Seven Rivers
Undergraduate
Research Symposium

QUICK REFERENCE



Seven Rivers Undergraduate Research Symposium

Welcome to the 2016
Seven Rivers Undergraduate Research Symposium!

This Quick Reference is designed to help you navigate and make the most of today's Symposium. In addition to the materials found here, you can find the Seven Rivers Abstract Book,
Oral Presentation Evaluation Criteria, Alphabetical Lists of Student Presenters and much more on our website:

www.viterbo.edu/sevenrivers.

If you have questions at any point throughout the day, please come to the Registration Table in the Fine Arts Center Atrium or approach a Student Ambassador (with the green nametags).

Thank you and we hope you enjoy today's Symposium!



Symposium Schedule

9:00-10:10am Registration (Fine Arts Center Atrium)

- Light refreshments will be provided.
- Research and creative works posters may be set up at this time.

10:10am-11:20am

Welcome and Keynote Address (Fine Arts Center Main Theatre)

- Welcome, President Richard Artman, Ph.D.
- Prayer, Amanda Vetsch '17, Biology
- Speaker Introduction, Jed Barton '17, Biopsychology
- Keynote address: Jim Bailey, MD, "End of Healing"
- Closing and Event Reminders, Kirsten Gabriel, Director of Undergraduate Research and Service-Learning

11:20am-12noon

Break & Distribution of Sack Lunches in the Fine Arts Center (FAC)

- ** Lunch is provided for registered participants only **
- Seating is available in the Fine Arts Center Main Theatre Lobby, the Reinhart Center Boardroom, and the Nursing Center First Floor Foyer.
- Research and creative works posters will also be available for viewing in the Reinhart Center Boardroom, FAC Main Theatre Lobby, & the Nursing Center First Floor Foyer.

12noon-2:00pm

Oral Presentations (Reinhart Center and School of Nursing Building)

- > Presentations consist of a 10-12 minute talk followed by 2-3 minutes for questions. There will be a 5-minute break between presentations.
- Quick References are available in the Fine Arts Atrium; the Alphabetical Listing of Presenters, Abstract Book, and Oral Presentation Assessment Criteria are available online at www.viterbo.edu/sevenrivers.

2:00-4:00pm

Poster Sessions (Reinhart Center Boardroom, Fine Arts Center Main Theatre Lobby, School of Nursing First Floor Foyer and Room 195)

- Research and creative works posters will be staffed by student researcher(s).
- ➤ Even-numbered posters will be staffed for the first hour and oddnumbered posters will be staffed for the second hour.

4:00-4:30pm

Awards Reception and Closing (Fine Arts Center Main Theatre Lobby)

> Join us for cake, punch, awards, and some relaxed time for socializing.



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Lunch Locations

While you are free to eat your lunch wherever you like, the following spaces have been set aside for you (see the campus map on the back page):

Fine Arts Center Main Theatre Lobby

Reinhart Center Board Room

Nursing Center First Floor Foyer

Honors Program Lunch with Dr. Jim Bailey: Fine Arts Center Hospitality Suite (RSVP required)

You are also encouraged to peruse the research posters set up in the Reinhart Center Boardroom, the Fine Arts Center Lobby, and the School of Nursing First Floor Foyer. Please note posters in School of Nursing Room 195 will be set up during the lunch period. Please approach a Student Ambassador (with the green nametags) if you have any questions.

Oral Presentation Rooms Assignments by Time Slot and Room

RC=Reinhart Center, NRC = School of Nursing Building

Time Slot	<u>Room</u>	Research Area	<u>Presenter</u>	<u>Institution</u>	Presentation Title
12noon	RC 201	Biology	Jeremy Heinle	St. Mary's Univ. of MN	Vascular Endothelial Growth Factor-B expression in Mice (Mus musculus) Exposed in utero to Atrazine
12:20pm	RC 201	Biology	Emma Akemann	Viterbo University	Luminol Detection of Blood Spatter After Exposure to Fire
12:40pm	RC 201	Molecular Biology	Acacia Wimmer	St. Mary's Univ. of MN	Expression of Hepatic Acetyl-CoA Carboxylase (ACACA) in Mice (Mus musculus) exposed in utero to atrazine
1pm	RC 201	Biology	Tori Voight	Viterbo University	Antigen specificity in symbiotic microbe-immune interactions
1:20pm	RC 201	Molecular Biology	Raelynn Speltz	St. Mary's Univ. of MN	Expression of Neuropilin-1 and VEGF-α in Mice (Mus musculus) brain tissue exposed in utero to atrazine
1:40pm	RC 201	Biology	Ruth Lee	Viterbo University	Effects of Thapsigargin and Concanavalin on Jurkat T-Cell IL-2 production
12noon	RC 130	Chemistry	Elizabeth Lawrence	Viterbo University	Determining the Leaching Rate of Florfenicol in Incorporated and Top-Coated Medicated Fish Feed
12:20pm	RC 130	Math	L. Buchanan, A. Ching, C. Magyar, H. Wu	UW-Eau Claire	The Moduli Space of Complex 2 3-dimensional Associative Algebras
12:40pm	RC 130	Combinatorics	Rita Post, Ryan Stodola, Jingtai Lui	UW-Eau Claire	Permutation Statistics in the Hyperoctahedral Group
1pm	RC 130	Chemistry	Will Jeffries	Viterbo University	Mn-doped ZnSe Quantum Dots for Optical Sensing
1:20pm	RC 130				
1:40pm	RC 130				
12noon	RC 127	Biology	Cassandra Barancyzk	Viterbo University	Winner and loser effects and the role of dominance hierarchies in the aggressive behavior of the Madagascar Hissing
12:20pm	RC 127	Biology	Ben Coleman	St. Mary's Univ. of MN	The Effects of TBX2 on Epiregulin Expression and ERK1/ERK2 Activation in MDA-MB-468 Cells
12:40pm	RC 127	Biology	Jessica Wisniewski	Winona State Univ.	Preliminary Study on Soil Richness and Diversity of
1pm	RC 127	Biology	Fangluo Chen	McDaniel College	Invertebrates in Three Different Habitats Visualizing Expression Patterns of neurexin genes in Zebrafish
1:20pm	RC 127	Biology	Courtney Lynch	St. Mary's Univ. of MN	to Identify Potential Receptors for Neuer1 Epiregulin Enhances Growth of MCF10A Mammary Epithelial Cells and Prevents Apoptosis
1:40pm	RC 127		-		dens and trevents ripoptosis

Oral Presentation Rooms Assignments by Time Slot and Room

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Time Slot	Room	Research Area	<u>Presenter</u>	Institution	Presentation Title
12noon	NRC 101	Philosophy	Amber Drewek	Viterbo University	Exploring the history of the Amish religion with regards to their baptism rituals
12:20pm	NRC 101	Spanish/Literature	Elaine Anderson	UW-La Crosse	Income inequality "In the Heights": The roles of gentrification and unjust urban planning in predominantly Latino immigrant neighborhoods
12:40pm	NRC 101	Literary Research	Erik Engelstad	Viterbo University	Latin American Poet Jorge Luis Borge's "Fervor de Buenos Aires"
1pm	NRC 101	Political Science	Dennis Brown	Viterbo University	Messaging in the 2016 Election
1:20pm	NRC 101	Music/History	Abigail Hall	Viterbo University	Music in the American Civil War: Developing American Culture
1:40pm	NRC 101	Creative Writing	Rachel Fries	Viterbo University	A Stranger in My Veins: Recounting My Myelofibrosis Diagnosis One Memory at a Time
12noon	NRC 104	Psychology	Christina Weldai	St. Mary's Univ. of MN	The exercise duration needed to gain cognitive and emotional benefits, when does it become most evident?
12:20pm	NRC 104	Psychology	Caitlin Miller	UW-Eau Claire	Insights into Writing in APA Style
12:40pm	NRC 104	Psychology	Sydney Eckert	Viterbo University	Examining Satisfaction and Gratitude in Married Couples
1pm	NRC 104	Sociology	Michelle Wagner and Yixuan Zhao	UW-Eau Claire and UW-Madison	An Analysis of Daily Activities and Their Associations of the Chinese Elderly
1:20pm	NRC 104				difficate Blacerty
1:40pm	NRC 104				

Poster Presentations by Room and by Number

<u>KEY</u>: RCB=Reinhart Center Boardroom, MTL=Fine Arts Center Main Theatre Lobby, NRC Foy=Nursing Center First Floor Foyer, NRC 195=Nursing Center Room 195

Room	Poster #	<u>Discipline</u>	<u>Institution</u>	<u>Presenters</u>	<u>Poster Title</u>
RCB	1	Chemistry	Viterbo University	Tristyn Forget	Efforts Toward the Synthesis of Leucophytalin C
RCB	2	Chemistry	Luther College	Matthew Amann	Analyzing the Binding Relationship of Curcuminoids to Human Serum Albumin Using Steady State Fluorescence
RCB	3	Astronomy	UW-La Crosse	Rebecca Taylor	Finding New Galactic Interstellar Neutral Hydrogen Shells
RCB	4	Math	UW-Eau Claire	Haotian Wu, Christopher Magyar, Lucas Buchanan, Ai Lie Ching	The Moduli Space of Complex 2 3-dimensional Associative Algebras
RCB	5	Biochemistry	Viterbo University	Kyle Ernzen	Determination of DNA Binding Interactions for Individual Constructs of the PICKLE Protein's DNA Binding Domain in A. thaliana
RCB	6	Chemistry/Biochemistry	UW-Eau Claire	Stanford Mitchell and Olivia Hurst	Nanoparticle Effect on the Structure and Catalytic Function of E. coli Prolyl-tRNA Synthetases
RCB	7	Biochemistry	UW-La Crosse	Jake Faultersack, Jack Geiger, Brianna Haight	Interactions between model peptide antibiotics and lipid vesicles depend on peptide charge distribution and structure
RCB	8	Biochemistry	St. Olaf College	Laura Muehlbauer	Inhibition, binding affinity, and substrate specificity of human mitochondrial RNase P
RCB	9	Biology	UW-La Crosse	Christian Montes	Using DNA sequencing and microscopy to gather needed data on three mushroom candidates for the IUCN Red List
RCB	10	Biology	Waldorf University	Gulnara Novbatova	Characterization of PKA regulatory subunit, PRKAR1, in zebrafish
RCB	11	Biology	Edgewood College	Dominic Egizi	Designing an efficient and selective DNA detection cycle using catalytic G-quadruplex production

RCB	12	Biology	Waldorf University	Rick Young	DNA Damage Associated with Muscular Dystrophy
RCB	13	Biology	St. Mary's Univ. of MN	Jordyn Messling and Sarah Laska	The impact of the dietary supplement HemoHIM on humoral and cell mediated immunity
RCB	14	Biology	UW-La Crosse	Amanda Bradley	Plant host and geospatial effects on diversity of leaf- associated fungi in a tropical island ecosystem
RCB	15	Bio-Engineering	UW-Platteville	Jessica Symons	Determining Biochemical Response of Single Human Colorectal Carcinoma Cell to Cesium Using Microfluidics and Raman Spectroscopy
RCB	16	Biology	UW-La Crosse	Benjamin Schilz	Who got there first? Effects of yeast/bacterial colonization patterns on biofilm structure in kombucha
RCB	17	Biology	Edgewood College	Brooke Gillitzer	Celastrus orbiculatus and Celastrus scandens differentiation using G-quadruplexes
MTL	**				
MTL	18	Biology	Viterbo University	Brooke Johnston	The Effects of Stress on Tau Build-up in Long Evans Rats
MTL	19	Environmental Chemistry	UW-La Crosse	Phoenix Rogers, Marissa C. Despins, Khadel Akindolire-King	Methylmercury Contamination in the Lower Food Web of At-Risk Minnesota Rivers
MTL	20	Biology	Viterbo University	Desirae Schuh	Preference of Natural Sugar vs. Artificial Sweetener in Long-Evans Rats
MTL	21	Archaeology/GIS	UW-La Crosse	Andrew Anklam	Using LiDAR to Identify Historic Features in the Superior National Forest
MTL	22	Biology	Viterbo University	Ryan Cook	Shifts in antimicrobial gene expression in mouse model of self-antigen driven inflammatory bowel disease
MTL	23	Biology	Viterbo University	Chris Pasquale	Growth Comparison Between Three Varieties of Yellow Beans

MTL	24	Sustainability	Viterbo University	Tamara Anderson	Familiarization with the FSPA's Organic Garden Processes through Research on the Highest Producing Tomato Plant Varieties
MTL	25	Sustainability	Viterbo University	Janelle Earle	Effects of Endomycorrhizal Inoculant on Garlic Performance - FSPA Organic Garden
MTL	26	Sustainability	Viterbo University	Amanda Vetsch	Pests, Powder, and Permethrin: Eliminating Insects and Diseases in an Organic Garden
MTL	27	Social Work	Viterbo University	Rachel Brennan, Angi Hoch, Mallory Gehrmann	Examining the need for safe, stable housing in the Powell-Poage-Hamilton Neighborhood
MTL	28	Social Work	Viterbo University	Mollie Huepfel, Abby Hines, Janelle Earle	Impact of Revitalization on La Crosse Neighborhood Environments
MTL	29	Social Work	Viterbo University	Samantha Clark, Tori Hansen, Mercades Stark	Improper Disposal Methods of Hypodermic Needles and Medication in La Crosse Neighborhoods
MTL	30	Social Work	Viterbo University	Stacy Lehman, Katelyn Kaiser, Stephanie Varilek	Desire for a Food Oasis in a Food Desert
NRC 195	**				
NRC 195	31	Psychology	Winona State	Alyssa Klenotich	Exploring the Generalizability of a Self-As-Doer Intervention
NRC 195	32	Psychology	University of St. Thomas	Shelby Doherty, Tim Kohlmann, Kristina Bridger	A Historical View of Solitary Confinement: 1800 to mid-1900s
NRC 195	33	Psychology	Winona State	Jennifer Gauerke	The Effects of Biogenetic Explanations on Stigmas of Psychological Disorders
NRC 195	34	Psychology	Viterbo University	Dana Reedy	Health Behaviors Associated with Substance Use Disorder Recovery
NRC 195	35	Psychology	St. Mary's Univ. of MN	S. Lardy, E. Leif, K. Wobbe, K. Nicoson, B. Mockler, H. Potter, M. Martinez	#fitspiration: Social Media's Influence on Thin versus Fit Body Image Ideals

NRC 195	36	Psychology	University of St. Thomas	Stephanie Peters, Benjamin Bassier, Cortez Tillman	A Comparison of Social Management within Education: The 1920's vs 1960's
NRC 195	37	Psychology	Viterbo University	Hollyann Niemiec	The Prevalence of Mind-wandering in the Recovery Population
NRC 195	38	Psychology	UW-Eau Claire	Saudamini Agarwal and Samantha Storzer	Use or Reuse: How do university students consume liquids on campus?
NRC 195	39	Psychology	Viterbo University	Natalie Semrad	Exploring Relationship Maps Within the Substance Abuse Population
NRC 195	40	Psychology	Winona State	Samantha Lee & Grady Friedges	"Now it's get good grades to get a good job": A Qualitative Analysis of Motivation to Achieve Academically among Collegiate Athletes
NRC 195	41	Psychology	Winona State	Samantha Lee	Narcissism, Likability, and Extraversion: A Quantitative Analysis on the Perception of a Strangers' Instagram Profile
NRC 195	42	Psychology	University of St. Thomas	Erin Brine-Doyle, Megan Vaughan, Julie Plutt	Perceptions of Women's Mental Illness in a Changing Social Context
NRC 195	43	Psychology	Viterbo University	Allison Purvis	The Associations Between Level of Stress, Perceived Effect of Stress on Health, and College GPA
NRC 195	44	Psychology	University of St. Thomas	Melanie Brothers, Rachael Romnek, Zeinab Aden	Complexities of genocide: A historical analysis
NRC 195	45	Psychology	UW-Eau Claire	Nensi Xhunga and Lane Coulter	The Spread of Manspreading
NRC 195	46	Psychology	Viterbo University	Xavier Smart	Nature Experiences and Knowledge about the Natural World
NRC 195	47	Psychology	Viterbo University	Sydney Eckert	Examining Satisfaction and Gratitude in Married Couples
NRC 195	48	Psychology	Winona State	Ben Coady	Spirituality, Parental Support and their Effects Upon Well-being, and Flourishment

NRC Foy	**				
NRC Foy	49	Social Psychology	Winona State	Cassidy Kleven	The Decoy Effect
NRC Foy	50	Social Psychology	Viterbo University	Maria Michels	Why Won't You Just Listen to Me? Study About the Willingness to Compromise Between Liberals and Conservatives
NRC Foy	51	Nursing Ethics	Viterbo University	Tyler Rehnelt, Marissa Pieper, Jessica Sims, Nicole Fronek	Moral Triage: Admitting Social Ethics into Nursing Practice
NRC Foy	52	Nutrition & Dietetics	Viterbo University	Samuel McCormick	Dietary Intake and Fasting Blood Glucose in Individuals with Pre-Diabetes
NRC Foy	53	Nutrition & Dietetics	Viterbo University	Rebecca Brannan	Diabetes Education for Better Self-Management
NRC Foy	54	Nutrition & Dietetics	Viterbo University	Dana Swope	The Effect of Dietary MUFA's on Resting Energy Expenditure in Pre-Diabetic Individuals
NRC Foy	55	Nutrition & Dietetics	Viterbo University	Rebecca Brannan, Sam McCormick, Grace Huebner, Dana Swope	Lipid Panel and Fasting Blood Glucose Analysis of Invididuals with Pre-Diabetes
NRC Foy	56	Nutrition & Dietetics	Viterbo University	Grace Huebner	Eight Week Dietary Intervention of The Effect of Pecans on Cardio-Metabolic Parameters: Body Composition
NRC Foy	57	Sociology	Viterbo University	Chantel Schulze, Elizabeth Knothe, Patricia Esparza	It's a Beautiful Day in the Neighborhood: Leveraging Community Assets and Anchor Institutions in South La Crosse
NRC Foy	58	Business	Viterbo University	Katie Mormann	State of the Workforce 2016/2017: Employee Retention & Satisfaction
NRC Foy	59	Servant Leadership	Viterbo University	Kate Willadsen	Breaking Down Language Barriers for English Language Learners
NRC Foy	60	Education	Viterbo University	Danielle Gille	Serving in South Africa

NRC Foy	61	Art and Psychology	Viterbo University	Sara Wisniewski	The Impact of Art Therapy on Youth
NRC Foy	62	English and Psychology	Viterbo University	Jessi Lawrence	Creativity: Necessity For Development or Wasted Outlet
NRC Foy	63	English	Viterbo University	Ivy King	Analyzing Historical and Cultural Perspectives of Women's Roles in the Early Modern Period through John Webster's The Duchess of Malfi

Notes



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