

# SETURDAY, APRIL 28

## WHITWORTH UNIVERSITY

SIRC provides an opportunity for undergraduate students to present their faculty-led research in a competitive, rigorous and inquiry-based format to help develop scholarly community.

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	SIRC 2018 Schedule		
7:00 a.m.	Compass Breakfast Wagon available	Outside Hixon Union Building (HUB)	
8:00 a.m. – 8:30 a.m.	Check-in, Coffee and Pastries	Weyerhaeuser Hall (WEY), 107	
8:30 a.m. – 9:00 a.m.	Welcome from President Beck Taylor	Weyerhaeuser Hall (WEY), 107	
9:15 a.m. – 10:45 a.m.	Early Morning Sessions RS1, RS2, RS3, RS4, PS1	Weyerhaeuser Hall (WEY), Hixon Union Building (HUB)	
11:00 a.m. – 12:30 p.m.	Late Morning Sessions RS5, RS6, RS7, RS8, RS9, PS2, IE1	Weyerhaeuser Hall (WEY), Hixon Union Building (HUB)	
12:30 p.m. – 2:00 p.m.	Break for Lunch*		
2:15 p.m. – 3:45 p.m.	Afternoon Sessions RS10, RS11, RS12, RS13, PS3	Weyerhaeuser Hall (WEY), Hixon Union Building (HUB)	
4:00 p.m. – 4:30 p.m.	Awards	Weyerhaeuser Hall (WEY), 107	

RS = Regular (Paper) Session PS = Poster Session IE = Ideas Exchange

<sup>\*</sup>Several lunch options are within walking distance of campus. Students with Sodexho meal plans may opt to eat in the Hixon Union Building (HUB) cafeteria. Thai Lunchbox will be set up during the lunch hour by the campanile.

#### Welcome from the President of Whitworth University



Whitworth University is proud to welcome students from Eastern Washington University, Gonzaga University, Washington State University-Spokane, Community Colleges of Spokane and Whitworth to the 15th Annual Spokane Intercollegiate Research Conference (SIRC). This event provides an opportunity for students to celebrate the research they have completed and to disseminate the results of their work to their peers and the public. In so doing, they join an academic enterprise that for centuries has advanced the frontiers of knowledge and applied that knowledge to solving the world's most complex problems.

The great medieval philosopher and theologian Thomas Aquinas may be considered one of the fathers of the modern university and, in many ways, of SIRC. He recognized reason as one of humankind's greatest gifts, and that the greatest use of

human reason was to pursue knowledge and truth wherever they may be found. His careful examination of the natural world (science) led him to understandings of history, philosophy and theology (humanities) and of economics, politics and psychology (social science) that had tremendous influence on Western thought and that are reflected in the breadth of subjects explored at this conference.

Aquinas also is known for an extraordinary body of writings in which he shared his knowledge with the world. As we make discoveries and gain insights through our research, we bear the responsibility to submit our work to the review of others in our field and to share what we have learned with the broader public. Peer review and public dissemination go hand in hand with the underlying research in expanding the body of knowledge needed to solve the critical problems we face. The students presenting at SIRC take that responsibility seriously, and I thank you.

On behalf of the faculty, staff and students of Whitworth University, I welcome you to our campus and applaud your contributions to the noble and important enterprise of academic scholarship and research.

Sincerely,

Beck A. Taylor, Ph.D. President

Whitworth University

## **Early Morning Sessions**

9:15 a.m. – 10:45 a.m.

Session RS <sup>2</sup> Faculty Mode	l erator: Patrick Ferro, Gonzaga University	Room WEYR 203
RS1-a	Bryn Cavin: "Whitman's Use of Dualism in His Poems of Faculty Sponsor: Laurie Lamon, Whitworth University	Identity"
RS1-b	Matt Sherber Howard: "Commodifying Tradition for Indi Ritual and Social Change in 'A Chaste Maid in Cheapside 'The Alchemist' Faculty Sponsor: Heather Easterling, Gonzaga Universit	e,' 'Eastward Ho,' and
RS1-c	Molly Wilson: "Collective Writing, Therapeutic Authorshi Feminist Experience" Faculty Sponsor: Ana Roncero-Bellido, Gonzaga Univers	•
RS1-d	Rebecca Dunne: "A Redefined Captivity Narrative" Faculty Sponsor: Jeff Miller, Gonzaga University	
RS1-e	Brittany Justham: "Shelling For Courage" Faculty Sponsor: Nicole Sheets, Whitworth University	
Session RS2 Faculty Mode	2 erator: Alisha Epps, Whitworth University	Room WEYR 204
		g: Gender Differences
Faculty Mode	erator: Alisha Epps, Whitworth University  Tayler Humphrey: "Shattering the Systemic Glass Ceilin in Leadership"	ng: Gender Differences  Ty  Works, and Moods"
Faculty Mode	rator: Alisha Epps, Whitworth University  Tayler Humphrey: "Shattering the Systemic Glass Ceilin in Leadership"  Faculty Sponsor: Patricia Bruininks, Whitworth Universit  Michael Liuzzi and Alexandra Pardico: "Friendships, Netw	ng: Gender Differences  ty  works, and Moods"  Gonzaga University  on on Actual
RS2-a RS2-b	Tayler Humphrey: "Shattering the Systemic Glass Ceilin in Leadership" Faculty Sponsor: Patricia Bruininks, Whitworth Universit Michael Liuzzi and Alexandra Pardico: "Friendships, Netw Faculty Sponsors: Anna Marie Medina and Gary Thorne, Kathryn Holtzheimer: "The Effects of Expected Motivation"	ng: Gender Differences  ty  works, and Moods"  Gonzaga University  on on Actual  ality: How a Vision

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RS3-a	Bailey Englin: "Nonlinear Model of the Business Cycle" Faculty Sponsor: Richard Cangelosi, Gonzaga University
RS3-b	Maxwell John Dulin and Jacob Ray Krantz: "Syllabification by Categorization" Faculty Sponsor: Paul De Palma, Gonzaga University
RS3-c	Marissa Moffett: "Tech Break: The Impact of Perceptions on Gender Disparity in Computer Science" Faculty Sponsor: Kent Jones, Whitworth University
RS3-d	Taha F. Hakkani: "A Mathematical Analysis of Sleep Cycles and Circadian Rhythms" Faculty Sponsor: Richard Cangelosi, Gonzaga University
RS3-e	Lydia Pane: "A Model of Immune System Response to Tumor Growth" Faculty Sponsor: Richard Cangelosi, Gonzaga University
Session RS4 Faculty Mode	Room WEYR 303 rator: Julia Stronks, Whitworth University
Faculty Mode	rator: Julia Stronks, Whitworth University  Alexander Mowery, Zachary Monroe, and Jake Nelson: "Cell Phone Privacy: An Analysis of Carpenter v. United States"
Faculty Mode RS4-a	Alexander Mowery, Zachary Monroe, and Jake Nelson: "Cell Phone Privacy: An Analysis of Carpenter v. United States" Faculty Sponsor: Julia Stronks, Whitworth University  Pema Tshogyal: "How Central is Nigel Farage to Brexit?"
RS4-a RS4-b	Alexander Mowery, Zachary Monroe, and Jake Nelson: "Cell Phone Privacy: An Analysis of Carpenter v. United States" Faculty Sponsor: Julia Stronks, Whitworth University  Pema Tshogyal: "How Central is Nigel Farage to Brexit?" Faculty Sponsor: Sean Swan, Whitworth University  Luke Atherton: "The Impact of JASTA"

**Room WEYR 205** 

Session RS3

Faculty Moderator: Lisa Laurier, Whitworth University

Session PS1 Room HUB MPR

Faculty Moderators: William Ntow, Whitworth University; Deborah Tully, Whitworth University; Kraig Wheeler, Whitworth University

PS1-a Brendon Winston: "Student Attitudes to Healthcare Information Technology and Patient Privacy" Faculty Sponsors: Anna Tresidder and Patricia Richards, Eastern University PS1-b Sarah Rountry: "Ella Baker" Faculty Sponsor: Marc Robinson, Whitworth University PS1-c Andrew Hackett: "Fred Hampton" Faculty Sponsor: Marc Robinson, Whitworth University PS1-d Emily Vermillion: "Cloning and Expressing PEPN in Lactobacillus helveticus" Faculty Sponsor: Deanna Ojennus, Whitworth University PS1-e Sarah Bundy and Yasmeen Albasheer: "The Effects of Copy-Cover-Compare on Sight Word Acquisition for a 16-Year-Old Male in a High School Resource Room" Faculty Sponsor: Jennifer Neyman, Gonzaga University PS1-f Erica Horn and Hailey Noyes: "The Effects of Contingent Rewards on On-Task Behavior and Copy, Cover, Compare on Correct Multiplication Facts for a Middle School Student with an Intellectual Disability" Faculty Sponsor: Jennifer Neyman, Gonzaga University Kelley O'Toole and Annie Heller: "The Effects of an Alternating Patterns PS1-g Intervention on Sight Word Recognition for a High School Student with a Learning Disability in a Resource Room" Faculty Sponsor: Jennifer Neyman, Gonzaga University PS1-h Katherine Ruff: "The Effects of Direct Instruction Flashcards on Sight Word Recognition for a First-Grade Boy with Developmental Delays in an Elementary Resource Room" Faculty Sponsor: Jennifer Neyman, Gonzaga University PS1-i Veronica Tischer, Catherine R. Siefert, David Baker, and Joseph Panchesson: "A Critical Analysis of the Food Industry and Proposed Local Solutions" Faculty Sponsor: Betsy Bancroft, Gonzaga University PS1-j Lauren Wilkin and Anna Yeung: "The Effect of Model-Lead-Test Intervention Procedure on the Correct Number of Subtraction Problems Using Money for a

Faculty Sponsor: Jennifer Neyman, Gonzaga University

Classroom"

13-Year-Old Student with an Intellectual Disability in a Special Education

PS1-k	Olivia Bartlett: "Injury-related Anxiety as a Psychological Barrier in Return to Play"  Faculty Sponsor: Cynthia Wright, Whitworth University
PS1-I	Ashley Yang: "Berberine Uptake in HepG2 Cells" Faculty Sponsor: Trisha Russell, Whitworth University
PS1-m	Jody Dillman, Dominique Cruz-Reyes, Luke Barrick, and Thomas Newberg: "The Effects of Hippotherapy on the Electromyograph of a Subject with Multiple Sclerosis"  Faculty Sponsor: Mike Sardinia, Whitworth University
PS1-n	Jacqueline Reid and William Henzler: "L-Theanine Effects on Memory and Cognition in Swim-Low Rats" Faculty Sponsor: Mike Sardinia, Whitworth University
PS1-o	Braden L. Corigliano and Desiree M. Graham: "Efficacy of Pyrantel Pamoate in Canines with Small vs. Large Genetic Variability" Faculty Sponsor: Mike Sardinia, Whitworth University
PS1-p	Jon Reid: "Effect of Amide-substituent Position on the Magnetic Resonance Imaging (MRI) and Optical Properties of Quinoline-sensitized Europium (III) Complexes"  Faculty Sponsor: Osasere Evbuomwan, Gonzaga University
PS1-q	Brian Hamm: "Assessing Bird Diversity in the Saltese Uplands Conservation Area Using Bioacoustic Monitoring and Cluster Analysis" Faculty Sponsor: Methea Sapp, Spokane Community College
PS1-r	Erik Robin Bruhjell: "Functional Microbial Diversity in Lake Arthur, Spokane, Washington" Faculty Sponsor: Betsy Bancroft, Gonzaga University
PS1-s	Paul Leonetti: "Lake Arthur Community Project" Faculty Sponsor: Betsy Bancroft, Gonzaga University
PS1-t	Austin Cassity: "Characterization of the Cyclization of Sucralose Derivatives under Basic Conditions" Faculty Sponsor: Trisha Russell, Whitworth University
PS1-u	Annika Barnett: "The Effect of Local Muscle Cooling on Muscle Activation and Fatigue" Faculty Sponsor: Ryan McCulloch, Gonzaga University
PS1-v	Simon A. Derrer and Alana K. Andrews: "Comparison of Tensile Strength of 3D Printed Elastomeric Dogbones Following Hydrocarbon Environmental Exposure"  Faculty Sponsor: Patrick Ferro, Gonzaga University

PS1-w Joshua Nay: "Approaches to the Organic Synthesis of 2-Oxoglutaramate" Faculty Sponsor: Travis Denton, Whitworth University PS1-x Katherine Drexelius: "Using Human Cortical and Cerebral Organoids to Model Prenatal Hypoxic-ischemic Encephalopathy" Faculty Sponsor: Jenny Hsieh, Gonzaga University PS1-y Jenna Valentine, Ryan Meehan, and Shane O'Brien: "Mitigating Dioxin Formation from Lignocellulose Combustion: An Experimental and Computational Approach" Faculty Sponsor: Matthew Cremeens, Gonzaga University PS1-z Lee Cantrell: "Uncharacteristic Quasiracemic Assemblies Derived from Tartaramide/Malamide Molecular Frameworks" Faculty Sponsor: Kraig Wheeler, Whitworth University PS1-aa Everett Fellger and Patrick Tjandra: "Investigation of the Material Properties of 304 Stainless in Tension with Prior Fatigue" Faculty Sponsor: Patrick Ferro, Gonzaga University

#### **Late Morning Sessions**

**Session RS5** 

11:00 a.m. - 12:30 a.m.

Room WEYR 203

RS5-a Regina Carrere: "Feminine Men in the Western"
Faculty Sponsor: Matthew Bolton, Gonzaga University

RS5-b Daniel Roberts: "Why the Proliferation of Amateur Photography is Good for Self-Representation"
Faculty Sponsor: Jessica Clements, Whitworth University

RS5-c Claire Standaert: "'What is the Right Thing to Do?' Understanding, Applying, and Evaluating Ethical Theories in Western Film"

and Evaluating Ethical Theories in Western Film"

Faculty Sponsor: Matthew Bolton, Gonzaga University

RS5-d Alice Barry: "The Unnatural Becoming Natural: How Mistress Eyre Creates Spatial Power in the Transitional City"

Faculty Sponsor: Heather Easterling, Gonzaga University

RS5-e Tilly Blakesley: "The Subtlety of Alchemy: Formation of Alchemical Space in Early Modern London Theatre"

Faculty Sponsor: Heather Easterling, Gonzaga University

Session RS6 Room WEYR 204

Faculty Moderator: Alisha Epps, Whitworth University

RS6-a Molly Wilson: "Separate Sphere to Concentric Circles: Moll Cutpurse and the Third Space"

Faculty Sponsor: Heather Easterling, Gonzaga University

RS6-b Gladys Suarez: "London's Contradictions Transform into the Epicene: Eastward Ho! and The Roaring Girl"

Faculty Sponsor: Heather Easterling, Gonzaga University

RS6-c Analee Scott: "What's Foreign to You May Not Be Foreign to Them:
Investigating the Emic and Etic Experiences of International Students at
Gonzaga University"
Faculty Sponsors: Nicole Willms, Vikas Gumbhir and Mary Jeannot, Gonzaga

University

RS6-d Nick Neely: "Stokely Carmichael Biography Abstract" Faculty Sponsor: Marc Robinson, Whitworth University

**Session RS7** 

**Room WEYR 205** 

Faculty Moderator: Tara Lambert, Whitworth University RS9-a Hannah Mumm: "Trumpit: The Similarities between Brexit and Trump" Faculty Sponsor: Sean Swan, Whitworth University RS9-b Matthew Boardman, Phillip Bax, Austin Casey, Kalani Padilla, and Eamonn Epinga-Neff: "Conventions, Affordances, and Lessons of Visual Narratives" Faculty Sponsor: Fred Johnson, Whitworth University RS9-c Sarah Herington: "The Significance of the National Health Service in British Politics" Faculty Sponsor: Sean Swan, Whitworth University Session PS2 Room HUB MPR Faculty Moderators: William Hayes, Gonzaga University; Pam LeBret, Whitworth University; Kraig Wheeler, Whitworth University PS2-a Aaron B. Cleveland, Eric Perry, and Kristine Larson: "Geotechnical Engineering: The Impact of Water Content on the Unconfined Compressive Strength of Compacted Latah Creek Floodplain Soil" Faculty Sponsor: Richard Orndorff, Eastern University PS2-b Pedro Tomazzelli: "Dorothy Height" Faculty Sponsor: Marc Robinson, Whitworth University PS2-c Annika Perez-Krikorian and Jacqueline M. Bertagnolli: "Next to Normal: Exploring Mental Illness through Musical Theatre" Faculty Sponsor: Leslie Stamoolis, Gonzaga University PS2-d Chantae Avina and Brazee Smith: "The Effects of Direct Instruction Flashcards on Sight Words for a Middle School Student with an Intellectual Disability in a Self-Contained Special Education Classroom" Faculty Sponsor: Jennifer Neyman, Gonzaga University PS2-e Aspen Edwards: "The Effects of Cover, Copy, and Compare on the Spelling Accuracy of a High School Student with a Learning Disability" Faculty Sponsor: Jennifer Neyman, Gonzaga University PS2-f Yanell Magana and Alexis Kozyra: "The Effectiveness of Direct Instruction Mathematics on Teaching Numeral Identification to a High School Student with Down Syndrome in a Special Education Classroom" Faculty Sponsor: Jennifer Neyman, Gonzaga University

Room WEYR 304

**Session RS9** 

PS2-g	Samantha Romeo: "The Effect of Receptive Tact Training Flashcards on Developing Picture Identification of a Two-Year-Old Boy with Down Syndrome"
	Faculty Sponsor: Jennifer Neyman, Gonzaga University
PS2-h	Darby Stone: "The Effects of a Communication Board with Contingent Rewards on Appropriate Behavior of a 20-Year-Old Female with a Developmental Disability in a Special Education Classroom" Faculty Sponsor: Jennifer Neyman, Gonzaga University
PS2-i	Jacie White: "The Effects of Social Stories and a Token Economy on Decreasing Inappropriate Peer Interactions with a Middle School Student" Faculty Sponsor: Cynthia Caniglia, Gonzaga University
PS2-j	Nicole Duke: "How Social Media Influences Our Romantic Relationships" Faculty Sponsor: Lisa Silvestri, Gonzaga University
PS2-k	Kashish Choudhary: "Inhibition of Peroxidase Activity in Horseradish" Faculty Sponsor: Deanna Ojennus, Whitworth University
PS2-I	Reilly Bealer: "How Does Relatedness of Breeders Affect Reproductive Partitioning in the Acorn Woodpecker?"  Faculty Sponsor: Joseph Haydock, Gonzaga University
PS2-m	Emily Donnel and Hannah VanDellen: "Cold Tolerance in Melittobia Digitata" Faculty Sponsor: Mike Sardinia, Whitworth University
PS2-n	Haley Williams, Colton Long, and Zachary Halma: "The Effects of Blueberry Supplementation on the Rate of Neocytolysis" Faculty Sponsor: Mike Sardinia, Whitworth University
PS2-o	Matthew Stanley: "Effects of Uniaxial Tensile Strain on Moth Wings through Digital Image Correlation" Faculty Sponsor: Timothy Fitzgerald, Gonzaga University
PS2-p	Patrick Wilber: "Calcium and Magnesium in the Sediment of the Little Spokane River Watershed" Faculty Sponsor: William Ntow, Whitworth University
PS2-q	Blake Casagranda: "Mechanical Properties and Hydrogen Embrittlement Resistance of API 5L X60 Pipeline Steel in Welded and Seamless Grades" Faculty Sponsor: Patrick Ferro, Gonzaga University
PS2-r	Nathaniel Carleton: "GIS Survey of the Flying L Ranch" Faculty Sponsor: Betsy Bancroft, Gonzaga University

PS2-s	Colette Jayde Werk, Erik Robin Bruhjell, and Gabrielle Dianne Thompson: "When Objects Collide: A Proposal for the Mitigation of Vehicle-Wildlife Collisions in the Inland Northwest"  Faculty Sponsor: Betsy Bancroft, Gonzaga University
PS2-t	Alex Navarra: "Orthogenesis at Trent & Harvard" Faculty Sponsor: Andy Buddington, Spokane Community College
PS2-u	Joe Wilson: "Concentration of Hydrogen as a Function of Thickness of 304 Stainless Tensile Specimen" Faculty Sponsor: Patrick Ferro, Gonzaga University
PS2-v	Haylee Hamilton: "Sleep Disturbances in Pathological Amyotrophic Lateral Sclerosis Drosophila melanogaster Model" Faculty Sponsors: Jason Gerstner and Gary Chang, Gonzaga University
PS2-w	Seth Foust and Bradley Tiefenthaler: "Effects of Lavender Oil on Predator Odor Induced Anxiety in Rats" Faculty Sponsors: Alisha Epps and Patricia Bruininks, Whitworth University
PS2-x	Abigail Nye: "The Redemption of Mary's Image in Catholicism and Protestantism"  Faculty Sponsor: Karin Heller, Whitworth University
PS2-y	Garrett Wikum: "Solid-Liquid Equilibrium Behavior of Binary Mixtures using DSC" Faculty Sponsor: Trisha Russell, Whitworth University
PS2-z	Louisa Reilly: "Developing a Lactate Analogue for Use as a PET Tracer in the Brain to Detect Alzheimer's" Faculty Sponsor: Stephen Warren, Gonzaga University
PS2-aa	Lee Cantrell: "Absolute Configuration Determination of Sequiterpene Lactone Inuloxin A Based on Experimental and Computational Analysis of Chiroptical Properties"  Faculty Sponsor: Prasad Polavarapu, Vanderbilt University

Session IE1 Room WEYR 111

Faculty Moderators: Jessica Clements, Whitworth University; Osasere Evbuomwan, Gonzaga University

- IE1-a Christopher Apodaca: "'What are you really?': A Qualitative Approach to Learning about Identity Formation of Mixed Race Students"

  Faculty Sponsor: Nicole Willms, Gonzaga University
- IE1-b Jack VanderGriend: "Applying Synchronous and Asynchronous Online Communication to Academic Consultation"

	Faculty Sponsor: Jessica Clements, Whitworth University
IE1-c	Morgan Portlock: "Daisy Bates: Ferocious Civil Rights Fighter" Faculty Sponsor: Marc Robinson, Whitworth University
IE1-d	Breezie Rayas: "Faith in the Line of Fire" Faculty Sponsor: Karin Heller, Whitworth University
IE1-e	Abebaye Bekele: "White Allies of the Civil Rights Movement: Virginia Durr" Faculty Sponsor: Marc Robinson, Whitworth University
IE1-f	Abebaye Bekele: "Are Faulty Opinion Polls to Blame for Brexit?" Faculty Sponsor: Sean Swan, Whitworth University

#### **Afternoon Sessions**

2:15 p.m. - 3:45 p.m.

Session RS10 Room WEYR 203

Faculty Moderator: Pam LeBret, Whitworth University

RS10-a Lacy Nguyen: "Dismantling the Myth of the Model Minority: How Harmful

Stereotypes Effect Asian-American Women"

Faculty Sponsor: Doug Sugano, Whitworth University

RS10-b Kimberly Griggs: "An Interreligious Intervention: Transforming the Abortion

Debate into a Dialogue on Life"

Faculty Sponsor: Emily Clark, Gonzaga University

RS10-c Rachael Eaton: "The Ecumenical Movement in Latin America"

Faculty Sponsor: Lindy Scott, Whitworth University

RS10-d Rachel Murray: "Julian of Norwich: Ignored and Rediscovered"

Faculty Sponsor: Karin Heller, Whitworth University

RS10-e Kimberly Forster: "Would You Room with a Felon? A Study on Student

Perceptions and the Stigma of Convicted Felons on a College Campus" Faculty Sponsors: Nicole Willms and Vik Gumbhir, Gonzaga University

Session RS11 Room WEYR 204

Faculty Moderator: Brian Smith, Whitworth University

RS11-a Allison Rude: "Christie v. NCAA"

Faculty Sponsor: Julia Stronks, Whitworth University

RS11-b Brittney Murray: "Row, Row, Row, Repeat: A Study of the Experiences of

Division 1 Female Rowers"

Faculty Sponsors: Nicole Willms and Vik Gumbhir, Gonzaga University

RS11-c Dakota Peterson: "The Grass is Greener on the Other Side: The Subculture of

Environmentalism on a College Campus"

Faculty Sponsor: Nicole Willms, Gonzaga University

RS11-d Jess Albinson: "Navigating Gender and Sexual Identity in a 'Straight' World: A

Study of How LGBTQ+ College Students Talk about Romantic Relationships"

Faculty Sponsors: Nicole Willms and Vik Gumbhir, Gonzaga University

RS11-e Annica Balentine and Callen Aten: "Future Doctor or Future Mom? How

Undergraduate Women Choose to Pursue Medicine"

Faculty Sponsor: Vik Gumbhir, Gonzaga University

Faculty Moderator: Heather Easterling, Gonzaga University RS12-a Alexander Mowery: "What are the Implications of the Brexit Supreme Court Ruling on the UK's Devolution Settlements?" Faculty Sponsor: Sean Swan, Whitworth University RS12-b Ashlie Loring: "Is Euroscepticism Increasing?" Faculty Sponsor: Sean Swan, Whitworth University Alicia Heiser: "Examining Declining Voter Turnout in Post-Authoritarian Chile" RS12-c Faculty Sponsor: Laura Brunell, Gonzaga University Caralyn Diedrich: "It's a Match! A Study of the Use of Dating Apps at a Small RS12-d Catholic University" Faculty Sponsor: Vikas Gumbhir, Gonzaga University RS12-e Yeeun Hong: "A Model or a Minority? Asian International and Asian American Student Experiences of Racial Stereotypes at Predominantly White University" Faculty Sponsor: William Hayes, Gonzaga University **Session RS13** Room WEYR 303 Faculty Moderator: David Boose, Gonzaga University RS13-a Christina Parslow: "The Impact of Brexit on the Good Friday Agreement and Northern Ireland" Faculty Sponsor: Sean Swan, Whitworth University RS13-b Katlin Bowers: "A Legal Analysis of Collins v. Virginia" Faculty Sponsor: Julia Stronks, Whitworth University RS13-c Alana Fujimoto: "Would Brexit Have Occurred if Austerity Measures had Never Been Initiated?" Faculty Sponsor: Sean Swan, Whitworth University RS13-d Peter Lockhart Schoening: "Discrimination in the U.S. Political Asylum Process" Faculty Sponsor: Julia Stronks, Whitworth University RS13-e Grace Muljadi: "Objection! The Truth behind the Courtroom Drama" Faculty Sponsors: Vik Gumbhir, Nicole Willms, and William Hayes, Gonzaga

Session RS12

Room WEYR 205

University

**Session PS3** Room HUB MPR Faculty Moderators: Marianne Bracke, Whitworth University; Grant Casady, Whitworth University; David Sloan, Whitworth University PS3-a Alex Fergus: "Robert F. Williams: Civil Rights Activist & Revolutionary Nationalist" Faculty Sponsor: Marc Robinson, Whitworth University PS3-b Brian Hann: "James Morris Lawson, Jr. and His Career of Non-Violent Activism" Faculty Sponsor: Marc Robinson, Whitworth University PS3-c Kohlton Wilcox: "Lions vs. the Sun" Faculty Sponsor: Thom Caraway, Whitworth University PS3-d Jilliann Barta: "The Use of a Model-Lead-Test-Retest Procedure on a Kindergarten Student to Increase Sight Word Identification in a Home Setting" Faculty Sponsor: Jennifer Neyman, Gonzaga University PS3-e Claren Fraher: "The Effectiveness of Story Retelling on Reading Comprehension for a High School Student with a Specific Learning Disability in a Resource Room" Faculty Sponsor: Jennifer Neyman, Gonzaga University PS3-f Jordyn McKenna: "The Effectiveness of an Adapted Direct Instruction Math Strategy on the Development of Quantifying Numbers by Two Thirtenn-Year-Old-Boys with Special Needs in a Special Education Classroom" Faculty Sponsor: Jennifer Neyman, Gonzaga University PS3-q Madison Rose: "Using 'Interval Check-ins' to Implement 'Self-Monitoring' Skills During Peer Conversations for a High School Student with Autism Spectrum Disorder in a High School Resource Room" Faculty Sponsor: Jennifer Neyman, Gonzaga University PS3-h Calle Sullivan: "The Effectiveness of Repeated Reading on Reading Fluency of a 15-Year-Old Girl with a Learning Disability in an English Language Arts Special Education Resource Room" Faculty Sponsor: Jennifer Neyman, Gonzaga University PS3-i Molly White, Madison Rose, and Evelyne Namakula: "An Analysis Comparing the Effects of Two Interventions, iPad and Computer Typing, on the Rate and Accuracy of Augmentative Communication for an Adolescent with Autism" Faculty Sponsor: Jennifer Neyman, Gonzaga University Tristan Robins and Miguette Orren: "Examining the Factors that Contribute to PS3-j Faster and Slower Regional High School Cross Country Times in the United States of America" Faculty Sponsor: Robin Henager, Whitworth University

PS3-k Brian Lee: "Strategies in Disulfide Bond Formations to Stabilize X-Prolyl Amino Dipeptidases for Hydrolysis of Proline-Rich Amino Acid Sequences" Faculty Sponsor: Deanna Ojennus, Whitworth University PS3-I Megan Cavataio, Hillary Le, and Phillip Bax: "The Cognitive Effects of an Acute Dose of Dark Chocolate on the Deary-Liewald Four Choice Reaction Time Test" Faculty Sponsor: Mike Sardinia, Whitworth University PS3-m Devan McAllister, Courtney Kinniburgh, William Liening, and Claire Sick: "The Health of an Intertidal Ecosystem Determined Through the Distribution of Two Mollusk Populations and Water Quality Testing" Faculty Sponsor: Grant Casady, Whitworth University Bailey R. Luoma: "Soil Characteristics in Populations of MacFarlane's Four-O-PS3-n Clock (Mirabilis macfarlanei), a Threatened Endemic Plant" Faculty Sponsor: David L. Boose, Gonzaga University PS3-o Tia Kohs: "Quantifying Alpha and Beta Acids in Hops" Faculty Sponsor: Kerry Breno, Whitworth University PS3-p Garrett Westling, Jane Holmes, Lauren Vagt, and Sahale Riedel: "Nesting Preferences of the Resplendent Quetzal (Pharomachrus mocinno costaricensus) Based on Aquacatillo Tree (Persea caerulea) Density" Faculty Sponsor: Grant Casady, Whitworth University PS3-q Nick Kiourkas: "Sediment Characteristics in Riverbed and Upland Soil in the Little Spokane River" Faculty Sponsor: William Ntow, Whitworth University PS3-r Paige Hauter, Karli McIntyre, Ashley Trunnell, Ashley Abriam-Snell, and Julia Bellia: "Developing an Environmental Education Plan and Data Collection Protocol for Local Public Schools in the Spokane Area" Faculty Sponsor: Betsy Bancroft, Gonzaga University PS3-s Harika Echuri: "Physicochemical Properties of Soil at Verbrugge Environmental Center" Faculty Sponsor: William Ntow, Whitworth University PS3-t Nick Buechler and Joseph Nunley: "Unconfined Strength Test of Latah Creek Soils" Faculty Sponsor: Richard Orndorff, Eastern Washington University PS3-u Jordan Cossette: "Heat Treatment Effects on Hydrogen Exposure Mitigation for 304 Stainless Tensile Specimens" Faculty Sponsor: Patrick Ferro, Gonzaga University

PS3-v Jennifer Loehner: "Optimized Synthesis of Praziquanamine Alkyl Derivatives via Microwave Reductive Amination" Faculty Sponsor: Trisha Russell, Whitworth University PS3-w Mohammadhossein Farahmand, Gustavo Ferrari, and Jian Rzeszewicz: "The Effects of Stanozolol on Body Weight of Sedentary Rats" Faculty Sponsor: Mike Sardinia, Whitworth University PS3-x Nam Nguyen: "Development of a Survey to Investigate Study Abroad Destination Choice" Faculty Sponsor: Chad Gotch, Washington State University PS3-y Shelby Bailess: "Glial Regulation of Sleep/Wake in Drosophila melanogaster" Faculty Sponsor: Jason Gerstner, Gonzaga University PS3-z Zack Halma, Mikaela Loudon, Sean Park, and Jian Rzeszewicz: "A Survey of Potential Habitat Species for Tent-Making Bats in Bijagual Nature Reserve" Faculty Sponsor: Grant Casady, Whitworth University PS3-aa Aaron B. Cleveland and Nick Buechler: "Geotechnical Engineering Properties of Mt. Mazama Ash and its Influence on the Strength of Latah Creek Floodplain Soils" Faculty Sponsor: Richard Orndorff, Eastern Washington University PS3-bb Zoe Dugdale: "Measuring How Mineworkers Spend Their Time: Results from the American Time Use Survey, 2014-2016" Faculty Sponsors: Anna Tresidder and Patricia Richards, Eastern University

#### **List of Student Presenters**

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