Deceleration Task.

- Sarah Casmass\textsuperscript{87}
  Exploring the Enneagram through Visual Aesthetics: Profiles for Personal Home Décor

- Sarah Stewart\textsuperscript{83}
  Toward a Biblical Sexual Ethic: How a Renewed Understanding of the Doctrine of the Image of God is an Important Response to the Ideas of the Sexual Revolution and the Self-esteem Movement

- Susan Terran
  A Smart Choice

Juried Arts

The following students submitted juried arts pieces for Research Week:

- William Adams\textsuperscript{30}
- Rebekah Bilek\textsuperscript{88}
- Brook Blackwell\textsuperscript{89}
- Elise Blakely\textsuperscript{97}
- Noel Bright\textsuperscript{93}
- Amanda Brush\textsuperscript{88}
- Kaylee Callahan\textsuperscript{88}
- Stephanie Calleja\textsuperscript{88}
- Joshua Cook\textsuperscript{88}
- Caroline Cummings\textsuperscript{88}
- Yesenia De La Cruz\textsuperscript{93}
- Elizabeth Dean\textsuperscript{89}
- Jeanne DiMaggio\textsuperscript{68}
- Victoria Dissmore\textsuperscript{88}
- Tia Driggers\textsuperscript{89}
- Zachary Enfield\textsuperscript{88}
- Avery Fetzer\textsuperscript{89}
- Madison Fogarty\textsuperscript{102}
- Gabrielle Galley\textsuperscript{88}
- Joy Hanneman\textsuperscript{100}
- Kelsey Hargett\textsuperscript{101}
- Caleb Hilsher\textsuperscript{88}
- James Howard\textsuperscript{89}
- Bailey Jacobs\textsuperscript{89}
- Christin Jaynes\textsuperscript{39}
- Rachel Jones\textsuperscript{104}
- Bethany Knaus\textsuperscript{88}
- Jeewon Lee\textsuperscript{88}
- Hannah Loomis\textsuperscript{88}
- Samantha Marjoram\textsuperscript{29}
- Bree McLaughlin\textsuperscript{30}
- Gabriela Mims\textsuperscript{88}
- Lauren O’Neil\textsuperscript{88}
- Sarah Pabst\textsuperscript{89}
- Gavin Renfro\textsuperscript{88}
- Candice Sampson\textsuperscript{93}
- Deanna Sattler\textsuperscript{95}
- Annaclare Schmiedel\textsuperscript{88}
- Matthew Schultz\textsuperscript{104}
- Steven Sherlin\textsuperscript{93}
- Deanna Smith\textsuperscript{88}
- Morgan Smith\textsuperscript{89}
- Mallory Spiers\textsuperscript{88}
- Caitlyn Stupi\textsuperscript{88}
- Bethany Tokgozoglu
- Anna Tucker\textsuperscript{89}
- Emillie Tucker\textsuperscript{89}
- Allison Walker\textsuperscript{88}
- Natalie Warner\textsuperscript{88}
- Samantha Wilson\textsuperscript{100}
- Matthew Wilson\textsuperscript{88}
- Hailey Worrell\textsuperscript{88}
- Emily Young\textsuperscript{88}
Noon-3 p.m.  Jerry Falwell Library, Active Learning Classroom, Scholars Lounge, Terrace Conference Room A/B
Oral Presentations
Residential and Online: Undergraduate and Graduate

› Jirayu Smitthimedhin⁶⁶
  Persecutor's Remorse: Mimetic Desire, the Scapegoat Mechanism, and the Compassionate Gaze in the Works of Shusaku Endo
  Terrace Conference Room A - Noon

› Nathan Landrum²⁸
  Rommel's Fatal Gambit: The First Battle of El Alamein
  Terrace Conference Room B - Noon

› Sarah Casmass⁸⁷
  Exploring the Enneagram through Visual Aesthetics: Profiles for Personal Home Decor
  Active Learning Classroom - Noon

› Zoe Sargent⁶⁷
  Does Your Provider Care: A Mixed Methods Study of Empathy in Medical and Graduate Counseling Students
  Scholars Lounge - Noon

› Matthew Bovard¹⁰⁵
  Amos 3:3-8: A Case Study of the Function of Rhetorical Questions in Amos
  Terrace Conference Room A - 12:30 p.m.

› Kerry Good³¹
  Terrace Conference Room B - 12:30 p.m.

› Vhuthuawane Madzinge³³
  Understanding the Mechanisms of the Protective Effects of Caffeine in Cardiac Autonomic Neuropathy
  Active Learning Classroom - 12:30 p.m.

› Rachel Pedigo⁵⁸
  A Phenomenological Study of ACSI International First Year Teachers' Experiences in Curriculum Development
  Scholars Lounge - 12:30 p.m.

› Kara Sease⁸¹
  Uncovering Linguistic Patterns in Tongue Twisters of Different Languages
  Terrace Conference Room A - 1 p.m.

› Joshua Heath¹⁰⁶
  The Color Blind Salute
  Terrace Conference Room B - 1 p.m.

› Hanna Byrd¹⁰⁷
  The Impact of Lyric Choices on Spiritual Edification
  Active Learning Classroom - 1 p.m.
FRIDAY, APRIL 19

Noon-3 p.m.  
Jerry Falwell Library, Active Learning Classroom, Scholars Lounge, Terrace Conference Room A/B
Oral Presentations
Residential and Online: Undergraduate and Graduate

› Abby Lokkesmoe12  
  Gender Differences in Law Enforcement Leadership Style: Implications for Subordinate Job Satisfaction  
  Scholars Lounge - 1 p.m.
› Emily Camplejohn81  
  Teaching English to Refugees through Storytelling  
  Terrace Conference Room A - 1:30 p.m.
› Kayla Hamlin82  
  The Impact of Theistic Existentialism in the Poetry of Antonio Machado  
  Terrace Conference Room B - 1:30 p.m.
› Paul West Okojie34  
  Factors of Risky Sexual Behavior Among Long Haul Truckers in a Southern Nigerian Town  
  Active Learning Classroom - 1:30 p.m.
› Nathan Sexten67  
  Scrolling: Social Media and the Power of Habit  
  Terrace Conference Room A - 2 p.m.
› Emily Thompson66  
  The Myth of Progress in Jonathan Swift and C. S. Lewis  
  Terrace Conference Room B - 2 p.m.
› Abby Richmond36  
  The Links Between Motivational Techniques, Successful Physical Therapists, and Successful Rehab Clinics  
  Active Learning Classroom - 2 p.m.
› Elizabeth Krantz39  
  Efficacy Study of Reminiscence Theatre with the Elderly  
  Scholars Lounge - 2 p.m.
› Richard Decker66  
  True Essence: The Value and Importance of Good Literature  
  Terrace Conference Room A - 2:30 p.m.
› Sophia Sweat82  
  The Legends of Guatemala: Miguel Ángel Asturias, Discovering the Impact of This Literary History  
  Terrace Conference Room B - 2:30 p.m.
Noon-3 p.m.  
Jerry Falwell Library, Active Learning Classroom, Scholars Lounge, Terrace Conference Room A/B  
Oral Presentations  
Residential and Online: Undergraduate and Graduate

› Zoe Sargent^67  
  Autism and Communication: A Phenomenology of Parents’ Perspectives  
  Active Learning Classroom - 2:30 p.m.

› Emily Renie^81  
  The Complexities of Teaching for Acquisition: Article Semantics  
  Scholars Lounge - 2:30 p.m.
We would like to extend a special thank you to all of our faculty judges. The success of this event would not be possible without your willingness to volunteer your time to our students.

- Shanna Akers
- Stephen Bell
- Stacey Bose
- Joseph Brewer
- Diane Bridge
- Janet Brown
- Bunnie Claxton
- Jamaica Conner
- Robert Cooper
- Lauren Daly
- Brianne Friberg
- Ben Forest
- Richard Fuhr
- Jonathan Giles
- Cynthia Goodrich
- Kristen Hark
- Scott Hayes
- Richard Hawkins
- Stephen Hobson
- Ben Kalu
- Matthew Lazenka
- Yingguang Liu
- Monique Maloney
- Troy Matthews
- Kurt Michael
- Kimberly Mitchell
- Mitchell Morrison
- Zhang Pei
- Leo Percer
- Michael Price
- Nancy Richardson
- Anita Satterlee
- Cynthia Schmidt
- Scott Severance
- Lisa Sosin
- Lucinda Spaulding
- Kevin Struble
- Robert Talley
- Ashley Tharpe
- Rob Van Engen
- Brian Walsh
- Joshua Waltman
The Center for Research & Scholarship would like to express special appreciation to the faculty and student members of the Research Week Advisory Board. This expertise of this board guides the application processes, judging criteria and rubrics, and the presentation guidelines to ensure that Research Week is a successful event each year that aligns with the mission of CRS to champion research and scholarship at Liberty University.

► David DeWitt
► Rorie Fredrich
► Matalie Howard
► Sam Landa
► Monique Maloney
► Tram Nguyen
► Estefany Orellana
► Carey Roberts
► Julia Rothenberger
► Paul Rumrill
► Martin Sheldon
► Kevin Struble
► Josh Waltman
► Darren Wu
> Acting
> American Sign Language
> Business Administration & Digital Marketing
> Business Administration: INTL BUS
> Biochemistry & Molecular Biology
> Biblical Studies
> Biomedical Sciences: Global Studies
> Biomedical Sciences: Global Studies
> Biomedical Sciences
> Biology
> Chemistry
> Criminal Justice: Criminal Science
> Criminal Justice: Strat Intelligence
> Criminal Justice
> Cell & Molecular Biology
> Clinical Mental Health Counseling
> Professional Counseling
> Communication
> Anatomy & Cell Biology
> Counseling Education
> Family Nurse Practitioner
> Environmental Biology
> Electrical Engineering
> English
> Exercise Science & Fitness
> Exercise Science: Pre-professional
> Forensic Science
> History (Comprehensive)
> History
> Interdisciplinary Studies
> International Relations
> Osteopathic Medicine
> M.S.: Biomedical Sciences
> Epidemiology
> Global Health
> Nutrition
> Nursing
> Public Health: Pre-clinical
> Psychology: Counseling
> Psychology: Criminal Psychology
> Psychology: Developmental Psychology
> M.S.: Psychology: Developmental Psychology
> Psychology: Industrial & Organizational
> M.S.: Psychology: Industrial & Organizational Psychology
> Psychology
> Psychology: Counseling and Human Development
> Psychology: Counseling/Clinical
> Sports Management: Admin
> Social Work
> Speech Communication
> ‘Theatre Arts: Dramaturgy
> Theatre Arts: Performance
> Theatre Arts
> Undecided
> Zoology
> Zoo & Wildlife Biology
> Family & Child Development
> Doctor of Educ: Curric & Instr
> Mechanical Engineering
> Christian Apologetics
> Elementary Ed Int Std: Soc Sci
> Biopsychology
> Mathematics
> History (Comprehensive)
> Marriage & Family Therapy
> M.A.: English
> CVPP
> Cinematic Arts
> Computer Science
> Govt: Western Legal Traditions
> Biblical Studies
> Sport Management
> Special Educ Integrated Stud
> Master of Public Health: Promo
> Biotechnology
> Music: Instrumental
> Philosophy
> Social Sciences
> M.A.: Hum Svcs Coun: Marriage/Fam
> M.A.: Music Education
> Teaching Engl as Sec Lang
> Spanish
> Christian Thought
> Paralegal Studies
> Fashion & Int: Int Design
> Exercise Science
> Human Perform
> Studio Art
> Studio & Dig Arts: Graphic Des
> Studio & Dig Arts: Studio Art
> M.A.: Public Policy
> Business Admin: Marketing
> Ph.D. High Ed Admin: Educ Lead
> Law and Policy: Pre-Law
> Fash and Int: Fash Merch
> Doctor of Educ: Leadership
> History: Classical Studies
> Graphic Design
> Strategic Comm
> M.A. Hum Svcs Coun: Addict & Rec
> Info Tech Web & Mobile Prog
> Academ-Biblical Studies
> MSCN
> Doctor of Worship Studies
> Doctor of Educ: Curric & Instr
> English (TC)
Passport

Air Pods Give Away!
Free T-shirt!

We want to reward your participation in Research Week 2019 with a chance to win a pair of Air Pods AND a free T-shirt (while supplies last)! Attend the following components of Research Week, collect a sticker at each one, turn in this page complete with stickers and your contact information at the registration table, collect your FREE Research Week T-shirt, and we will draw a winner for the Air Pods!

1) Attend the Keynote Address, Monday, April 15, 11:45 a.m. - hors d'oeuvres served!
2) View a poster presentation, Monday-Thursday, ask for sticker at registration table.
3) Attend an Oral Presentation, Tuesday-Friday, see schedule for details.
4) Attend a Performing Arts Presentation, Thursday, 1-2 p.m., see schedule for details.
5) Attend a 3-Minute Theses Presentation, Thursday, see schedule for details.

HOW TO VOTE for JURIED ARTS PEOPLE'S CHOICE AWARD

Vote in the People's Choice Juried Art Competition! Go to Facebook.com/LibertyULibrary, and like your favorite piece in the Research Week Juried Art photo album. Voting ends on Friday, April 19, at 4:00 pm, so cast your vote today!

NAME: ______________________________ EMAIL: ___________________________@liberty.edu