Spring 2019

Spring Student Showcase Awards Program 2019

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LONGWOOD EXCELLENCE IN RESEARCH & CREATIVE INQUIRY & INCITE

AWARD CEREMONY

TUESDAY · 23 APRIL 2019 · 12:30 P.M.
Bedford Atrium
Welcome! Thank you for joining us to acknowledge and celebrate our students who have gone above and beyond in their pursuit of research and creative inquiry! The awards ceremony will include the winners of the INCITE Journal of Undergraduate Scholarship awards, and students who are being recognized with the Longwood Excellence in Research and Inquiry Award. All award recipients will receive a medallion to recognize their achievement.

Students who have been recognized with an award are noted by the colored ribbons on their name badges. Projects that have been published in INCITE are noted in the program.

**The different colors of the Award Recipient ribbons indicate the following achievements:**

*Light Blue-* Participated in an intensive research program, such as Longwood’s PRISM or CURIO program, or a Research Experience for Undergraduates outside of Longwood University

*Dark Blue-* Presented research at a scholarly conference or had a performance or exhibition of creative work outside of Longwood University

*Red-* Published an article in a peer-reviewed scholarly journal or received external funding to support an independent research and inquiry project

*Green-* Completed a Senior Honors Research Project at Longwood University

*Yellow-* Published in INCITE, the undergraduate research journal for the Cook-Cole College of Arts and Sciences at Longwood University
Award Recipients

Students who participated in an intensive research program, such as Longwood’s PRISM or CURIO program, or a Research Experience for Undergraduates outside of Longwood University

Jordan Berkompas, (Faculty Sponsor, Matt Lucas)
*The Geometry of Curves and Surfaces via Moving Frames, PRISM, Summer 2018

Matthew Bowman, (Faculty Sponsor, Ben Campbell)
*A layered way to think about science: Using multiple frameworks to represent science concepts, presented at Virginia Association of Science Teachers, Fall 2018
* Concept Models as Planning Tools for Practicing Science Teachers, PRISM, Summer 2018

Rachel Cliborne, (Faculty Sponsor, Sean Ruday)
*99 Problems, but Grammar Ain’t One, CURIO project Spring 2017, and published in ATEG Journal

Kaitlyn Crow, (Faculty Sponsor, Mary Carroll-Hackett)
*Comparing Earthquakes to Sex: A Poetic Exploration of the Female Body, Sexuality, and Power, CURIO

Adam Gyori, (Faculty Sponsor, Christopher Labosier)
*Thermal Safety of Children's Outdoor Play Equipment, CURIO

Curran Atkinson, (Faculty Sponsor, Kathy Gee)
*Best Treatment for Mosquito Larvae in Rainwater Harvesting Systems, PRISM, Summer 2019

Corri Calandra, (Faculty Sponsor, Jonathan White)
*Synthesis of a cancer-targeting, choline- appended Pt anticancer therapeutic and characterization of its DNA target binding, PRISM program, Summer 2019

Sarah Elsakr, (Faculty Sponsor, Sarah Porter)
*Spectroscopic and Chemometric Analysis of Petroleum Products for Forensic, Environmental, and Industrial Applications, PRISM 2019

Meghan Hall (Faculty Sponsor, Erin Shanle)
*Investigating the effects of cancer mutations on the activity of p300, PRISM, Summer 2019

Caitlin Harris (Faculty Sponsor, Erin Shanle)
*Investigating the effects of cancer mutations on DNA damage response proteins in yeast, presented at the Virginia Academy of Science and ASBMB; PRISM Summer 2018 and 2019
Derek Holmberg, (Faculty Sponsor, Kenneth Pestka)
* The Physical and Acoustic Analysis of Wooden Baseball Bats Using Resonant Ultrasound Spectroscopy, PRISM, Summer 2018

Jordan Howard, (Faculty Sponsor, Troy Purdom)
* Evaluation of running anaerobic sprint test (RAST) in division 1 female soccer players across the summer and competitive seasons, PRISM, Summer 2018

Taylor Jacobson, (Faculty Sponsor, Sean Ruday)
* Making A Difference: What Research Has to Say About Social Justice in the Classroom, CURIO (Spring 2018); published in Virginia English Journal, Summer 2019

Kaelyn Jefferson, (Faculty Sponsor, Andrew Yeagley)
* Disconnecting the Estrogen Receptor Binding Properties and Antimicrobial Properties of Parabens through 3,5-Substitution, presented at the Virginia Section American Chemical Society Local Meeting 2016-2018; Senior Honors Research 2018; PRISM 2016; published in Journal of Medicinal Chemistry 2018; presented at American Chemical Society National Meeting 2018

Lauren Johnson, (Faculty Sponsor, Benjamin Topham)
* A computational study of single molecule diodes, PRISM 2018; published in INCITE, second place award winner – Natural Sciences Category

Ibrahim Kante, (Faculty Sponsor, Phil Cantrell/Scott Cole)
* The study of precolonial kingship in Sub-Saharan Africa; Why the Democratic Republic of the Congo outsourced its responsibility to educate its citizens, CURIO; presented at JMU 2019 VCHC conference; INCITE second place award winner – Humanities Category

Brady Knight, (Faculty Sponsor, Tom Wears)
* The Geometry of Curves in Surfaces in 3-dimensional Lie Groups, PRISM 2019

Brianna LaFratta, (Faculty Sponsor, Max Hennings)
* An Analysis of Neurogenesis in a Mouse Model of Chemotherapy-Related Cognitive Impairment, PRISM, summer 2019

Maurice Manchester, (Faculty Sponsor, Erin Shanle)
* Investigating the effects of cancer mutations on the activity of p300, PRISM, summer 2018

Dakota Martin, (Faculty Sponsor, Julian Dymacek)
* Hybrid Distributed Constrained Non-negative Matrix Factorization, PRISM, summer 2018

Kaitlyn McCleese, (Faculty Sponsor, Deborah Durham)
* An Essay Comparing and Contrasting Different Medical Issue on Opposite Ends of the Spectrum of Health Care; Sleep Paralysis Interviews, CURIO
Justin Moore, (Faculty Sponsor, Julian Dymacek)
* Extended Applications of Distributed Non-Negative Matrix Factorization, PRISM 2019

Charlotte Pfamatter, (Faculty Sponsor, Kathy Gee)
* Evaluating Control and Mitigation Techniques for Mosquitoes in Rainwater Harvesting Systems, PRISM summer 2019

Catherine Swinsky, (Faculty Sponsor, Brandon Jackson)
* Shake a tail feather: finding the function of bird tails in slow flight, PRISM, summer 2019

Dillon Tennis, (Faculty Sponsor, Christopher Labosier)
* Is there an Urban Heat Island (UHI) in Farmville, Virginia? Presented at American Association of Geographers; PRISM summer 2018

Madison Trebour, (Faculty Sponsor, Jo Morrison)
* Physiological demands of hard shoe and soft shoe Irish dancing, presented at SEACSM 2018-19; CURIO

Joshua Walker, (Faculty Sponsor, Ben Topham)
* Computational Study of Chemical Control of Single Molecule Electronics, PRISM 2019

Alexis Wayland, (Faculty Sponsor, Troy Purdom)
* Hyaluronic Acid Expression and Overtraining, PRISM 2019
Students who presented research at a scholarly conference or had a performance or exhibition of creative work outside of Longwood University

Colter Bennett, (Faculty Sponsor, Matt Lucas)
*Students with Dyspraxia Participating in Recess, published in the Virginia Association of Health, Physical Education, Recreation, and Dance Journal, Spring 2018
*Developing Sports Programs for Children with Disabilities in Rural America, presented at SHAPE American, Nashville, TN, Spring 2018

Megan Bland, (Faculty Sponsor, Alix Fink)
*Seasonal Changes of Bird Species Diversity and Community Composition in Alaska, presented at National Collegiate Honors Council Annual Conference, Fall 2018

Matthew Bowman, (Faculty Sponsor, Ben Campbell)
*A layered way to think about science: Using multiple frameworks to represent science concepts, presented at Virginia Association of Science Teachers, Fall 2018
* Concept Models as Planning Tools for Practicing Science Teachers, PRISM, Summer 2018

Caroline Carter, (Faculty Sponsor, Wade Znosko)
*Impact of impaired water on developing embryos along the WNT pathway, Incorporating Sense of place into open ocean conservation, presented at National Collegiate Honors Conference; Marine Biodiversity & Conservation Research Symposium
*Community assessment of Hydroids and genetic assessment of Aglaophenia latecarinata in the Sargasso Sea
*Alterations in Gene Expression Within Members of the WNT Pathway in Zebrafish Embryos Raised in Impaired Waters, presented at National Collegiate Honors Council Annual Conference

Kristen Chelsey, (Faculty Sponsor, Sean Ruday)
*Presented at the Annual Conference of the National Council of Teachers of English

Troy Clift, (Faculty Sponsor, Dina Leech)
*Using High Frequency Sensor Data to Monitor Organic Matter Fluxes to a Coastal Stream, presented at AERS Annual Meeting

Grace Dalton, (Faculty Sponsor, Wendy Snow/Katrina Maynard)
*Re-imaging Teacher Education using Practicum-Embedded Coursework for Longwood University's Liberal Studies Elementary and Middle Pre-service Teachers, presented at Association for Teacher Educators 2019 Conference in Atlanta, GA, 2019
*Practitioner manuscript with Dr. Jodie Brinkmann and Dr. Katrina Maynard (in progress)

Cecilie Elliott, (Faculty Sponsor, Adam Franssen)
*Individual variation in maternal response tied to differential expression of oxytocin and estrogen in several brain regions, presented at SYNAPSE and CVCSN
**Sandra Elsakr Ghali, (Faculty Sponsor, Sujan Henkanaththegedara)**  
*Diversity and Activity Patterns of Pollinators in a Suburban Flood Plain in Virginia, presented at Virginia Academy of Science, 2018*

**Rachel English, (Faculty Sponsor, Wade Lough/Christopher Register)**  
*Bees Matter, presented at Longwood Center for the Visual Arts*

**Mary Zell Galen, (Faculty Sponsors, David Coles, Jessi Znosko, James Munson, James Jordan)**  
*Professionalism: The Effects of FIRST Robotics Folklore and Culture on the STEM Community; Response to the Great Vermont Flood of 1927; Presented at Virginia Collegiate Honors Council's 2016 Conference; published in INCITE; Senior Honors Research; Summer Undergraduate Research and Inquiry  
*Pitt's Gold and Paper Money: Reactions to the Bullionist Controversy, 1797-1821*

**Shannon Graham, (Faculty Sponsor, Wendy Pulliam/ Lissa Power-deFur)**  
*Effect of Instruction Method on Competency and Perception of Proloquo2Go, presented at Speech-Language-Hearing Association of Virginia Conference, 2019*

**Caitlin Harris (Faculty Sponsor, Erin Shanle)**  
*Investigating the effects of cancer mutations on DNA damage response proteins in yeast, presented at the Virginia Academy of Science and ASBMB; PRISM Summer 2018 and 2019*

**Karissa Harris, (Faculty Sponsor, Timothy Coffey/ Lissa Power-deFur)**  
*Effects of Postural Position and Utensil Use on Simulated Pill Swallows, presented at Speech-Hearing Association of Virginia*

**Joseph Hyman, (Faculty Sponsor, Yulia Uryadova)**  
*Chernobyl: Putting Perestroika and Glasnost to the Test, presented at 2019 VCU Student Research Conference; INCITE first place award winner – Humanities Category*

**Kaelyn Jefferson, (Faculty Sponsor, Andrew Yeagley)**  
*Disconnecting the Estrogen Receptor Binding Properties and Antimicrobial Properties of Parabens through 3,5-Substitution, presented at the Virginia Section American Chemical Society Local Meeting 2016- 2018; Senior Honors Research 2018; PRISM 2016; published in Journal of Medicinal Chemistry 2018; presented at American Chemical Society National Meeting 2018*
Ashley Johnson, (Faculty Sponsor, Timothy Ritzert)
*Addressing, Mental Health Stigma: Evaluation of an Intervention, presented at Carolinas Psychology Conference

Samantha Jones (Faculty Sponsor, Wade Lough/ Christopher Register)
*The Kitty Cause, presented at Longwood Center for the Visual Arts

Courtney Kaczmarek, (Faculty Sponsor, Wendy Pulliam/ Lissa Power-deFur)
*Effect of Instruction Method on Competency and Perception of Proloquo2Go, presented at Speech-Language-Hearing Association of Virginia 2019 Conference

Ibrahim Kante, (Faculty Sponsor, Phil Cantrell/Scott Cole)
*The study of precolonial kingship in Sub-Saharan Africa; Why the Democratic Republic of the Congo outsourced its responsibility to educate its citizens, CURIO; presented at JMU 2019 VCHC conference; INCITE second place award winner – Humanities Category

William Kish, (Faculty Sponsor, Sujan Henkanaththegedara)
*Hidden Spiders: The Diversity and Distribution of Spiders in a Suburban Landscape in Virginia, presented at Virginia Academy of Science conference, 2018
* Physio-chemical effects on vernal pool communities in High Bridge Trail State Park, PRISM 2018

Kathryn Kosiorek, (Faculty Sponsor, Adam Franssen)
*Individual variation in maternal response tied to differential expression of oxytocin and estrogen in several brain regions, presented at SYNAPSE and CVCSN

Elizabeth Llewellyn, (Faculty Sponsor, Wendy Pulliam/ Lissa Power-deFur)
*Effect of Instruction Method on Competency and Perception of Proloquo2Go, presented at Speech-Language-Hearing Association of Virginia 2019 Conference

Miki (Emily) Martin, (Faculty Sponsor, Susan Lynch/ Kirstin Whitely)
*Building Social Skills and Slaying Dragons: A Study of the Effects of Tabletop RPG Therapy on Adolescents with Autism Spectrum Disorder, presented at VASTRA, 2019

Meredith Paige, (Faculty Sponsor, Timothy Coffey/ Lissa Power-deFur)
*Effects of Postural Position and Utensil Use on Simulated Pill Swallows, presented at Speech-Hearing Association of Virginia

Connor Perry, (Faculty Sponsor, Sujan Henkanaththegedara)
*Mesocosm experiments reveal negative impacts of invasive red-swamp crayfish on native Piedmont crayfish, presented at Virginia Academy of Science, 2016
Jesse Plichta Kellar, (Faculty Sponsor, Sarah Varela)
*Community Engagement and the Successful Eradication of Rinderpest in East Africa, presented at New York Academy of Medicine, History of Medicine night

Carrie Reaver, (Faculty Sponsor, Bjorn Ludwar)
*Assessing Fingerprinting Asymmetry to Detect Type 1 Diabetes Mellitus, presented at AMSA Conference, 2019

Garrett Reese, (Faculty Sponsor, Lacy Klinger)
*Loving by Peter Manos, presented at Moton Museum; Illyria Theatre Company, February 2019

Elle Richardson, (Faculty Sponsor, Amorette Barber)
*Preparation and application of a new bacterial biosensor for the presumptive detection of gunshot residue, published in Journal of Visualized Experiments;
*Enhancing the anti-tumor efficacy of chimeric antigen receptor-expressing T cells with naturally occurring plant stilbenes, presented at American Society for Biochemistry and Molecular Biology

Jessica Savas, (Faculty Sponsor, Erin Shanle)
*Investigating the effects of cancer mutations on DNA damage response proteins in yeast, presented at Virginia Academy of Science and ASBMB

Haley Schultz, (Faculty Sponsor, Lee Bidwell)
*Increasing Parent Child Involvement at a Domestic Violence Shelter Utilizing Family Fun Times Activities, presented at Virginia Social Sciences Association Annual Meeting, 2019

Andrea Soles, (Faculty Sponsor, Amorette Barber)
*Preparation and application of a new bacterial biosensor for the presumptive detection of gunshot residue, published in Journal of Visualized experiments
*Enhancing the anti-tumor efficacy of chimeric antigen receptor-expressing T cells with naturally occurring plant stilbenes, presented at American Society for Biochemistry and Molecular Biology

Morgan Sullivan, (Faculty Sponsor, Timothy Coffey/ Lissa Power-deFur)
*Effects of Postural Position and Utensil Use on Simulated Pill Swallows, presented at Speech-Hearing Association of Virginia

Deairra Thompson, (Faculty Sponsor, Timothy Coffey/ Lissa Power-deFur)
*Effects of Postural Position and Utensil Use on Simulated Pill Swallows, presented at Speech-Hearing Association of Virginia

Madison Trebour, (Faculty Sponsor, Jo Morrison)
*Physiological demands of hard shoe and soft shoe Irish dancing, presented at SEACSM 2018-19; CURIO
Jamesha Watson, (Faculty Sponsor, Jake Milne)

Courtney White, (Faculty Sponsor, Jake Milne)
*Trust of Insiders and Outsiders between America and India; Enjoyment of Horror Films in relation to Extroversion, PRISM; presented at Carolina's Undergraduate Psychology Conference

Payton Yates, (Faculty Sponsor, Wendy Pulliam/ Lissa Power-deFur)
*Effect of Instruction Method on Competency and Perception of Proloquo2Go, presented at Speech-Language-Hearing Association of Virginia 2019 Conference
Students who published an article in a peer-reviewed scholarly journal or received external funding to support an independent research and inquiry project

Colter Bennett, (Faculty Sponsor, Matt Lucas)
*Students with Dyspraxia Participating in Recess, published in the Virginia Association of Health, Physical Education, Recreation, and Dance Journal, Spring 2018
*Developing Sports Programs for Children with Disabilities in Rural America, presented at SHAPE American, Nashville, TN, Spring 2018

Jennifer Cassidy, (Faculty Sponsor, Sean Ruday)
*Can We Use Our Phones?: The Use of Mobile Phones in the English Teacher’s Classroom, published in Virginia English Journal, Winter 2019

Alexandra Cequeria, (Faculty Sponsor, Sean Ruday)

Rachel Cliborne, (Faculty Sponsor, Sean Ruday)
*99 Problems, but Grammar Ain’t One, CURIO project Spring 2017, and published in ATEG Journal

Grace Dalton, (Faculty Sponsor, Wendy Snow/Katrina Maynard)
*Re-imaging Teacher Education using Practicum-Embedded Coursework for Longwood University's Liberal Studies Elementary and Middle Pre-service Teachers, presented at Association for Teacher Educators 2019 Conference in Atlanta, GA, 2019
*Practitioner manuscript with Dr. Jodie Brinkmann and Dr. Katrina Maynard (in progress)

Michala Day, (Faculty Sponsor, Robin Smith)
*Speech and Intelligence: Does My Use of Colloquialisms Label Me Incompetent?, Published in Virginia English Journal, Summer 2018

Amelia Erickson, (Faculty Sponsor, Matthew Lucas)
*Students with Oppositional Defiant Disorder Participating in Recess, published in The Virginia Journal, Spring 2018

Steven Herring, (Faculty Sponsor, Naomi Johnson)
*Twitter, Social Support Messages, and the #MeToo Movement, published in Virginia Association of Communication Arts & Sciences (VACAS), 2019

Taylor Jacobson, (Faculty Sponsor, Sean Ruday)
*Making A Difference: What Research Has to Say About Social Justice in the Classroom, CURIO (Spring 2018); published in Virginia English Journal, Summer 2019
Kaelyn Jefferson, (Faculty Sponsor, Andrew Yeagley)
*Disconnecting the Estrogen Receptor Binding Properties and Antimicrobial Properties of Parabens through 3,5-Substitution, presented at the Virginia Section American Chemical Society Local Meeting 2016-2018; Senior Honors Research 2018; PRISM 2016; published in Journal of Medicinal Chemistry 2018; presented at American Chemical Society National Meeting 2018

Karyn Keane (Faculty Sponsor, Elif Guler)
*This Pussy Grabs Back: Body Rhetoric at the Women’s March on Washington
*Nasty Women: Grendel’s Mother and Wealhtheow as Equal Depictions of Femininity, published in Undergraduate Journal of Contemporary Issues & Media; Undergraduate Medieval Conference of Longwood; Sigma Tau Delta Review

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*Enhancing the anti-tumor efficacy of chimeric antigen receptor-expressing T cells with naturally occurring plant stilbenes, presented at American Society for Biochemistry and Molecular Biology

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Jamesha Watson, (Faculty Sponsor, Jake Milne)
Students who completed a Senior Honors Research Project at Longwood University

Mary Zell Galen, (Faculty Sponsors, David Coles, Jessi Znosko, James Munson, James Jordan)
*Professionalism: The Effects of FIRST Robotics Folklore and Culture on the STEM Community; Response to the Great Vermont Flood of 1927; Presented at Virginia Collegiate Honors Council's 2016 Conference; published in INCITE; Senior Honors Research; Summer Undergraduate Research and Inquiry
*Pitt's Gold and Paper Money: Reactions to the Bullionist Controversy, 1797-1821

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*Disconnecting the Estrogen Receptor Binding Properties and Antimicrobial Properties of Parabens through 3,5-Substitution, presented at the Virginia Section American Chemical Society Local Meeting 2016- 2018; Senior Honors Research 2018; PRISM 2016; published in Journal of Medicinal Chemistry 2018; presented at American Chemical Society National Meeting 2018

Katie Kline, (Faculty Sponsor, David Magill)
*Joyless Adaptations: Gulliver's Travels and the Limits of Editions for Children, Senior Honors Research

Zachary Morgan, (Faculty Sponsor, Andrew Yeagley)
*Investigating the Binding Energies of Paraben and Paraben Derivatives with the Estrogen Receptor, Senior Honors Research

Jessica Smith, (Faculty Sponsor, Timothy Coffey)
*Position and Time: Examination of LESS Scores for Division 1 Basketball Players, Senior Honors Research

Kate Spradlin, (Faculty Sponsor, Frank Bacon)
*Senior Honors Research
Published in INCITE, the undergraduate research journal for the Cook-Cole College of Arts and Sciences at Longwood University

Jacob Carney, (Faculty Sponsor, Andrew Yeagley)
*Synthesis of 3,5-substituted parabens and their antimicrobial properties, published in INCITE, first place award winner - Natural Sciences, Spring 2019

Megan Garrett, (Faculty Sponsor, JoEllen Pederson)
*Watering Down Accessibility: The Issue with Public Access to Alaska’s Federal Waterways, INCITE first place award winner - Environmental Sciences Category

Laura Gottschalk (Faculty Advisor, Chris Register)
*Graphic design, published in INCITE

Joseph Hyman, (Faculty Sponsor, Yulia Uryadova)
*Chernobyl: Putting Perestroika and Glasnost to the Test, presented at 2019 VCU Student Research Conference; INCITE first place award winner – Humanities Category

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Summer Meinhard
*Papermaking, published in INCITE

Charlotte Potts, (Faculty Sponsor, Elif Guler)
*The Rhetorical Construction of eSports’ Legitimacy, published in INCITE

Jenny Raven
*Jewelry and metal crafting, published in INCITE

Chris Siefke, (Faculty Sponsor, Scott Cole)
*Why did the United Kingdom Vote to Leave the European Union? Published in INCITE

Glenn Spencer, (Faculty Sponsor, Sean Barry)
*Satire of the State through Discourse: Applying Althusser and Bakhtin to William Dean Howells ‘Editha’, INCITE third place award winner: Humanities Category
Ryan White, (Faculty Sponsor, Andrew Yeagley)
*Synthesis of 3,5-substituted parabens and their antimicrobial properties, INCITE first place award winner - Natural Sciences