### Welcome to the Higher Education Council of Berks County (HECBC Conference)

Dear Conference Attendees,

It is my pleasure to welcome you to the HECBC Conference on behalf of Reading Area Community College. We are excited to showcase the incredible work of our students. Congratulations to all students participating and help me recognize their dedication, creativity, and passion for learning.

I would also like to extend my heartfelt thanks to the faculty and staff who have supported and guided our students throughout their preparation for this conference. Their mentorship and commitment to student success have been vital in making this event possible.

As you engage with the student presentations today, I encourage you to appreciate the hard work and collaboration that have gone into each one. This conference is a wonderful reflection of the power of education, teamwork, and the bright future ahead for the students.

Thank you for being part of this exciting event. Enjoy the conference!

All the best,

Susan D. Looney, J.D., Ed.D. President



# **Keynote Speaker**

## Amanda Funk Founding Executive Director Widoktadwen Center for Native Knowledge RACC and Kutztown Alumna

Amanda Funk is the founding executive director of the Widoktadwen Center for Native Knowledge, a 501(c (3 nonprofit whose mission is to promote the visibility of Native Americans in Berks County and beyond through community education, leadership, and activism. She is an enrolled member of the Citizen Potawatomi Nation, raised and educated in Berks County. Amanda earned

both her Master's and Bachelor's degrees in English from Kutztown University with a minor in Professional Writing, and her Associate's degree in Communications from Reading Area Community College. She has taught at RACC and Alvernia University and tutored writing at both, with a special focus in adult education. Amanda is a trained land steward and certified pollinator steward active in urban greening and food sovereignty initiatives. She currently substitute teaches in the Reading School District.

Amanda is a founding member of Keep Reading Beautiful and currently serves as a trustee of the Berks History Center, chairing the DEI committee. Amanda has previously served on the Cabinet of Emerging Leaders United through the United Way of Berks County, the Board of Directors of Family Promise of Berks County, and the Board of Directors of the Association of Fundraising Professionals Berks Regional Chapter, where she also chaired the Marketing & Communications Committee for four years.

## HECBC Undergraduate Research and Creative Activities Conference Reading Area Community College

#### Saturday, April 26, 2025

8:15 a.m. - 9:00 a.m. Registration

8:45 a.m. – 9:20 a.m. Welcome and Keynote Address (Miller Center Theater)

Kenneth Dearstyne, Senior Vice President of Financial and Administrative Services

Amanda Funk, Executive Director, Widoktadwen Center for Native Knowledge

9:30 a.m. - 10:45 a.m. Session 1

Posters (Schmidt Technology Center)

Papers (Berks Hall)

Art (Miller Center lobby)

Theater (Miller Center Theater)

11:00 a.m.-12:15 p.m. Session 2

Posters (Schmidt Technology Center)

Papers (Berks Hall)

Art (Miller Center lobby)

Theater (Miller Center Theater)

#### 12:30 p.m. -1:15 p.m. Lunch (Schmidt Technology Center)

Special performance

1:30 p.m. -2:15 p.m. Session 3

Posters (Schmidt Technology Center)

Papers (Berks Hall)

2:30 p.m. – 3:00 p.m. Dessert and closing ceremony (Schmidt Technology Center)

Special thanks to the following for sponsoring/donating to the raffle: RACC Federation AFT Local 3173 Anthony DeMarco Reading Fightin Phils

# **Passport to Learning**

This year, we're offering a fun activity for students throughout the day to encourage you to attend as many sessions as possible. Students received a passport at registration that they can take with them throughout the day. As you engage with the presenters and moderators, get your passport stamped by the moderator in each session.

Fill out your entire passport and bring it to the Schmidt Technology Center at the end of the day (2:30pm) to be entered into a raffle for some great prizes, including an iPad!

Don't forget to get your passport stamped on your way out of the Keynote Address!



## **Presentation Abstracts**

Scan the QR codes below to read the abstracts for all of today's presentations

**Paper Abstracts** 



Art Abstracts



**Poster Abstracts** 



## <u>Session 1 (9:30a.m. – 10:45a.m.)</u>

## Theater Performances: Miller Center Theater Moderator: Prof. Ellen "Dash" Walter

"No One is Alone" from Into the Woods by Stephen Sondheim and "Sweet Time" from Raisin by Judd Woldin and Robert Brittan Kimberly Doyle, RACC Faculty mentor and accompanist: Prof. Ellen Walter

"Emotional Baggage" by Nina Shengold Samantha Pineiro (director/actor), Alekzander Rodriguez, Alexander Morales, Hannah Noah, Jaia Rahn, Sifa Kamau, and Nayla Wansley, RACC Faculty mentor: Prof. Ellen Walter

Excerpt: "The Thing About Peaking in High School"

Kara Armstrong, Kutztown Faculty mentor: Dr. Todd Dodson

"Monologue by Mary" in The Melville Boys by Norm Foster Ileana Ramirez, RACC Faculty mentor: Prof. Ellen Walter "Faith" by Eric Lane Timothy Spatz (director), Samantha Pimerio, and Alexzander Morales, RACC Faculty mentor: Prof. Ellen Walter

Excerpt: "Jack's Monologue" from The Importance of Being Earnest by Oscar Wilde Jayla Porcher, RACC Faculty mentor: Prof. Ellen Walter

Excerpt: "Catherine's Monologue" from Snow White Gets Her Say by Chris Wind Madison Hill, RACC Faculty mentor: Prof. Ellen Walter

Excerpt: "Romeo's Monologue Act 3, Scene 3" from Romeo & Juliet by William Shakespeare Edwin Vargas, RACC Faculty mentor: Prof. Ellen Walter

## Art Exhibit: Miller Center Lobby Moderators: Prof. Anthony Vega and Dr. Chris Costello

"Field of Florals," "Blushing Bloom," "Orange Citrus" Madelyn Rismiller, RACC Faculty mentor: Prof. Christina Pinkerton

"David Bowie," "Biophelia," "BGG Guitarist and Singer" Marli Herner, RACC Faculty mentor: Prof. Christina Pinkerton

"Environmental Identity" Alyson Witman, Kutztown Faculty mentor: Prof. Michael Covello

"Hibiscus Flower" Skyden Thrower, RACC Faculty mentor: Prof. Christina Pinkerton "Printstallation: From Abstraction to Environment" Madison Jackson, Kutztown Faculty mentor: Dr. Andrew Vogel

"GirlPearl\_v2.jpeg" Noelle Cruz, Albright Faculty mentor: Prof. Kristen Woodward

"Wild Palette: Harnessing Raw Earth Pigment for Sustainable Artistic Expression" Ashley Fry, Kutztown Faculty mentor: Prof. Michael Covello

"Krähen werden" Taylor Pengelly, Kutztown Faculty mentor: Dr. Lynn Kutch

## **Paper Session 1**

#### Political Science: Berks Hall Room 405 Moderator: Dan Glass. Student Success Navigator

"The Local Renaissance" Alex Darlington, Kutztown Faculty mentor: Dr. Paula Holoviak

"Why are many Developed Nations in Demographic Decline?" Caleb Gehman, RACC Faculty mentor: Prof. David Leight

"How Inconspicuous and Insufficient Policies Affect Daily Lives" Jada Maye, Kutztown Faculty mentor: Dr. Jennifer Jacobson

"European Immigration and the Welfare State" Sarah Snow, Kutztown Faculty mentor: Dr. Steve Lem

#### Creative Writing 1: Berks Hall Room 414 Moderator: Prof. Joey Flamm-Costello

"The Path of Severance: A Fictional Socio-Political Commentary" Jaden Morrow, RACC Faculty mentor: Prof. Joey Flamm-Costello

"My Old Dog and I" Isabella Miller, RACC Faculty mentor: Prof. Stephanie Andersen

"The Complexity of Love: Exploring the Internal and External Factors that Affected My Understanding of Romance" Rachel Etim, Alvernia Faculty mentor: Dr. Lena Ziegler

#### Media: Berks Hall Room 503 Moderator: Dr. Diane Conrad

"Expanding Awareness of Student-Run Literary Journals" Rebekah Smith, RACC Faculty mentor: Dr. Bahar Diken

"The Impact of Social Media on Adolescent Self-Esteem" Sage Wasser, RACC

Faculty mentor: Dr. Lucia Torcia-Thompson

"Getting the Click: How Thumbnails Stand Out" Anthony Chiango, Kutztown Faculty mentor: Dr. Kibum Youn

## Poster Session 1: Schmidt Training and Technology Center lobby Moderators: Prof. Carol Bean-Ritter, Dan Glass, Kathleen DePaul, R.N.

"Hiker Stilts" Kevin Ramirez-Olivares, Alex Contros, Miral Ibrahim, and Scott Ziegler, Penn State Berks

Faculty mentor: Dr. Rungun Nathan

"Habitat Preference Maps Reveal the Effects of Human Presence on Mammals at Hawk Mountain Sanctuary" Morgan Herb, Kutztown

Faculty mentor: Dr. Andrew Mashintonio

"The Dichotomy and Psychology of In-Person vs. Virtual Jobs" Jaden Barr, Kutztown

Faculty mentor: Dr. Thomas Robinson

"Greenwashing in Oil Companies and the Role of Corporate Social Responsibility (CSR)" Ruhaan Pius, Penn State Berks Faculty mentor: Dr. Ada Leung

"Inflation and Food Access in Berks County" Jeilyn Tineo, Penn State Berks Faculty mentor: Dr. Ada Leung

"Scrolling Minds: Investigating the Mental Health Effects of Social Media on Young Adults"

Viktoriia Vozharenko, Penn State Berks Faculty mentor: Dr. Ada Leung

"The Search for Miniature Black Holes" Ilaria Catania, Albright Faculty mentor: Dr. Brian Buerke

"Production of Biofuel from Common Pennsylvania Algae" Lily McDonough, Alvernia Faculty mentor: Dr. Joseph Kremer "Greenwashing White Gold: Lithium's False Dilemma and the Race to the Future" Amanda Celentano, Kutztown Faculty mentor: Dr. Megan O'Byrne

"The Development of a Cybersecurity System Through AI and Software Technologies" Andy-Jess Damord, Alvernia Faculty mentor: Dr. Erik Robuck

"Pitch Count and Pitch Velocity Effects on Ulnar Collateral Ligament (UCL Injuries in Baseball Pitchers" Michael Ramondo, Alvernia Faculty mentor: Dr. Thomas Franek

"Previous Injuries Increasing the Risk of Sustaining an ACL Tear in Female Athletes: Critically Appraised Topic" Jacob Buser, Alvernia Faculty mentor: Dr. Ashley Gray

"The Meal Manager" Andre Ballard, Jr., Shawn Clark, Darik Tannis-Harriet, and Braylon Kuhn, Penn State Berks Faculty mentor: Dr. Terry Speicher

"A Design of Experiments (DOE Approach to Evaluate the Tensile Strength of a Novel 3D Printing Material" Kira Corrie, Penn State Berks

Faculty mentor: Dr. Marietta Scanlon

"The Impact of Education on Psychological Resiliency" Jonas Smith, RACC Faculty mentor: Prof. Carol Bean-Ritter "Spirituality's Influence on Psychological Health"

Bree Kantner, RACC Faculty mentor: Prof. Carol Bean-Ritter

"The New Luxury: How Streetwear and High-End Brands Leverage Exclusivity and Adapt to New Consumer Culture"

> Ciarra Thompson. Albright Faculty mentor: Prof. Kyla Freeman

"Chromatic Influence: A Creative Exploration of the Color Perceptions of Gen Z Women and Men"

> Hannah Sierra, Albright Faculty mentor: Prof. Kyla Freeman

"Treating Mental and Physical Impairment Concurrently to Reduce Stigma and Improve Engagement"

> Marlena Okurowski, Colin Stile, Maddie Downes, and Keito Shaw, Alvernia Faculty mentor: Dr. Catherine Emenheiser

"Molecular Dynamics Investigation of Small Hydrophobe Aggregation in Water" Alyssa Shaub, Alvernia Faculty mentor: Dr. Brad Bauer

"Smart-Skim"

Kayln Hess, Megan Goodhart, Kohlby Rollman, and Nicholas Rutkowski, Penn State Berks Faculty mentor: Dr. Rungun Nathan

"Exploring Factors that Affect Care Provider Participation and Influence Pediatric Therapy Success"

> Wilma Taveras, Reilly Enos, Mckylie Boreman, and Caitlin McCrone, Alvernia Faculty mentor: Dr. Catherine Emenheiser

"Study of Baseline Soil Chemistry at Kutztown University's Regenerative Organic Agriculture Living Laboratory" Nicholas Rivera and Gillian Samony, Kutztown

Faculty mentor: Dr. Julie Palkendo

"Strands of Evidence: Using Hair Fiber Analysis to Combat Illegal Wildlife Trade" Collin Shorten, Alvernia Faculty mentor: Dr. Joshuah Smith

"Visualization of nano-hydroxyapatite and fluoride ions in dental remineralization" Deanna Cao, Penn State Berks Faculty mentor: Dr. Lorena Tribe

"Fairness in Operations Research" Alexander Maldonado, Penn State Berks Faculty mentor: Dr. Abdullah Konak

"Using Metal Identification Experiments to Increase Students' Interest in Chemistry" Leah Zettlemoyer, Penn State Berks Faculty mentor: Dr. James Karlinsey

"Double Jeopardy: The Complex Reality of How Intersectionality Affects Black Women in the Workforce"

> Rachel Etim and Elsa-Nicole Rosa, Albright Faculty mentor: Dr. Soma Ghosh

"SDG 4 and Call to Action: Exploring Policy Interventions in Philadelphia's Public Schools" Eve Erb and Erik Thelander, Albright Faculty mentor: Dr. Soma Ghosh

"The Cost of Couture: Investigating Fashion's Waste Crisis and Sustainable Alternatives" Larisbel Diaz, Albright Faculty mentor: Dr. Soma Ghosh

# Session 2 (11:00a.m.-12:15p.m.)

### Theater Performances: Miller Center Theater Moderator: Prof. Ellen "Dash" Walter

"Acting II Improv" Hannah Noah, Nayla Wansley, AJ Rodriguez, Zander Morales, and Sifa Kamau, RACC Faculty mentor: Prof. Nessie Houck

Excerpt: "Georgie's Monologue" from Spike Heels by Theresa Rebeck Emily Lesher, RACC Faculty mentor: Prof. Ellen Walter

Excerpt: "Lucy's Proclamation" from the musical You're a Good Man, Charlie Brown by Clark Gesner NancyRose Dotterrer, RACC

Faculty mentor: Prof. Ellen Walter

Excerpt: "Charlie Brown at Lunchtime" from the musical You're a Good Man, Charlie Brown by Clark Gesner Juan Steven. Ramirez-Albino, RACC Faculty mentor: Prof. Ellen Walter

Excerpt: "Kim's Monologue" from Rather Be a Man by Joseph Arnone Janine Carrion, RACC Faculty mentor: Prof. Ellen Walter

Excerpt: "The Cheese Robber" from Goodbye Charles by Gabriel Davis Justin Perez, RACC Faculty mentor: Prof. Ellen Walter

Art Exhibit: Miller Center Lobby Moderator: Prof. Anthony Vega Please join us in the Miller Center for Celebration of the Arts



### **Paper Session 2**

#### Science: Berks Hall Room 611 Moderator: Professor Heather Hinkle

"Cloning and Expressing Ctb9 Interactions in Mammalian Cells" Therese Coleman, Kutztown Faculty mentor: Dr. Cristina Cummings

"Time Series Modeling of Wind Velocity for Optimized Uncrewed Aerial Vehicle Navigation"

> Mark Longenberger, Penn State Berks Faculty mentor: Dr. Matthew Rhudy

"The Remarkable Biomedical Advantages of Danio rerio"

Maggie Seng, RACC Faculty mentor: Prof. Heather Hinkle

"The Impact of Generative AI on Critical Thinking" Christian Clarke, Penn State Berks Faculty mentor: Dr. Abdullah Konak

#### Social Sciences: Berks Hall Room 405 Moderator: Zachary Stackhouse, Accessibility Services Coordinator

"Design Choices in Nazi Visual Propaganda that Promoted Othering" Evelynn Nowicki, RACC Faculty mentor: Professor Jodi Greene

"From Factories to Freight: Our Pennsylvania's Shift to a Logistics-Based Economy" Jonathan Newnham, Penn State Berks Faculty mentor: Dr. Ada Leung

"The Reasonableness of the Reasonable Person Standard in the American Criminal Justice System" Jadilyz Baez, Kutztown Faculty mentor: Dr. Pietro Toggia

#### Creative Writing 2: Berks Hall Room 503 Moderator: Professor Stephanie Andersen

"Control or Connection Creative Nonfiction" Elizabeth Weiler, RACC Faculty mentor: Prof. Stephanie Andersen

"The Broken Dam" Malia Evans, RACC Faculty mentor: Prof. Stephanie Andersen

"Writing an Interactive Children's Book About OCD"

Gina Glantz, Kutztown Faculty mentor: Dr. Robert Folk

#### Humanities 1: Berks Hall Room 414 Moderator: Dr. Danelle Bower

"Spanish and Inclusive Language: An Unnecessary Debate?" Kendall Zamora, Kutztown Faculty mentor: Dr. Christine Nunez

"Ethnographic Exploration: A Global Scholar's Perspective" Mariah Straubel, Albright Faculty mentor: Dr. Lena Ziegler

"Afro-Latino Pride: Elizabeth Acevedo's Representation of Afro-Latinidad" Lismeylin Feliz Medrano, Kutztown Faculty mentor: Dr. Christine Nunez

"Mennonite Affirmation and Schism on the LGBT Community" Nikolai Kochel, Kutztown Faculty mentor: Dr. Jennifer Schlegel

#### Poster Session 2: Schmidt Training and Technology Center lobby Moderators: Kathleen DePaul, R.N., Dan Glass, Dr. Diane Conrad

"The Interactive Harmonograph" Seth Williams, Natalie Lawton, Jon Brady, and Alex Hackett, Penn State Berks Faculty mentor: Dr. Rungun Nathan

"The Incidence of Lower Extremity Injuries on Various Playing Surfaces and Preventative Measures"

> Aidan Chumas, Alvernia Faculty mentor: Dr. Ashley Gray

"Clinical Effectiveness of PRP in Upper Extremity Cases" Paul McClair, Alvernia

Faculty mentor: Dr. Thomas Franek

"Women: Influential Roles They Had in the 19th Century Reform Movements" Katina Scheponik, RACC Faculty mentor: Professor Jodi Greene
"The Relationship Between Estrogen Levels and Joint Laxity in the Female Athlete" Madalynn Mancini, Alvernia Faculty mentor: Dr. Ashley Gray
"E-Assist Running Stroller" Madison Haraschak, Urfredo Encarnacion, and Jared Swingholm, Penn State Berks

Faculty mentor: Dr. Terry Speicher

"Effects of Heat Acclimation on Sports Performance: A Critically Appraised Topic" Delva Jean-Baptiste, Alvernia Faculty mentor: Dr. Thomas Franek

"The Effect of Anxiety and Depression on Injury Risk in Athletes: A Critically Appraised Topic" Joyce Lu, Alvernia Faculty mentor: Dr. Ashley Gray

"Investigating the Role of CXCL9 in Immune-Mediated Fibroblast Growth Regulation Using Cell Culture Techniques" Shayna Bullock, Alvernia Faculty mentor: Dr. Lindsey Kraus

"Using Replica of Fossils to Teach Kids About the Evolution of Dinosaurs" Lia Bueno, Yazmin Hernandez, Yamilex Vargas, Albright Faculty mentor: Dr. Ian Cost

"Effective Removal of Persistent Organic Pollutants from Waterways Using Magnetic Biochar"

> Nathan Bentivegna, Alvernia Faculty mentor: Dr. Joseph Kremer

"Novel Soil Microbes and the Search for New Antibiotics"

Brynn Bock, Alvernia Faculty mentor: Dr. Jamie Becker

"Alvernia University Sustainability Ambassador Program" Nicholas Hornbuckle, Alvernia Faculty mentor: Dr. Alicia Sprow

"Understanding the Metabolic Functions of Neuronal 9G8 in Regulating Organismal Metabolism in Drosophila" Lauren Conrad, Penn State Berks

Faculty mentor: Dr. Justin DiAngelo

"Building a Polymer Database for Microplastic Analysis: Advancing Research on Bacterial Colonization and Resistance" Bianca Witaszek, Jules Lesher, and Michelle Brown, Penn State Berks Faculty mentor: Dr. James Karlinsey

"The Effectiveness of Conservative Treatment vs. Surgical Interventions in Athletes Diagnosed with Thoracic Outlet Syndrome: A Critically Appraised Topic" Rachel Miller, Alvernia Faculty mentor: Dr. Thomas Franek

"The Benefit of Pelvic Floor Therapy During the Perinatal Time Period" Hannah Nagy, Taylor Mancini, Kelly Sabo, Ansley Utter, Alvernia Faculty mentor: Dr. Catherine Emenheiser

"Identifying the Most Effective Living Setting for Enhancing Quality of Life in People with Dementia" Madison Denchy, Abigail Backert, Julie Nentwig, and Talia Galbreath, Alvernia Faculty mentor: Dr. Catherine Emenheiser

"Portable Weldpack" Jacob Christman, and Broderick Bolyn, Penn State Berks Faculty mentor: Dr. Rungun Nathan

"Exploring the Influence of Viscosity, Surface Tension, and Substrate Material in Forensic Blood Spatter Analysis" Kristen Wislowski, Alvernia Faculty mentor: Dr. Brad Bauer "Climate Change's Pessimism Effects on Personal Impact" Alex Funez, RACC Faculty mentor: Prof. Carol Bean-Ritter

"Pennsylvania Drug Courts" Natalie Orihuela Valdez, Penn State Berks Faculty mentor: Dr. Jennifer Murphy "Building Resilient Cities: Evaluating Philadelphia's Progress on Sustainable Infrastructure through the Lens of SDG 9" Alex Zhang,Albright Faculty mentor: Dr. Soma Ghosh

"Maximalism in Fashion: The Art of Bold Self-Expression and Excess" Xaiyna Muhammad-Kelly, Albright Faculty mentor: Prof. Kylah Freeman

"How are Gen Z Values, Luxury Branding, and TikTok Reshaping Fashion Marketing and Consumption?" Ahmad Scott, Albright

Faculty mentor: Prof. Kylah Freeman

"Effectiveness of the Community Learning Equine-guided Program" Karis Howell, Julie Burkhardt, Arianna McGrory, and Madison Whary, Alvernia Faculty mentor: Dr. Amanda Stilianos "Color as Brand Language: Women's Apparel and Consumer Association" Rayven Muller, Albright Faculty mentor: Prof. Kylah Freeman

"Culture vs Couture: An Exploration of the Cultural and Socioeconomic Differences between SoHo and Harlem" Karla Caceres Peña, Albright Faculty mentor: Prof. Kylah Freeman

"Impact of Interprofessional Collaboration on Patient Satisfaction in Student-Led Clinics and Chronic Illness Treatment" Faith Guers, Linae Williams, William

Fisher, and Olivia Blockberger, Alvernia Faculty mentor: Dr. Catherine Emenheiser

"Analysis of Microplastics Found Near the Blue Marsh Lake Swimming Area" Laura Read, Keiana Morris, Hailey Zavecz, Madilyn Bausher, Emily Cai, Vinh Lu, Sidhdi Narkhede, Benjamin Sedlmyer, Penn State Berks Faculty mentor: Dr. Jill Felker

# Session 3 (1:30p.m.- 2:15p.m.)

## **Paper Session 3**

#### Environmental Science: Berks Hall Room 405 Madamatan Part Parts Bathamad

#### **Moderator: Prof. Bryan Rothermel**

"Investigating the Local Environment for Novel Antibiotics: An Application of the Tiny Earth Project"

> Christina Walko, Alvernia Faculty mentor: Dr. Jamie Becker

"Microplastics and Antibiotic-Resistant Bacteria in Blue Marsh Lake: Possible Impact on the Recreational Swimming Area"

> Benjamin Sedlmyer and Emily Cai, Penn State Berks Faculty mentor: Dr. Jill Felker

"Regenerative Agriculture in Ancient Latin American Civilizations May be a Model for Climate Change Resilience"

> Erin Foley, Kutztown Faculty mentor: Dr. Christine Nunez

# The Front Street Journal

The student newspaper of Reading Area Community College

www.thefrontstreetjournal.com

Your campus. Your stories. Your voice.



WINNER OF TWO 2025 STUDENT KEYSTONE MEDIA AWARDS

#### Education: Berks Hall Room 414 Moderator: Kim Stahler, Reference Librarian, The Yocum Library

"Comparative Analysis of Human versus AI-Generated Codes Regarding the Transformative Impact of Student Innovation Competitions and Programs on Entrepreneurial Mindset"

> Rere Adeyemo, Penn State Berks Faculty mentor: Dr. Sadan Kulturel-Konak

"Technology as an Equalizer in Education" Caxton Opuko, Kutztown Faculty mentor: Prof Jici Huang

"Behavior Intervention Plan" Olivia Hartman, Kutztown Faculty mentor: Dr. Christopher Bloh

"Supporting Heritage Spanish Learners: Bridging Conversational Skills and Formal Language Proficiency"

> Marco Dominguez, Kutztown Faculty mentor: Dr. Christine Nunez

#### Humanities 2: Berks Hall Room 611 Moderator: Professor Joey Flamm-Costello

"Being A Receptive Multilingual Is Not a Permanent Identity"

> Sudan Wrey, Kutztown Faculty mentor: Dr. Christine Nunez

"Cultural Self-Identity" Victoria Szczepaniak, Kutztown Faculty mentor: Dr. Christine Nunez

"There's Still Work to be Done: A Feminist Analysis of the 9 to 5 Work Schedule" Susanna Naugle, RACC Faculty mentor: Prof. Joey Flamm-Costello

"How Language Shapes Thought, Emotion, and Social Norms: A Comparative Study of Spanish and Mandarin"

> Emi Monday, Kutztown Faculty mentor: Dr. Christine Nunez

#### Psychology/Sociology: Berks Hall Room 503 Moderator: Professor Carol Bean-Ritter

"Does Delaying Parenthood Make You Older and Wiser?" Bree Kantner, RACC Faculty mentor: Prof. David Leight

"Sibling or Parent? The Phenomenon of Parentification" Beneily Ramirez Terrero, Kutztown Faculty mentor: Dr. Christine Nunez

"What Interventions Have Proven to be Most Effective in Ensuring Health, Safety, and Welfare for Children and their Families in Berks County?"

Emely Morban, Kutztown Faculty mentor: Dr. Mary Weller

"Music Therapy and Its Impact on Cognitive and Neurological Functioning in Alzheimer's Disease: A Meta-Analysis" Samantha Klimek, Kutztown Faculty mentor: Dr. Stephen Oross III



### Poster Session 3: Schmidt Training and Technology Center lobby Moderators: Dr. Diane Conrad, Kathleen DePaul, R.N., Dan Glass

"The Effects of Hydration Strategies in Regard to Sport Performance in Endurance Athletes" Chenoa Bernhardt, Alvernia Faculty mentor: Dr. Ashley Gray

"Understanding the Role of the Reelin Protein in Fibroblasts by Utilizing Growth Curve Analysis and Microscopy Under Stress Conditions"

Tahner Gehringer, Alvernia Faculty mentor: Dr. Lindsay Kraus

"Dough Slippage Testing Device" Jonathan Haraschak, Lucas Smith, and Anthony Carpenter, Penn State Berks Faculty mentor: Dr. Rungun Nathan

"An Evaluation of Ankle Excursion in Runners With and Without Medial Tibial Stress Syndrome"

> Keiana Morris, Penn State Berks Faculty mentor: Dr. Allison Singles

"Exploring Participation Differences in Innovation Competitions Between Business and Engineering Students"

> Mary Cloud Namy, Penn State Berks Faculty mentor: Dr. Sadan Kulturel-Konak

"Let's Empower them with Fashion: A Proposed Workshop for Unhoused Women and Children"

> Kayla Paige, Albright Faculty mentor: Prof. Kylah Freeman

"The Art of Appeal: How Textile Prints Attract Different Demographics" Louella Formica, Albright Faculty mentor: Prof. Kylah Freeman "The Fabricated Dream: How Fashion's Illusions Fuel Unhappiness and Overconsumption" Alexandra Pancu, Albright Faculty mentor: Prof. Kylah Freeman

"PPET Pet Treat Robot" Justin Billger, Reis Linsenbigler, Jim Nguyen, and Ethan Zekhtser, Penn State Berks Faculty mentor: Dr. Terry Speicher

"Bridging the Gap: Post Early Intervention Services"

Sarah Baker, Deidre Dengler, Mariele Gates, and Lydia Stupp, Alvernia Faculty mentor: Dr. Catherine Emenheiser

"Angular Momentum Exhibit" Ainsley Butler, Nathan Vreeland, and Amandre Hatcher, Penn State Berks Faculty mentor: Dr. Rungun Nathan

"Can Mindfulness and Meditation Practices Reduce Stress and Violence Amongst the Youth Population?" Brandon Nabar, Penn State Berks

Faculty mentor: Dr. Jennifer Murphy

"Building a Healthier Future: Strategic Pathways to Achieving Urban Health Equity Through SDG 3" Jeovany Rodriguez and Erick Tacuri, Albright Faculty mentor: Dr. Soma Ghosh

"Sliding Mode Control for melt pool Area in Metal Laser Powder Bed Fusion Process" Fabian Gonzalez, Penn State Berks Faculty mentor: Dr. Dimitri Karagiannis "Screwinator"

Dale Belville, Zachary Schlegel, Bailey Levan, and Mason Lazarony, Penn State Berks

Faculty mentor: Dr. Rungun Nathan

"Gravity Battery Parameter Investigation" Allison Ammarell, Penn State Berks Faculty mentor: Dr. Dale Litwhiler

"Exploring Sustainable Strategies for Wildfire Prevention in California Cities" Casey Henderson, Ian Keating, and Alexa Cipolla, Albright Faculty mentor: Dr. Soma Ghosh

"Using a RESTful API to Train an LLM" Devin Haas, Alvernia Faculty mentor: Prof. Eric Robuck

"Parasitic Odyssey: Plasmodium and Its Journey to Infamy" Keiana Morris, RACC Faculty mentor: Prof. Heather Hinkle "Automated Straightening of Aluminum Extrusions" Braden Ritter, Sabiha Kermalli, Joe

Pasterski, and Shiv Patel, Penn State Berks Faculty mentor: Dr. Rungun Nathan "Computational Amino Acid Tutorial for Learning: Integrated with Online Network (CATLion)"

> Deanna Cao, Kaidalyn Awilda Salce, Ishita Singh, Penn State Berks Faculty Mentor: Dr. Lorena Tribe

"From Chesapeake to Tap: Advancing SDG 6 Through Navigating Baltimore's Water Quality Challenges"

> Matthew Creeger and Samuel Moratori, Albright Faculty mentor: Dr. Soma Ghosh

"Tracking Superbugs: Antibiotic Resistance in Blue Marsh Watershed, in Reading, Pennsylvania" Mallory Duff, Shantelle Duarte, Dior Stuart, Kaylin Ifill, Owen Ruiz Perez,

Kim Grace, Jazmin Laperon, Alejandra Varona, Paria Khalili, and Emmanuel Mensah, Penn State Berks Faculty mentor: Dr. Jill Felker

"Water Quality Assessment Using Chemical Testing Methods in Blue Marsh Watershed, Reading, Pennsylvania" Jada Savage, Kaelyn Balbirer, and Mary Namy, Penn State Berks Faculty mentor: Dr. Jill Felker

Rere	Adeyemo	Penn State Berks	Paper 3 - Education
Allison	Ammarell	Penn State Berks	Poster 3
Kara	Armstrong	Kutztown University	Theater 1
Abigail	Backert	Alvernia University	Poster 2
Jadilyz	Baez	Kutztown University	Paper 2 - Social Sci/History
Sara	Baker	Alvernia University	Poster 3
Kaelyn	Balbirer	Penn State Berks	Poster 3
Andre	Ballard Jr.	Penn State Berks	Poster 1
Jaden	Barr	Kutztown University	Poster 1
Madilyn	Bausher	Penn State Berks	Poster 2
Dale	Belville	Penn State Berks	Poster 3
Nathan	Bentivegna	Alvernia University	Poster 2
Chenoa	Bernhardt	Alvernia University	Poster 3
Justin	Billger	Penn State Berks	Poster 3
Olivia	Blockberger	Alvernia University	Poster 2
Brynn	Bock	Alvernia University	Poster 2
Broderick	Bolyn	Penn State Berks	Poster 2
McKylie	Boreman	Alvernia University	Poster 1
Jonas	Brady	Penn State Berks	Poster 2
Michelle	Brown	Penn State Berks	Poster 2
Lia	Bueno	Albright College	Poster 2
Shayna	Bullock	Alvernia University	Poster 2
Julie	Burkhardt	Alvernia University	Poster 2
Jacob	Buser	Alvernia University	Poster 1
Ainsley	Butler	Penn State Berks	Poster 3
Karla	Caceres Peña	Albright College	Poster 2
Emily	Cai	Penn State Berks	Paper 3 - Enviro Science
Deanna	Сао	Penn State Berks	Poster 1
Anthony	Carpenter	Penn State Berks	Poster 2
Janine	Carrion	Reading Area Community College	Theater 1
Ilaria	Catania	Albright College	Poster 1
Amanda	Celentano	Kutztown University	Poster 1
Anthony	Chiango	Kutztown University	Paper 1 - Media
Jacob	Christman	Penn State Berks	Poster 2
Aidan	Chumas	Alvernia University	Poster 2
Alexa	Cipolla	Albright College	Poster 3
Shawn	Clark	Penn State Berks	Poster 1
Christian	Clarke	Penn State Berks	Paper 2 - Science
Therese	Coleman	Kutztown University	Paper 2 - Science
Lauren	Conrad	Penn State Berks	Poster 2
Alex	Contros	Penn State Berks	Poster 1
Kira	Corrie	Penn State Berks	Poster 1

Matthew	Creeger	Albright College	Poster 3
Noelle	Cruz	Albright College	Art
Andy-Jess	Damord	Alvernia University	Poster 1
Alex	Darlington	Kutztown University	Paper 1 - Political Science
Madison	Denchy	Alvernia University	Poster 2
Deidre	Dengler	Alvernia University	Poster 3
Larisbel	Diaz	Albright College	Poster 1
Marco	Dominguez	Kutztown University	Paper 3 - Education
NancyRose	Dotterrer	Reading Area Community College	Theater 2
Maddie	Downes	Alvernia University	Poster 1
Shantelle	Duarte	Penn State Berks	Poster 3
Mallory	Duff	Penn State Berks	Poster 3
Urfredo	Encarnacion	Penn State Berks	Poster 2
Reilly	Enos	Alvernia University	Poster 1
Eve	Erb	Albright College	Poster 1
Rachel	Etim	Albright College	Paper 1 - Creative Writing 1
Rachel	Etim	Albright College	Poster 1
Malia	Evans	Reading Area Community College	Paper 2 - Creative Writing 2
Lismeylin	Feliz Medrano	Kutztown University	Paper 2 - Humanities 1
William	Fisher	Alvernia University	Poster 2
Erin	Foley	Kutztown University	Paper 3 – Enviro Science
Louella	Formica	Albright College	Poster 3
Ashley	Fry	Kutztown University	Art
Alex	Funez	Reading Area Community College	Poster 2
Talia	Galbreath	Alvernia University	Poster 2
Mariele	Gates	Alvernia University	Poster 3
Caleb	Gehman	Reading Area Community College	Paper 1 - Political Science
Tahner	Gehringer	Alvernia University	Poster 3
Gina	Glantz	, Kutztown University	Paper 2 - Creative Writing
Fabian	Gonzalez	Penn State Berks	Poster 3
Megan	Goodhart	Penn State Berks	Poster 1
Kim	Grace	Penn State Berks	Poster 3
Faith	Guers	Alvernia University	Poster 2
Devin	Haas	Alvernia University	Poster 3
Alex	Hacket	Penn State Berks	Poster 2
Jonathan	Haraschak	Penn State Berks	Poster 2
Madison	Haraschak	Penn State Berks	Poster 3
Olivia	Hartman	Kutztown University	Paper 3 - Education
Amandre	Hatcher	Penn State Berks	Poster 3

Casey	Henderson	Albright College	Poster 3
Morgan	Herb	Kutztown University	Poster 1
Yazmin	Hernandez	Albright College	Poster 2
Marli	Herner	Reading Area Community College	Art
Kayln	Hess	Penn State Berks	Poster 1
Madison	Hill	Reading Area Community College	Theater 2
Nicholas	Hornbuckle	Alvernia University	Poster 2
Karis	Howell	Alvernia University	Poster 2
Miral	Ibhrahim	Penn State Berks	Poster 1
Kaylin	Ifill	Penn State Berks	Poster 3
Madison	Jackson	Kutztown University	Art
Delva	Jean-Baptiste	Alvernia University	Poster 2
Bree	Kantner	Reading Area Community College	Paper 3 - Psych/Socio
lan	Keating	Albright College	Poster 3
Sabiha	Kermalli	Penn State Berks	Poster 3
Paria	Khalili	Penn State Berks	Poster 3
Sifa	Kimau	Reading Area Community College	Theater 2
Samantha	Klimek	Kutztown University	Paper 3 - Psych/Socio
Nikolai	Kochel	Kutztown University	Paper 2 - Humanities 1
Braylon	Kuhn	Penn State Berks	Poster 1
Jazmin	Laperon	Penn State Berks	Poster 3
Natalie	Lawton	Penn State Berks	Poster 2
Mason	Lazaroney	Penn State Berks	Poster 3
Jules	Lesher	Penn State Berks	Poster 2
Emily	Lesher	Reading Area Community College	Theater 2
Bailey	Levan	Penn State Berks	Poster 3
Reis	Linsenbigler	Penn State Berks	Poster 3
Mark	Longenberger	Penn State Berks	Paper 2 - Science
Joyce	Lu	Alvernia University	Poster 2
Alexander	Maldonado	Penn State Berks	Poster 1
Taylor	Mancini	Alvernia University	Poster 2
, Madalynn	Mancini	Alvernia University	Poster 2
, Jada	Maye	Kutztown University	Paper 1 - Political Science
Paul	McClair	Alvernia University	Poster 2
Caitlin	McCrone	Alvernia University	Poster 1
Lily	McDonough	Alvernia University	Poster 1
Arianna	McGrory	Alvernia University	Poster 2
Emmanuel	Mensah	Penn State Berks	Poster 3

Rachel	Miller	Alvernia University	Poster 2
Isabella	Miller	Reading Area Community College	Paper 1 - Creative Writing 1
Emi	Monday	Kutztown University	Paper 3 - Humanities 2
Alexzander	Morales	Reading Area Community College	Theater 1, Theater 2
Samuel	Moratori	Albright College	Poster 3
Emely	Morban	Kutztown University	Paper 3 - Psych/Socio
Keiana	Morris	Penn State Berks	Poster 2, Poster 3
Keiana	Morris	Reading Area Community College	Poster 3
Jaden	Morrow	Reading Area Community College	Paper 1 - Creative Writing 1
Xaiyna	Muhammad-Kelly	Albright College	Poster 2
Rayven	Muller	Albright College	Poster 2
Brandon	Nabar	Penn State Berks	Poster 3
Hannah	Nagy	Alvernia University	Poster 2
Mary Cloud	Namy	Penn State Berks	Poster 3
Sidhi	Narkhede	Penn State Berks	Poster 2
Susanna	Naugle	Reading Area Community College	Paper 3 - Humanities 2
Julie	Nentwig	Alvernia University	Poster 2
Johnathan	Newnham	Penn State Berks	Paper 2 - Social Sci/History
Jim	Nguyen	Penn State Berks	Poster 3
Hannah	Noah	Reading Area Community College	Theater 2
Evelynn	Nowicki	Reading Area Community College	Paper 2 - Social Sci/History
Marlena	Okurowski	Alvernia University	Poster 1
Caxton	Opuko	Kutztown University	Paper 3 - Education
Natalie	Orihuela Valdez	Penn State Berks	Poster 2
Kayla	Paige	Albright College	Poster 3
Alexandra	Pancu	Albright College	Poster 3
Joe	Pasterski	Penn State Berks	Poster 3
Shiv	Patel	Penn State Berks	Poster 3
Taylor	Pengelly	Kutztown University	Art
Justin	Perez	Reading Area Community College	Theater 2
Samantha	Pineiro	Reading Area Community College	Theater 1
Ruhaan	Pius	Penn State Berks	Poster 1

lleana	Ramirez	Reading Area Community College	Theater 1
Beneily	Ramirez Terrero	Kutztown University	Paper 3 – Psych/Socio
Kevin	Ramirez-Olivares	Penn State Berks	Poster 1
Michael	Ramundo	Alvernia University	Poster 1
Laura	Read	Penn State Berks	Poster 2
Madelyn	Rismiller	Reading Area Community College	Art
Braden	Ritter	Penn State Berks	Poster 3
Nicholas	Rivera	Kutztown University	Poster 1
Jeovany	Rodriguez	Albright College	Poster 3
AJ	Rodriguez	Reading Area Community College	Theater 1/Theater 2
Kuhlby	Rollman	Penn State Berks	Poster 1
Elsa-Nicole	Rosa	Albright College	Poster 1
Owen	Ruiz Perez	Penn State Berks	Poster 3
Nicholas	Rutkowski	Penn State Berks	Poster 1
Kelly	Sabo	Alvernia University	Poster 2
Gillian	Samony	Kutztown University	Poster 1
Jada	Savage	Penn State Berks	Poster 3
Katina	Scheponik	Reading Area Community College	Poster 2
Zachary	Schlegel	Penn State Berks	Poster 3
Ahmad	Scott	Albright College	Poster 2
Benjamin	Sedlmyer	Penn State Berks	Paper 3 - Enviro Science
Maggie	Seng	Reading Area Community College	Paper 2 - Science
Alyssa	Shaub	Alvernia University	Poster 1
Keito	Shaw	Alvernia University	Poster 1
Collin	Shorten	Alvernia University	Poster 1
Hannah	Sierra	Albright College	Poster 1
Ishita	Singh	Penn State Berks	Poster 3
Lucas	Smith	Penn State Berks	Poster 2
Rebekah	Smith	Reading Area Community College	Paper 1 - Media
Jonas	Smith	Reading Area Community College	Poster 1
Sarah	Snow	Kutztown University	Paper 1 - Political Science
Timothy	Spatz	Reading Area Community College	Theater 1
Colin	Stile	Alvernia University	Poster 1
Mariah	Straubel	Albright College	Paper 2 - Humanities 1
Dior	Stuart	Penn State Berks	Poster 3

Lydia	Stupp	Alvernia University	Poster 3
Jared	Swingholm	Penn State Berks	Poster 2
Victoria	Szczepaniak	Alvernia University	Paper 3 – Humanities 2
Erick	Tacuri	Albright College	Poster 3
Darik	Tannis-Harriet	Penn State Berks	Poster 1
Wilma	Taveras	Alvernia University	Poster 1
Erik	Thelander	Albright College	Poster 1
Ciarra	Thompson	Albright College	Poster 1
Skyden	Thrower	Kutztown University	Art
Jeilyn	Tineo	Penn State Berks	Poster 1
Ansley	Utter	Alvernia University	Poster 2
Yamilex	Vargas	Albright College	Poster 2
Edwin	Vargas	Reading Area Community College	Theater 1
Alejandra	Varona	Penn State Berks	Poster 3
Viktoriia	Vozharenko	Penn State Berks	Poster 1
Nathan	Vreeland	Penn State Berks	Poster 3
Christina	Walko	Alvernia University	Paper 3 – Enviro Science
Nayla	Wansley	Reading Area Community College	Theater 1, Theater 2
Sage	Wasser	Reading Area Community College	Paper 1 - Media
Elizabeth	Weiler	Reading Area Community College	Paper 2 - Creative Writing 2
Madison	Whary	Alvernia University	Poster 2
Linae	Williams	Alvernia University	Poster 2
Seth	Williams	Penn State Berks	Poster 2
Kristen	Wislowski	Alvernia University	Poster 2
Bianca	Witaszek	Penn State Berks	Poster 2
Alyson	Witman	Kutztown University	Art
Hannah	Wolfe	Alvernia University	Poster 3
Sudan	Wray	Kutztown University	Paper 3 - Humanities 2
Kendall	Zamora	Kutztown University	Paper 2 - Humanities 1
Hailey	Zavecz	Penn State Berks	Poster 2
Ethan	Zebtser	Penn State Berks	Poster 3
Leah	Zettlemoyer	Penn State Berks	Poster 1
Alex	Zhang	Albright College	Poster 2
Scott	Ziegler	Penn State Berks	Poster 1

## **Mission Statement and Core Values**

Reading Area Community College builds communities of learning committed to educational growth and to the economic vitality in our region.

#### At RACC...

- We strive for excellence in all our actions.
- We promote student learning and personal growth through teaching and mentoring.
- We create welcoming and safe environments where intellectual curiosity and learning can flourish.
- We value the diversity in our community and the richness it brings.
- We connect students to resources within the College and the community at large that best meet their educational needs.
- We are committed to lifelong learning both for students and ourselves.

#### Philosophy

Reading Area Community College believes in the educational enrichment of each citizen and the economic and cultural development of the community we serve. We are committed to the four key "hallmarks" which we believe are at the core of a comprehensive community college: access, opportunity, excellence and hope.

Access. We provide access to an education for all students. As an open access institution, students have the chance to fulfill their aspirations and educational goals.

**Opportunity**. As teachers, administrators, student services, or support personnel, we strive to work in harmony, aligned with our commitment to student success in order to ensure that every student has the opportunity to achieve their dreams.

**Excellence**. We are committed to excellence in everything we do. Unique to community colleges is the opportunity to personalize learning and support services to address a student where he or she may be on the learning spectrum.

**Hope**. Reading Area Community College has offered hope to so many who thought they could never pursue a higher education. Our mission ultimately offers hope to all persons, and we will continue to work diligently to sustain, and ultimately fulfill, that hope for all students.

#### **RACC Board of Trustees**

Mr. Edwin L. Stock, Chair Mr. Guido M. Pichini, Vice Chair Mr. Dean E. Sheaffer, Secretary

Dr. Sam A. Alley Ms. Wanda Colon Mr. Daniel Cortes Mr. Jack R. Gombach Mr. Michael C. Haney Mrs. Mary H. Kargbo Mr. Lawrence J. Medaglia, Jr. Pastor Manuel A. Perez Dr. Michelle Reichard-Huff Mr. Gary W. Rightmire Mr. Michael Toledo Dr. Suzanne Wenderoth

James H. Yocum Trustee Emeriti

Mrs. Connie M. Archey Mr. Jon C. Scott Mr. John C. Woodward Mrs. Nancy L. Snyder \* Mr. James H. Yocum

#### College Solicitor - Kozloff Stoudt

Mr. Peter Schuchman, Esquire

Berks County Board of Commissioners

Mr. Christian Y. Leinbach, Chair Mr. Michael S. Rivera Mr. Dante Santoni