

THANK YOU

Piedmont University would like to thank the following faculty, staff, and students who have helped make Symposium a success.

Dr. Julia Schmitz
Michelle Irvin
Prof. Sandra Maughon
Dr. Elaine Bailey
Dr. Abbey Dondanville
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Dr. Susanna Warnock
Dr. Kim Crawford
Dr. Windy Charles
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Michelle Leach
Jenna Wendel
Zack Hoopaugh
Jim Peeples
Michael Mack
Morgan Williams
Zac Moore
Cat Simpson-Wiles
Mitzi Heck
Maintenance
I.T. Department

We also like to thank the 120 faculty, staff, and students who are volunteering throughout the day. Without them, this day would not be possible!

We gratefully appreciate the leadership and support from:

Dr. James F. Mellichamp
Dr. Dan Silber
Dr. Kenyon Gannon



WEDNESDAY, APRIL 6

9:00^{AM} – 5:00^{PM}

For more information, visit
piedmont.edu/symposium

PIEDMONT
UNIVERSITY

PIEDMONT SYMPOSIUM


APRIL 6, 2022

| | Session 1 9:00-10:00 | Session 2 10:10-11:10 | Session 3 11:20-12:20 | Session 4 12:30-1:30 | Session 5 1:40-2:40 | Session 6 2:50-3:50 | Session 7 4:00-5:00 |
|----------------------------|---|--|--|---|---|---|---|
| Screening Room Swanson 128 | Implementing Backwards Design Deana Boling | Bounding the (2,2)th Chow-Waring Rank of Quartic Polynomials Sean VanMeter | Ellician Computer Science Internship Jeremy Cooper | Sometimes the Sky is Green: The Art Education Experience Annalyn Kendall, Jordan Adams, Jasmine Alvarado, Megan Moon, Rebecca Murphy | The Dystopian Reality of the Ukraine War Through the Media Sarah Bittner, Jordan Burch, Conner Creedon, Jaela Dodd, Emma Marti, Anyatasia Olson, Hannah Palmer, Caleb Rogers | Piedmont Productions Caleb Rogers, Megan Schaefer, Tyler Goins, Anastasia Olson, Rowan Edmonds, Jordan Hicks, Aaron Palmer, Connor Creedon, Jessica Sconyers | Empathy Takes the Stage Lexie Partain |
| | Famous Women in Mathematics Rebecca Bailey, Micaela Quesada | Concavity of Tangles Peyton Tillery | The Making of a Web-Based Chatbot Laura Dyer | Ray Spillenger: the Last Action Painter Rebecca Murphy | | | Exploring the Theatrical Unions: Are They Right for Me? Dane Wilson, Carson Letner, Ian Williams |
| | Homework Debate: Is It Effective? Kinsley Smith, Miranda Caudell | Truncated Square Tangles Christopher Bale | Sound Synth Program Logan Bramlett | | | | |
| | Top 10 Tech Picks for Teachers Tyler Hill | | | | | | |
| Stewart Auditorium | Mononucleosis and Gangrene Gabriella Hayes, Breanna Nine | Ringworm, Shingles, and Malaria Hannah Smith, Jenna Broach, Taylor Buckner | Chicken Pox and Chlamydia Brady McGuire, Trey Huguley | Retention rates within animal-based rescues and rehabilitations Sara Massey | Learning Without Tests: The Student's Experience Megan Bone, Tiffany Long, Odalys Rendon, Amanda Weinhart, Carson Weiner, Emily Wiley | Flexible Seating, Why Samantha Duvall | Can middle school Science students' engagement be increased through creative technological research project-based learning allowing for increased cross-curricular activities? Amanda Sutton, Tanya Schwab |
| | Streptococcal Disease and Necrosis Fasciitis Marion Sloyan, Jack Traylor | Medical microbiology diseases- gastroenteritis and amoebic dysentery Josey George, Addie Bolton | Coronavirus Avery McAllister | Legislation and Crime and Poverty Christopher Burnett | Braving the Storm: Storytelling Through Natural Themes in Music Julia DeMello | Homework in Math Class? Shauna Widding | Comparing Classroom Management Practices in the Theater Elizabeth Carver, Cole Korch, Haley Patterson |
| | Pneumonia bacterial infection and Swine flu Ashley Pugh, Mati Hill | Rubella & Tetanus Alaina McDonald, Destiny Deetz | Parkinson's Disease Katherine Stigall, Katrina Jernigan, Gimena Gutierrez | Carving the Via Media: The English Reformation and its Agents Isabel Jones | The effects of technology on education post Covid-19 pandemic. William Underwood | Effects of Parental Involvement on Education Angela Allen | Sensory Breaks in the Classroom Martina Maloch |
| | Ricin Poisoning Samantha Seymour | If//How Social Class Affects Life Expectancy. Summer Galloway | Alzheimer's Disease Ashley Simmons, Lashana Johnson, Iman Ollie | An Examination of the Polarization of the Supreme Court Patrick Dunlap | The Conference Experience for Undergraduate Students Cole Cline | The effects of technology on education post Covid-19 pandemic. William Underwood | How Do We Reach Them? Tackling the Difficulties of Inclusion and Heterogeneity in Classrooms. Dustin Waters |
| | Examining the Effects of Separation on Incarcerated Mothers and their Children Rachel Humble | Gout Jon Brown, Ross Coppedge, Taylor Hermann | | | | | Does technology actually benefit students? Margaret Greenwald |
| | | Gangrene Josy Hill, Brynne Gillilan, Emmaleigh Harris, Madalyn Martin | | | | | |

EcoCareers Conference

(Login using the QR Code or come to Stewart 305)

Registration is FREE!



11:00-11:50 - Dr. Karen Weaver, President and CEO of Karen Williams Weaver Foundation and former mayor of Flint, Michigan

11:50-12:30 - Explore green careers in the Health and Wellness sector with a panel of professionals from a variety of backgrounds and employers.

1:00-1:30 - Interview with an artist

1:30-2:30 - Introduction to career planning for college students.

2:30-3:10 - Explore several Environmental Justice career paths with a panel of professionals.

| 12:30-1:30 Swanson Computer Lab | | 12:30-1:30 Swanson Bridge | | Radio |
|---|---|---|---|-------|
| Rootin' Tootin' Cowboys Game Ronnie Passmore | Magic 8 Ball Justin Deas | Aqueous Ion Concentrations in Groundwater from a Wetland Environment Imani Vincent | Live radio broadcast on 298.7FM (11:00-1:00) Caleb Rogers, Walker Brown, Destiny Coggins, Leo Galarza, Sophie Haines, Chad Hall, Kayla Lathon, Luke Micham, Jessica Sconyers, MacLean Tadlock | |
| Sound Synth Program Logan Bramlett | The Making of a Web-Based Chatbot Laura Dyer | The effects of Beaver Dams on E. coli in the Water Katie Gailey | People of Piedmont - Symposium 2022 (1:00-2:00) Noah Aaron, Conner Creedon, Jaela Dodson, Chris Donsereaux, Andy Klein, Matt Kodrowski, Evan Laporta, Aaron Palmer, Conner Rogers, Michael Thomason, James Whitmer, Brett Loftis | |
| CSCI-1302 Final Project Jonathan Graver | Object Oriented Video Game Presentation Anthony Newton | | | |
| Ellician Computer Science Internship Jeremy Cooper | | | | |

| | Session 1 9:00-10:00 | Session 2 10:10-11:10 | Session 3 11:20-12:20 | Session 4 12:30-1:30 | Session 5 1:40-2:40 | Session 6 2:50-3:50 | Session 7 4:00-5:00 | |
|-------------------------|---|--|---|---|--|---|--|--|
| Commons Conference Room | In Natural Childbirth, Do Alternative Birthing Positions Decrease the Occurrence of Delivery Complications Allison Cole | Mental Health in Nursing Students Brenda Diaz | IPV Alberto Perez | The Pay Discrepancy Between Men's and Women's Sports in the United States Connor Moranos, Phillip Watters, Logan Cranford, Livia Skinner | Amazon Case Study Owen Helgesen, Carter Ballstadt, Mason Graves | Piedmont Nature Trail Leah Higginbotham, Michael Mack, Heidi Lopez, Conner Moranos | Of the People: The Role of American Folk Music in Social Change Matthew Bramlett | |
| | In U.S. population susceptible COVID-19, do minorities have higher mortality or morbidity rates compared to non-minorities? Marcus Buffinton | The Impact of Inadequate Sleep on Mental Health Kyyah Simon | Is Using a Distraction Technique More Effective Than Not Using a Distraction Technique When Giving Vaccination to Pediatric Patients for Pain Response? Yesseli Nunez | How can media coverage impact sports performance? Katherine Fernandez, Alfred Robers, Grant Olson, Michael Porcelli | Redo of Bookstore clothes Elizabeth Hamilton, LeeAnn Lawrence, James Cash, Matthew Loftin | Refrigerator Space Saver Mallory O'Brien, Adriana Martin, Dylan Lindsey | | |
| | In Pregnant Women Diagnosed with COVID-19, What is the Effects of COVID-19 Diagnosis on Fetal Outcomes? Tristan Rowell | How Does Job Satisfaction Impact Nurse Retainment? Stephanie Stone | Does Medical Intervention During Birth Cause Postpartum Complications? Lindsey Irvin | Do injuries to sports stars affect ticket sales? Kelton Kieschnick, Blake Silvey, Ryan Hanson, Mario Perezassar | Marketing Plan: The Rechargeable Rangefinder Eric Penland, Rachel Marsh, Connor Hixson, John Foster | Marketing Proposal for Immersive Movie Theater Susan Chastain, Jentry Brown, James Wesley Parks | Alarm Watch Tyler Nelson, Taylor Pease, Zeke Swartz, Cole Ellis | |
| | Adverse Child Health & Cognitive Outcomes Related to Postpartum Depression Monica Suarez | Psychological impact on nurses Brooke Cassidy | Internet Resources for Parents Whose Child has a Cleft Lip/Palate Jaycie Ponce | How has the Transfer Portal affected college athletics? Christian Puckett, Peyton Irvin, Eric Penland, Hudson Troxel | New and Improved Lacrosse Chest Protectors John Matriona, Carson Vikos, Macklin Flannigan | | | |
| Daniel 312 | How Does Lean Meat Aid in Decreasing the Time of DOMS in Comparison to Non-Lean Meat Andrew Cox | The Use of Caffeine and its Effect on Soccer Skill Performance Madison Comer | The Effect of Static and Dynamic Stretching on Power Production Patrick Dempsey | "The Student in the Back Row has a Question": Trillium Editors in Conversation Timothy Nguyen, Lakhiya Franklin, Gary Harrison, Sarah Brooks, Elizabeth Carter, Samantha Carvallo, Jason Castillo, Madeline Wilnot, Jessell Witter, Jaydn DeWald, Joshua McGowen | Mental Health and Drug Addiction in Recovering Addicts Emily Owen | Injury Prevalence and its Effects on MLB Team Performance Heath Waldrop | Everything Sees, Everything Speaks: A Tantric Approach to Poetry Rebecca Wood | |
| | Differences in Anaerobic Capacity after high GI and low GI pre-activity food consumption Rebecca Balon | Caffeine's Effect on Raising Steady State Heart Rate Brianna King | Power in Performance Jonathan Boan | Seeking Treatment with a History of Low Back Pain and the Mechanics of a Golf Drive Taylor Brown | The Effects of Workload on Mental Health of College Students: Anxiety and Depression Factors Knox Joanna | Flexibility Differences in College Basketball Athletes Based on Gender and Position Dalton Meeler | Silence as Bakhtinian Utterance and Dialogical Heteroglossia in The French Lieutenant's Woman Gary Harrison | |
| | Nutrition Knowledge Josey George | Environmental Conditions Affecting Performance Sloan Fletcher | Seeking Treatment with a History of Low Back Pain and the Mechanics of a Golf Drive Taylor Brown | How To Read Poetry Cole Cline, Rebecca Wood | Study of Factors Influencing Burnout in Collegiate Athletes Addie Bolton | The differences in physical ability components in d3 college lacrosse positions William French | ACL Injuries in Collegiate Athletes Gabriella Lotter | |
| | BCAA Pre-workout against DOMS symptoms Katy Brown | Certified Nursing Assistant Burnout: An Exploration of Burnout and Adverse Associations Danielle DeVerter | Strength training program design and performance outcomes Jared Brock | | | | | |
| Daniel 310 | Skill Performance in Nursing Practice and How it Effects Patient Outcomes Peyton Dorsey | How can teachers infuse literacy to help students in a History classroom? Christian Crider | Will Mothers Who Choose to Exclusively Breastfeed Experience Longer Duration of Exclusive Breastfeeding When Receiving Support from Postpartum Hospital Staff? Sarah Stowe | Complementary and Alternative Medicine Practices with Cancer Treatment Laura Goolsby | Coaches and Athletic Trainers Compliance of Heat-Illness Guidelines Anteca Hill | Improper Lifting Techniques & History of Injury Among Novice Powerlifters Sarah Smith | The Monstrous in Medieval Literature Janiah Rakestraw, Darius Smith, Sammyjo Henderson | |
| | In Inpatient Settings, Do Staffing Ratios Impact the Frequency of Patient Falls? Clara Ortega | Instructional Relevance: Why Math Matters to Everyone Austin Bond, Morgan Calhoun, Shaylen Sutton, Laken Stiles | The Effects of Kangaroo Care on Breastfeeding and Health in Newborns Katelyn Perry | What is the Effect of a Global Pandemic on Psychological Disorders in Healthcare Providers? Priya Desai | Mirror Therapy in Improving the Performance in Non-Dominant Hand Function Reagan Hanson | The Effects of Cryotherapy on Balance Perryn Morgan | Science Fiction as a Mode of Discovery Edith Gonzales, Haylee Collins, Madisen Hewell, Zane Smith | |
| | Language Barriers in Healthcare Areli Albarran | Effectiveness of Team Care Approach Vs Primary Care Approach in Acute Care Settings Nancy Virgen-Ortiz | Methods of Increasing Vaginal Births with a Breech Presentation Margaret Pfiel | Is COVID-19 transmission reduced with N-95 respirators in comparison to surgical mask within healthcare professionals? Christopher Burke | Heart Rate and Concussion Signs Andrew Gooch | Correlation between Anthropometric Measurements of the lower leg and vertical jump performance Jeremy Halbrook | Analysts of VO2MAX and sport efficiency Maxwell Miller | |
| | | | Distraction Techniques vs. Positioning of Children during Clinical Procedures Abigail Arrington | The Importance of Sleep In College and for Nurses Caitlyn Worthy | Do Patients Admitted to inpatient care, recover quicker with more efficient outcomes, when family visitation is allowed at bedside? Laticia Johnson | | | |

Session 1: 9:00-10:30

| Student | Title | Location | Sponsor |
|--------------------|--|----------|------------------|
| Klaire Varney | Appearances Effect on Social Perception | A1.1 | Cindy Vance |
| Emma Marti | What is the Role of Social Media in the Rise of Conspiracy Theories in Popular Culture? | A2.1 | Melissa Tingle |
| Anna Watson | TikTok Product Trends: Upsetting the Paid Advertising Market | A3.1 | Melissa Tingle |
| John Dills | Broadcast Journalism, and Social Media's Effects on Rural Populationss | A4.1 | Melissa Tingle |
| Lizzie Nile | The Pandemic and the Memories of People | A5.1 | Cindy Vance |
| Odalys Rendon | The Effects of Social Media on Self-Esteem | A6.1 | Cindy Vance |
| Cole Cline | The Memory Abilities of Crows | A7.1 | Mike Friedline |
| Cooper Kework | Comparison of Infection Prevalence and Intensity by the Trematode <i>Metagonimoides oregonensis</i> between Two Species of Desmognathan Salamander | B1.1 | Carlos Camp |
| Noah Irwin | Relationship between Size and Foraging in Dusky Salamanders (<i>Genus Desmognathus</i>) | B2.1 | Carlos Camp |
| Taylor Hopkins | Test of Predator Avoidance by Larvae of the Blue Ridge Two-lined Salamander (<i>Eurycea wilderae</i>) in Appalachian Streams | B3.1 | Carlos Camp |
| Kaitlyn Hemperly | Prevalence and intensity of the trematode <i>Metagonimoides oregonensis</i> in two species of brook salamanders, Genus <i>Eurycea</i> | B4.1 | Jessica Wooten |
| Allyson Ward | Investigation of a possible new lineage of the Allegheny Mountain Dusky Salamander, <i>Desmognathus ochrophaeus</i> | B5.1 | Jessica Wooten |
| Kayla Maddox | Phylogenetics of <i>Desmognathus ochrophaeus</i> , the Allegheny Mountain Dusky Salamander, in West Virginia | B6.1 | Jessica Wooten |
| Laura Dyer | Climate Change is Real | B7.1 | Shahryar Heydari |
| Ana Lopez Prado | Interactive AI Dashboard: U.S. Wildfires and Earthquakes between 1992-2018 | B8.1 | Shahryar Heydari |
| Carson Weiner | Voter Perception of Politicians: Impact of Party Affiliation | C1.1 | Cindy Vance |
| Carson Weiner | Voter Characterization of Politicians Based on Gender | C2.1 | Cindy Vance |
| Megan Bone | Will Inciting an Empathetic Response Increase Accuracy in Heartrate Recall Task | C3.1 | Cindy Vance |
| Megan Bone | Effects of Price on Alcohol Simulation Results In-Person and Online | C4.1 | Mike Friedline |
| Aria Solano | Observing Athletes Heart Rate in Response to Athletic Injury: How Anxious do Athletes Get? | C5.1 | Cindy Vance |
| Emily Wiley | Power of Thoughts on Athletic Success | C6.1 | Cindy Vance |
| Perryn Morgan | Diabetes | C7.1 | Erika McKinney |
| Madison Gallarelli | Cell Phone Addiction Among College Students: How Dependent Are They? | C8.1 | Mike Friedline |

Session 2: 11:00-12:30

| Student | Title | Location | Sponsor |
|--|--|----------|----------------|
| Sarah Smith | An Overview of Gastrointestinal Conditions | A1.2 | Erika McKinney |
| Jeremy Halbrook | Pain | A2.2 | Erika McKinney |
| Grace Beasley | TB aka Tuberculosis | A3.2 | Julia Schmitz |
| Grant Cobb | Anthrax | A4.2 | Julia Schmitz |
| Latosha Gresham | Bubonic Plague | A5.2 | Julia Schmitz |
| Abbie Newbern and Railey Richardson | Acne | A6.2 | Julia Schmitz |
| Katie Gailey | The effects of beaver dams on <i>E. coli</i> in the water | A7.2 | Julia Schmitz |
| Angel McDaniel | Chemiluminescence: Luminol and Its Reactions | A8.2 | Areatha Ketch |
| Domonique Hill and Winter Goble | Diversity of Spiders in Urban and Green Points | B1.2 | Rebecca Godwin |
| Domonique Hill, Kendall Jenkins, Shay Bataille, Winter Goble | Crossing Fruit Flies with the YMW and the Eyeless Mutation | B2.2 | Jessica Wooten |
| Emily Rankin | Inheritance Pattern of Wing Shape in <i>Drosophila Melanogaster</i> | B3.2 | Jessica Wooten |
| Emily Rankin | Synthesis of a Penicillin Derivative | B4.2 | Elaine Bailey |
| Abigail Iacobucci | A Comparison of Microplastic Concentrations in Freashwater Columns | B5.2 | Deb Dooley |
| Reagan Hart, Kaity Hemperly, Jenna Ash | Inheritance Patterns of the genes for Bar Eye and Eyeless in the fruit fly, <i>Drosophila melanogaster</i> | B6.2 | Jessica Wooten |
| Veronica Renteria | Use of antipsychotics (Seroquel, Zyprexa, and Abilify,) For Treatment of Dementia | B7.2 | Sean Carrigan |

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| Pape Ndiaye | Patterns of Biotic and Abiotic Contamination within a Small Watershed in Northeast Georgia | B8.2 | Tim Menzel |
| Kelly Anderson, Katlyn Crampton, Mariajose Montoya, Donald Stoltz, Breanna Taylor, Ty'kiria Wallington | Educational Resources created by BIOL 1101 students | C1.2 | Julia Schmitz |
| Michael Mack, Kristy Lightsey, Taylor Hopkins | The Diversity and Leadership of the SGA | C2.2 | Zac Moore |
| Nahomi Soloranzo, Michael Mack, Caden Nelms, Silas Sandles, Kayla Maddox | Diversity As A Verb, Not A Noun | C3.2 | Zac Moore |
| Susan Chastain, Sydney Malek | Cost Accounting Case Study - 1201Cupcakes | C4.2 | Savannah Brookshire |
| Angela Lee | Companion Planting | C5.2 | Bill Nye |
| Hailey Covarrubias | The Effects of <i>Psidium Guajava</i> on pre-existing conditions of Atherosclerosis | C6.2 | Bill Nye |
| Molly Butler | <i>C. Fluminea</i> as an Indicator Species for Aluminum Toxicity | C7.2 | Bill Nye |
| Abby Dini | Food Preferences for the Brown Planarian Flatworm | C8.2 | Bill Nye |

Session 3: 2:00-3:30

| Student | Title | Location | Sponsor |
|------------------|---|----------|----------------|
| Winter Herndon | Teaching Methods for the Success of Students with Autism | A1.3 | Perry Rettig |
| Amanda Nix | Internship Reflection Presentation | A2.3 | Perry Rettig |
| Riley Graham | Are digital school days important, would school systems benefit with them in the regular school schedule? | A3.3 | Perry Rettig |
| Victoria Drake | The way sleep affects students. | A4.3 | Perry Rettig |
| Michelle Jackson | What's Behind the Mask? | A5.3 | Kelly Land |
| Leslie O'Neal | Effective Classroom Strategies to Support ELL Students | A6.3 | Lillian Reeves |
| Kate Holbrook | Positive ADHD behavioral management in the classroom | A7.3 | Bill Nye |
| Madison Campbell | The Gaps Left by Covid in Education. | A8.3 | Tad MacMillan |
| Josy Hill | Synthesis of a Penicillin Derivative | B1.3 | Elaine Bailey |
| Jason Vaughan | Notch Signaling and Its' Crucial Function | B2.3 | Sean Carrigan |
| Katelyn Dove | Effects of water purification and treatment on humans and environmental health. | B3.3 | Sean Carrigan |
| Duke Wodetzki | The effects of different mouthwashes on micro bacteria in the oral cavity | B4.3 | Elaine Bailey |
| Gabrielle Rufus | Comparison of blood detection methods and materials used in forensics | B5.3 | Sean Carrigan |
| Addison Bowen | The Knowledge from Insects | B6.3 | Bruce Willis |
| Katelyn Smith | The Effects of Cu+2 on Alcohol Dehydrogenase at a pH of 9.00 | B7.3 | Elaine Bailey |
| Madison Cassidy | Disordered Eating | C1.3 | Erika McKinney |
| Catherine Mote | Relative Energy Deficiency in Sport (RED-S): An Overview | C2.3 | Erika McKinney |
| Luis Saldierna | The Benefits of Video Games in Education | C3.3 | Mark Evans |
| Emma Williams | Social Justice in CMSD | C4.3 | Monica Harn |
| Peyton Tillery | The Mean of Three-point Shots Made by Piedmont Basketball | C5.3 | Doug Torrance |
| Jade Edwards | Popular Car Colors | C6.3 | Doug Torrance |
| Nathan Boyce | Mathematical Statistics in Major League Baseball | C7.3 | Doug Torrance |
| Christopher Bale | Popular professional sports on campus | C8.3 | Doug Torrance |