THE 15TH ANNUAL SPOKANE INTERCOLLEGIATE RESEARCH CONFERENCE

SATURDAY, 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

*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.

RS = Regular (Paper) Session  PS = Poster Session  IE = Ideas Exchange
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 RS1      Room WEYR 203
Faculty Moderator: Patrick Ferro, Gonzaga University

RS1-a  Bryn Cavin: “Whitman’s Use of Dualism in His Poems of Identity”  
Faculty Sponsor: Laurie Lamon, Whitworth University

Faculty Sponsor: Heather Easterling, Gonzaga University

Faculty Sponsor: Ana Roncero-Bellido, Gonzaga University

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      Room WEYR 204
Faculty Moderator: Alisha Epps, Whitworth University

RS2-a  Tayler Humphrey: “Shattering the Systemic Glass Ceiling: Gender Differences in Leadership”  
Faculty Sponsor: Patricia Bruininks, Whitworth University

RS2-b  Michael Liuzzi and Alexandra Pardico: “Friendships, Networks, and Moods”  
Faculty Sponsors: Anna Marie Medina and Gary Thorne, Gonzaga University

RS2-c  Kathryn Holtzheimer: “The Effects of Expected Motivation on Actual Motivation”  
Faculty Sponsor: Wendy Bleecker, Whitworth University

Faculty Sponsor: Nicole Willms, Gonzaga University

RS2-e  Austin Johnson: “Against the Odds: Former Foster Children’s Experience”  
Faculty Sponsor: Vikas Gumbhir, Gonzaga University
Session RS3
Faculty Moderator: Lisa Laurier, Whitworth University

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 Moderator: Julia Stronks, Whitworth University

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

RS4-b Pema Tshogyal: “How Central is Nigel Farage to Brexit?”
Faculty Sponsor: Sean Swan, Whitworth University

RS4-c Luke Atherton: "The Impact of JASTA”
Faculty Sponsor: Julia Stronks, Whitworth University

RS4-d Hanna Gillingham: “The British-Irish Council as a Post-UK Formation”
Faculty Sponsor: Sean Swan, Whitworth University

RS4-e Hannah Howell: “To Pee or Not to Pee: A Legal Analysis and Advisory Statement for U.S. Public Schools Concerning Transgender Students and Equal Access to Sex-Segregated Public Facilities”
Faculty Sponsor: Julia Stronks, Whitworth University
Session PS1

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

PS1-g  Kelley O’Toole and Annie Heller: “The Effects of an Alternating Patterns 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

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 13-Year-Old Student with an Intellectual Disability in a Special Education Classroom”  
Faculty Sponsor: Jennifer Neyman, Gonzaga University
Olivia Bartlett: “Injury-related Anxiety as a Psychological Barrier in Return to Play”
*Faculty Sponsor: Cynthia Wright, Whitworth University*

Ashley Yang: “Berberine Uptake in HepG2 Cells”
*Faculty Sponsor: Trisha Russell, Whitworth University*

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*

Jacqueline Reid and William Henzler: “L-Theanine Effects on Memory and Cognition in Swim-Low Rats”
*Faculty Sponsor: Mike Sardinia, Whitworth University*

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*

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*

Brian Hamm: “Assessing Bird Diversity in the Saltese Uplands Conservation Area Using Bioacoustic Monitoring and Cluster Analysis”
*Faculty Sponsor: Methea Sapp, Spokane Community College*

*Faculty Sponsor: Betsy Bancroft, Gonzaga University*

Paul Leonetti: “Lake Arthur Community Project”
*Faculty Sponsor: Betsy Bancroft, Gonzaga University*

Austin Cassity: “Characterization of the Cyclization of Sucralose Derivatives under Basic Conditions”
*Faculty Sponsor: Trisha Russell, Whitworth University*

Annika Barnett: “The Effect of Local Muscle Cooling on Muscle Activation and Fatigue”
*Faculty Sponsor: Ryan McCulloch, Gonzaga University*

*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*

*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 11:00 a.m. – 12:30 a.m.

Session RS5 Room WEYR 203
Faculty Moderator: Lisa Laurier, Whitworth University

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"
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

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  
Faculty Moderator: Sean Swan, Whitworth University  
Room WEYR 205

Faculty Sponsor: Lisa Silvestri, Gonzaga University

RS7-b Samantha Louie: “Now Trending...#BlackMirror”  
Faculty Sponsor: Claudia Bucciferro, Gonzaga University

RS7-c Joshua M. Jacobs: “The Journey Walked on Water: An Analysis of the Christ Narrative as an Archetypal Hero”  
Faculty Sponsor: Lisa Silvestri, Gonzaga University

RS7-d Kolby Cameron: “Class v. United States: A Judicial Analysis”  
Faculty Sponsor: Julia Stronks, Whitworth University

RS7-e Boitumelo Nkonde: “How Influential was the New Media in the Brexit and Scottish Independence Debate?”  
Faculty Sponsor: Sean Swan, Whitworth University

Session RS8  
Faculty Moderator: Richard Cangelosi, Gonzaga University  
Room WEYR 303

RS8-a Bailey Englin, Rachael Kuhn, and Russell Ford: “Patterns in Klein Links”  
Faculty Sponsors: Vesta Coufal and Kate Kearney, Gonzaga University

Faculty Sponsors: Claudia Bucciferro and Ann Ciasullo, Gonzaga University

RS8-c Laura Miller: “Materials Engineering, Investment Casting, and Additive Manufacturing as an Intersection of Visual Art”  
Faculty Sponsor: Patrick Ferro, Gonzaga University

RS8-d Dee Dee Brown, Sarah Godbehere, and James Sulser: “Addressing the Issue of Food Loss and Waste at Gonzaga University’s Main Dining Facility: A Holistic Systems-Based Approach”  
Faculty Sponsor: J. Alexander Maxwell, Gonzaga University

RS8-e Gabriella Bulman and Suhail Rajah: “Global Gene Expression Analysis in the Absence of a Non-Receptor Tyrosine Kinase during Post-Embryonic Development of the Nematode C. elegans”  
Faculty Sponsors: Aaron Putzke and Kent Jones, Whitworth University
Session RS9
Faculty Moderator: Tara Lambert, Whitworth University

RS9-a Hannah Mumm: “Trumpit: The Similarities between Brexit and Trump”
Faculty Sponsor: Sean Swan, Whitworth University

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
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
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-l  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

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

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  

Session RS10  
Faculty Moderator: Pam LeBret, Whitworth University

RS10-a  
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  
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  
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
Session RS12  
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

RS12-c  Alicia Heiser: “Examining Declining Voter Turnout in Post-Authoritarian Chile”  
Faculty Sponsor: Laura Brunell, Gonzaga University

RS12-d  Caralyn Diedrich: “It’s a Match! A Study of the Use of Dating Apps at a Small 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  
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 University
<table>
<thead>
<tr>
<th>Session PS3</th>
<th>Room HUB MPR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Faculty Moderators:</strong> Marianne Bracke, Whitworth University; Grant Casady, Whitworth University; David Sloan, Whitworth University</td>
<td></td>
</tr>
</tbody>
</table>

| 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 Thirteen-Year-Old-Boys with Special Needs in a Special Education Classroom”  
**Faculty Sponsor:** Jennifer Neyman, Gonzaga University |
**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 |
| PS3-j       | Tristan Robins and Miquette Orren: “Examining the Factors that Contribute to 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*

*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*

PS3-n  Bailey R. Luoma: “Soil Characteristics in Populations of MacFarlane’s Four-O-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 Aguacatillo 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: “Physiochemical 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*
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Mohammadhossein Farahmand, Gustavo Ferrari, and Jian Rzeszewicz: “The Effects of Stanozolol on Body Weight of Sedentary Rats”  
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Nam Nguyen: “Development of a Survey to Investigate Study Abroad Destination Choice”  
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Shelby Bailess: “Glial Regulation of Sleep/Wake in Drosophila melanogaster”  
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