From the College’s Mission Statement

The Gustavus curriculum is designed to bring students to mastery of a particular area of study within a general framework that is both interdisciplinary and international in perspective. The College . . . seeks to promote the open exchange of ideas and the independent pursuit of learning.

Welcome to the sixth annual Celebration of Creative Inquiry, a showcase of research, scholarship, and creative work by Gustavus Adolphus College students! We hope you enjoy learning about the creative inquiry our undergraduate students engage in every day at Gustavus Adolphus College, and we hope you will learn about some projects in disciplines other than your own. As you will see, these kinds of projects provoke the intellect and stimulate the learning process—the heart of a true liberal arts education.

Creative inquiry is an intentionally broad term that includes research, scholarship, and creative works. Creative inquiry may be initiated

… as part of a class assignment or project;
… by the student or group of students, on- or off-campus;
… by the faculty member, as in student-faculty collaborative research projects.

And the definition of creative inquiry varies by discipline but includes

… asking a question that has not been asked before;
… a process that attempts to fill a gap in or create new knowledge, information, or art;
… a process or product that requires the student to add ideas or imagination of their own;
… a project that is shaped by choices that the student made independently;
… a component of critical reflection.

~ Tom Huber
Faculty Associate for Undergraduate Research,
John S. Kendall Center for Engaged Learning

This event is supported by the Provost’s Office, the Office of Marketing and Communication, and the John S. Kendall Center for Engaged Learning.

Special thanks to Cathy Blaukat for organization and administrative support, Physical Plant and Dining Service for their assistance in setting up and arranging this event, and all the faculty and student volunteers who helped to make this event possible!

The John S. Kendall Center for Engaged Learning supports faculty in achieving their potential as teachers and scholars. Responsive to the professional needs and interests of each faculty member, the Kendall Center includes support for teaching initiatives and faculty research, scholarship, creativity, and provides on-campus opportunities for focused conversation on pedagogy, assessment of student learning, and collaboration among colleagues. Through its support of such opportunities, the Kendall Center fosters the pursuit of teaching and scholarly excellence throughout all stages of each faculty member’s career and for all Gustavus students. Undergraduate research is one of the primary areas supported by the Kendall Center that demonstrates faculty and student engagement in learning.
Participants

Kelsey Abele, Cadi Kadlecuk (Forensics)
Sponsor: Cadi Kadlecuk, Forensics
Three Crowns Room, Session B
“Bridging the Gap between Forensics and the Youth Community: Priming the Next Generation”

Christopher Anderson (Lewis and Clark College), Marion Scheepers (Boise State University), Marlena Warner (University of Idaho), Helen Wauck
Sponsor: Max Hailperin, Mathematics and Computer Science
Three Crowns Room, Session A
“Ciliate Genome Remodeling”

Lauren Anderson
Sponsor: Anna Versluis, Geography
Three Crowns Room, Session B
“Somali Immigrant Relations in a Rural Midwestern Town”

Anna Ayers Looby
Sponsor: Mimi Gerstbauer, Peace Studies
Three Crowns Room, Session A
“The Warfare of Rape: Destruction of Peace at Its Core”

Brin Bailey, Dawn Comstock, Kyle Hilding, Maggie Lane, Michelle Myers, Michaela Rice
Sponsor: Dave Newell, Center for Servant Leadership
Three Crowns Room, Session B
“Understanding Civility through Community-Based Research”

Katie Barta, Sam Good
Sponsor: Jim Dontje, Environmental Studies
Three Crowns Room, Session A
“Sustainability at Gustavus: Biking Initiatives”

Katie Barta
Sponsor: Jim Dontje, Environmental Studies
Three Crowns Room, Session B
“Gustavus Garage Sale”

Emily Batchelder
Sponsor: Lynnea Myers, Nursing
Three Crowns Room, Session B
“Effect of Summer Institute on High School Students’ Perceptions of Pursuing a Nursing Career”

Elsa Bell
Sponsor: Anna Versluis, Geography
Three Crowns Room, Session A
“Benefits of Urban Gardening”

Eli Benz, Kat Dahl
Sponsor: Mike Ferragamo, Biology
Three Crowns Room, Session B
“The Effect of Scopolamine Bromide on Spatial Learning by Rats”

Zachary Harrison Blinkinsop, Krystal Bundy, Ian Decker, Reanna Phillips, Kenwon Tran, Amanda Wood
Sponsor: Scán Easton, Classics
Three Crowns Room, Session A
“The Rhythm of Love: A Metrical Performance of Catullan and Horatian Poetry”

Laurel Boman
Sponsor: Eric Dugdale, Classics
Three Crowns Room, Session B
“The Ethnic Medea on the American Stage: Colonization and Decolonization through the Classics”

Kendra M. Braegelmann
Sponsors: Jan Wotton, Neuroscience and Mike Ferragamo, Neuroscience
Three Crowns Room, Session A
“Relationship between Salicylate Induced Tinnitus and Circadian Rhythm”

Elizabeth Brauer, Steffanie Larson
Sponsor: Ana Adams, Modern Languages, Literatures, and Cultures
Three Crowns Room, Session A
“Engaging Minority Entrepreneurship: A Partnership in Support of the Entrepreneur Doorway Project”

Amy M. Brooks
Sponsor: Heidi Meyer, Nursing
Three Crowns Room, Session A
“Exploring First Year College Students’ Perception and Knowledge of Digital Abuse”

Tram Bui
Sponsor: Peg O’Connor, Philosophy
Three Crowns Room, Session B
“The Philosophy of Sexual Addiction and Recovery”
Daniel Burnett  
Sponsor: Kara Barnette, Philosophy  
*Three Crowns Room, Session B*  
“Foundations of Harm, Foundations of Knowledge”

Matt Bye  
Sponsor: Mark Bjelland, Geography  
*Three Crowns Room, Session A*  
“Parishes without Borders: Congregational Geography in Minneapolis and St. Paul”

Kristen Campbell  
Sponsor: Carolyn Dobler, Mathematics and Computer Science  
*Three Crowns Room, Session B*  
“Tobacco Use by Women during Pregnancy”

Mia M.S. Cannon  
Sponsor: Mimi Gerstbauer, Peace Studies  
*Three Crowns Room, Session A*  
“Rehabilitating Child Soldiers”

Nora Christensen, Michael Howe  
Sponsor: Thomas Gardner, Chemistry  
*Three Crowns Room, Session B*  
“Synthesis of the Bifacial Ligand, 1,6,7,12-Tetraazaperylene: A New Approach”

Matthew Collins, Ryan Williams, Olivia Johnson  
Sponsor: Bruce Van Duser, Health & Exercise Science  
*Three Crowns Room, Session B*  
“Comparison of Plyometric Training and Traditional Run Training on Two-Mile Run Performance”

Cory Colvard, Cory Anderson  
Sponsor: Stephanie Otto, Health & Exercise Science  
*Three Crowns Room, Session A*  
“The Effects of Creatine Monohydrate on 2-Mile Run Time”

Austin Conrad  
Sponsor: Doug Huff, Philosophy  
*Three Crowns Room, Session B*  
“The Hobbit and The Dark Knight Rises: Aristotle in Modern Literature”

Grant Cooper  
Sponsor: Laura Triplett, Geology  
*Three Crowns Room, Session B*  
“Mapping Tree Growth and Survivorship in Monteverde, Costa Rica”

Susan Crane  
Sponsor: Eric Dugdale, Classics  
*Three Crowns Room, Session B*  
“Divine Suffering and the Human Experience”

Amanda Croonquist  
Sponsor: Mimi Gerstbauer, Peace Studies  
*Faculty/Staff Lounge, Session B*  
“Alternative Methods of Incarceration”

Teige Cudahy  
Sponsor: Anna Versluis, Geography  
*Faculty/Staff Lounge, Session B*  
“Are We Happy Here? A Proposed Study of Sense of Place and Subjective Wellbeing”

Kat Dahl, Erin Sherman, Heather Annis, Jim Hill, Jacob Forcier, Heather Goff, Britta Rinke, Matt Keller, Torey Asao, Blair Riegel, Laurel Krebsbach, Liz Strom, Nikki Carlson, Shelby Winzent, Quinn Arnold: Student Athlete Volunteer Educators  
Sponsor: Kari Eckheart, Athletics  
*Faculty/Staff Lounge, Session A*  
“Student Athlete Volunteer Educators Promote Healthy Choices by Hosting Mission Nutrition Events in March”

John Danforth, Dwight Stoll (Chemistry), David Harmes (Chemistry), James Arps (ProMed)  
Sponsor: Dwight Stoll, Chemistry  
*Faculty/Staff Lounge, Session B*  
“Release Rates of the Steroid Dexamethasone Phosphate (DSP) from Silicon Rods Used in Implantable Medical Devices”

Nathan Dexter  
Sponsor: Anna Versluis, Geography  
*Faculty/Staff Lounge, Session A*  
“Language in Flux: Sami and Meänkieli Languages in Northern Sweden”

LaTreasure Dickson  
Sponsor: Bruce Van Duser, Health & Exercise Science  
*Faculty/Staff Lounge, Session B*  
“Relationship of Low Back Pain and Number of Years in Participation in Gymnastics”

Keith Diers  
Sponsor: Kyle Momsen, Health & Exercise Science  
*Faculty/Staff Lounge, Session A*  
“Changes in Shoulder Range of Motion of Collegiate Overhead Athletes over a Two Month Period”
Hollie Edlund  
Sponsor: Melissa Rolnick, Theatre & Dance  
Faculty/Staff Lounge, Session A  
“Movement for Movementsake”

Lars Ericson  
Sponsor: Mimi Gerstbauer, Peace Studies  
Faculty/Staff Lounge, Session A  
“Segregation Lives: 60 Years after Brown versus Board of Education Segregated Schools Divide America”

Courtney Farland  
Sponsor: Stephanie Otto, Health & Exercise Science  
Faculty/Staff Lounge, Session B  
“Gusties Love Group Exercise”

Kexin Feng  
Sponsor: Sheng-Ping Yang, Economics & Management  
Saint Peter Room, Session A  
“The Impact of Health Insurance Coverage on the Choices of Medical Services: A Multinomial Logit Approach”

Laura Flicek, Samantha Thrane  
Sponsor: Ana Adams, Modern Languages, Literatures, and Cultures  
Three Crowns Room, Session A  
“Engaging Minority Entrepreneurship: A Partnership in Support of the Entrepreneur Doorway Project”

Hannah Forster, Kelly Okerman, Aurie Domholt  
Sponsor: Michele Koomen, Elementary & Secondary Education  
Three Crowns Room, Session B  
“Recognizing the Middle Child: Under Which Circumstances Do We Overlook These Students and Why?”

Katherine H. Frehner  
Sponsor: Beatriz Torres, Communication Studies  
Saint Peter Room, Session A  
“The Dangerous Uses of Online Support Groups: A Cyberethnography on My ProAna”

Ava Goepfert  
Sponsor: Patricia English, Communication Studies  
Saint Peter Room, Session A  
“From Home to Dorm: First Year Students’ Meanings of Home”

Karl M. Grant  
Sponsor: Eric Dugdale, Classics  
Saint Peter Room, Session B  
“How Herakles Helps Us Tell Better Stories: Intertextuality as a Narrative Tool”

Daria Grishina  
Sponsor: Thomas Gardner, Chemistry  
Saint Peter Room, Session A  
“Towards a Novel Switchable Aromatic Hemiporphyrine Ligand”

Tiamat Gustafson  
Sponsor: Mimi Gerstbauer, Peace Studies  
Saint Peter Room, Session B  
“Overthrowing the Red State: The Impossibilities of Life within a Prison Camp”

Jennifer Hernandez, Abby Schnorr  
Sponsor: Ana Adams, Modern Languages, Literatures, and Cultures  
Three Crowns Room, Session A  
“Engaging Minority Entrepreneurship: A Partnership in Support of the Entrepreneur Doorway Project”

Sam Hoppe  
Sponsor: Mimi Gerstbauer, Peace Studies  
Saint Peter Room, Session A  
“Moving towards Restorative Justice in the US Prison System”

Matt Humphries  
Sponsor: Mimi Gerstbauer, Peace Studies  
Saint Peter Room, Session B  
“Nonviolent ‘Weapons’ Are More Effective than Violent Ones”

Katharina Janzen  
Sponsor: Mimi Gerstbauer, Peace Studies  
Saint Peter Room, Session A  
“How Mennonite Teachings Build a Culture of Peace”

Mariecus C.M. Jarvis, Audrey Messelt  
Sponsor: Karla Marz, Biology  
Heritage Room, Session B  
“Mapping the Period (PER) Binding Surface of the Circadian Clock Protein Cryptochrome (CRY)”

Gena Jenniges  
Sponsor: Mimi Gerstbauer, Peace Studies  
Heritage Room, Session A  
“Resource Wars: Is Privatization Really the Answer?”
Amy Jensen  
Sponsor: Mimi Gerstbauer, Peace Studies  
_Heritage Room, Session A_  
“The Myth of War for the U.S. Needs De-
glorification”

Elizabeth Johnson  
Sponsor: Kathi Tunheim, Economics & Management  
_Heritage Room, Session A_  
“Sweden: Pioneering Gender Equality and Advocacy for Women in Contemporary Enterprises and the Home”

Jenna King  
Sponsor: Mimi Gerstbauer, Peace Studies  
_Heritage Room, Session B_  
“Homosexuality in Islam Nations”

David Kramer, Kayla Shrupp  
Sponsor: Bruce VanDuser, Health & Exercise Science  
_Heritage Room, Session A_  
“Myofascial Release (Foam Rolling) on the Sit and Reach Test and One-Mile Run”

Tim LaBombard  
Sponsor: Anna Versluis, Geography  
_Heritage Room, Session B_  
“Land Use Change Due to Mississippi River Flooding in Southern Minnesota”

Kirsten Larsen, Rachel Larson (Chaplain)  
Sponsor: Rachel Larson, Chaplain  
_Heritage Room, Session A_  
“Labyrinth in Linnaeus Arboretum”

Trang H. Le  
Sponsor: Beatriz Torres, Communication Studies  
_Heritage Room, Session B_  
“Understanding the Bully Online Forum through Social Exchange Theory”

Karla Leitzman  
Sponsor: Amy Scham, Theatre & Dance  
_Heritage Room, Session A_  
“Performing a One Woman Show: The Edge of Our Bodies by Adam Rapp”

Kelsey Lucia, Kassandra Lueth  
Sponsor: Heidi Meyer, Nursing  
_Saint Peter Room, Session A_  
“Knowledge of Human Papillomavirus and Vaccine in Young Adult Males”

Matthew Lunde  
Sponsor: Bruce Van Duser, Health & Exercise Science  
_Saint Peter Room, Session B_  
“Difference in Maximal Oxygen Uptake and Lactic Acid Accumulation between Singles and Doubles Tennis Athletes”

Danielle Mangine  
Sponsor: Thomas Gardner, Chemistry  
_Saint Peter Room, Session B_  
“Diels-Alder Reactions of Prochiral 1,5-Disubstituted Anthracenes towards the Creation of Chiral Auxiliaries and Ligands”

Christina Mantey  
Sponsor: Barbara Zуст, Nursing  
_Saint Peter Room, Session B_  
“Cultural Ethical Challenges: Exploring the Lived Experience of Nurses Caring for Culturally Diverse Patients”

Chris Masad  
Sponsor: Anna Versluis, Geography  
_Saint Peter Room, Session A_  
“Comparing Greek and Roman Geographers”

Chris Masad  
Sponsor: Eric Dugdale, Classics  
_Saint Peter Room, Session B_  
“The Roman Theater as an Empirical Tool”

Zoë May  
Sponsor: Mimi Gerstbauer, Peace Studies  
_Heritage Room, Session B_  
“Can We Create Peace through Food? Addressing Gender Disparities and Building Stronger, More Peaceful Communities through Food Production”

Amanda Miller, Daniel Moos (Education)  
Sponsor: Daniel Moos, Elementary & Secondary Education  
_Heritage Room, Session A_  
“The Role of Epistemological and Self-Regulated Learning Beliefs in Pre-service Teachers’ Evaluation of Lesson Plans”

Kristin Moen  
Sponsor: Anna Versluis, Geography  
_Heritage Room, Session B_  
“Comparing How Work and Family/Life Balance Affects Life Satisfaction in Denmark and the United States”
Kristen Montijo  
Sponsor: Jennifer Ackil, Psychological Science  
*Heritage Room, Session A*  
“The Continued Influence Effect and Supplementary Misinformation”

Briana Mork  
Sponsor: Steve Mellema, Physics  
*Heritage Room, Session B*  
“Optical Imaging by Reflection through Random Media”

Emma Motl, Xi Wang, Bryan Miles, Kelly O’Neill, Kendyl Greimann, Kayla Hanninen  
Sponsor: Thomas Gardner, Chemistry  
*Heritage Room, Session A*  
“Construction of Two-Fold Symmetric Phthalocyanines for the Purpose of Creating Linear Coordination Phthalocyanine Polymers”

Peter Moua  
Sponsor: Mimi Gerstbauer, Peace Studies  
*Heritage Room, Session B*  
“The Ones That Are Left: Hmong People in an Unwanted Land”

Adriana Mozo, Sammi Wright  
Sponsor: Ana Adams, Modern Languages, Literatures, and Cultures  
*Three Crowns Room, Session A*  
“Engaging Minority Entrepreneurship: A Partnership in Support of the Entrepreneur Doorway Project”

Tyler Mulcahey  
Sponsor: Bruce Van Duser, Health & Exercise Science  
*Heritage Room, Session A*  
“Comparison between High-Intensity Resistance Training and Traditional Resistance Training on Strength Gains and Cardiovascular Fitness”

Ryan Ness, Connor Norris  
Sponsor: Bruce Van Duser, Health & Exercise Science  
*Heritage Room, Session B*  
“Plyometric vs. Squat/Power Clean on Vertical Jump and 30 M. Sprint Performance in Non-athlete Women”

Trevor Oestenstad  
Sponsor: Annabel Landaverde, Admission  
*Heritage Room, Session A*  
“Bienvenidos a Gustavus: Translating Admission Materials and Its Implications”

Sophia Ogren-Dehn, Greg Wiessner, Alex Christianson  
Sponsor: Jim Donje, Environmental Studies  
*Heritage Room, Session B*  
“The Coca-Cola Educational Partnership Grant: Big Hill Farm”

Rachel P. Oien  
Sponsor: Laura Triplett, Geology  
*Heritage Room, Session A*  
“Mapping Depth to Bedrock in a Tropical Pre-Montane Wet Forest in Costa Rica”

Chris Olson  
Sponsor: Mimi Gerstbauer, Peace Studies  
*Faculty/Staff Lounge, Session A*  
“Drones: A Bird’s Eye View”

Tasha Ostendorf  
Sponsor: Jan Wotton, Neuroscience  
*Heritage Room, Session B*  
“Hoarding Behavior: A Review of Current Research and Theory”

Tony Ouradnik  
Sponsor: Mimi Gerstbauer, Peace Studies  
*Heritage Room, Session B*  
“Democracy: An Optimal Solution”

Reanna Phillips  
Sponsor: Eric Dugdale, Classics  
*Heritage Room, Session B*  
“Heroic and Sympathetic Criminals: How Ancient Athenians Understood Morally Complex Figures as Depicted in Tragedy and Pottery”

Jasmine Porter  
Sponsor: Anna Versluis, Geography  
*Faculty/Staff Lounge, Session B*  
“Incorporating Garden-Based Learning Curricula into School Classrooms”

Alexa Potts, Alyssa Gaulrapp  
Sponsor: Lynnea Myers, Nursing  
*Heritage Room, Session A*  
“High School Students’ Perception of Nursing”

Miranda Quirk Becker  
Sponsor: Anna Versluis, Geography  
*Heritage Room, Session B*  
“What St. Paul Can Learn From Christchurch, New Zealand, on Sustainable Living: Composting”
Saskia Raether  
Sponsor: Mimi Gerstbauer, Peace Studies  
**Heritage Room, Session B**  
“The Validity of Ecotourism as a Peacemaker”

Griffin Reed  
Sponsor: Aaron Banks, Health & Exercise Science  
**Heritage Room, Session A**  
“Nature Deficit Disorder: Causes, Effects, and Solutions for Gusties”

Chelsey Richardson, Lexi Quale, Cassie Rogness  
Sponsors: Kari Eckheart, Peer Education & Chemical Health, and Stephanie Otto, Health & Exercise Science  
**Rundquist Room, Session A**  
“Gusties Go Healthy: 2013 Well-Being Fair”

Jessica Richert  
Sponsor: Eric Carlson, History  
**Rundquist Room, Session A**  
“Eugenics as a Transnational Movement during the Interwar Period”

Christine Roering, Mary Joos (HES)  
Sponsor: Mary Joos, Health & Exercise Science  
**Rundquist Room, Session B**  
“Plantar Fasciitis Treatment: A Meta-Analysis”

Jennessa Runia  
Sponsor: Mimi Gerstbauer, Peace Studies  
**Rundquist Room, Session A**  
“The Use of Rape and Other Sexual Violence in Times of War”

Elizabeth Schmidt  
Sponsor: Patricia English, Communication Studies  
**Rundquist Room, Session A**  
“The Lived Experience of Single Parent Family Members”

Lucas Seewald  
Sponsor: Tom Huber, Physics  
**Board Room, Session B**  
“Scanning Vibrometry Studies of Reed Dynamics in Reed Organ Pipes”

Ian Shay, K. Angelique Dwyer (MLLC)  
Sponsor: K. Angelique Dwyer, Modern Languages, Literatures, and Cultures  
**Rundquist Room, Session B**  
“Lila Downs: Performing Panlatinidad through Folklore”

Daniel Sinda, Sanjive Qazi (Biology)  
Sponsor: Sanjive Qazi, Biology  
**Rundquist Room, Session A**  
“Instituting the Concept of Well-Being in Clients with Mental and Physical Instability and Disability”

Zachary Stackhouse  
Sponsor: Anna Versluis, Geography  
**Rundquist Room, Session B**  
“HIV/AIDS in South Africa”

Josie Steinmetz, Anna Ayers Looby, Kacy Lorber, Kayla Hanninen, Kendyl Greimann  
Sponsor: Thomas Gardner, Chemistry  
**Rundquist Room, Session B**  
“Reduced-Symmetry ABAC Metallophthalocyanine Complexes from a Tethered Phthalonitrile Trimer”

Chloe Strand  
Sponsor: Mimi Gerstbauer, Peace Studies  
**Board Room, Session A**  
“Conflict, Peace, and Children: Building a Brighter Future”

Danielle Thibodeau, Samantha Opsahl  
Sponsor: Barbara Zust, Nursing  
**Board Room, Session A**  
“Exploration of Parents’ Thoughts and Beliefs toward Vaccinating or Not Vaccinating Their Children in the Rural Area”

Tia Thompson, Madison Wroge  
Sponsor: Ana Adams, Modern Languages, Literatures, and Cultures  
**Three Crowns Room, Session A**  
“Engaging Minority Entrepreneurship: A Partnership in Support of the Entrepreneur Doorway Project”

Bennett Thrash  
Sponsor: Anna Versluis, Geography  
**Heritage Room, Session A**  
“East African Immigrant Assimilation in Minnesota”

Julia Tindell  
Sponsor: Amy Seham, Theatre & Dance  
**Board Room, Session B**  
“At Risk: Writing Mental Illness into Contemporary Theatre”
Courtney Train  
Sponsor: Mimi Gerstbauer, Peace Studies  
*Board Room, Session B*  
“Torture, Desire, and the Other: Prisoner Abuse”

Tuan Tran, Ian Gibbs-Hall, Paul Young, Doug Fryer (United Science, LLC), Conor Smith (United Science, LLC), Jon Thompson (United Science, LLC), Bill Barber (Agilent Technologies)  
Sponsor: Dwight Stoll, Chemistry  
*Board Room, Session A*  
“Characterization of Carbon-Modified Silicas for Use in Analytical Liquid Chromatography”

James Trevathan, Paul Saulnier (Physics)  
Sponsor: Paul Saulnier, Physics  
*Board Room, Session A*  
“Characterization of Diffuse Media with Laser Speckle”

Andrew Vold  
Sponsor: Mimi Gerstbauer, Peace Studies  
*Board Room, Session A*  
“Microcredit: Providing a Path to Freedom”

Allyson Voss  
Sponsor: Marisa Kalbermatten, Modern Languages, Literatures, and Cultures  
*Board Room, Session B*  
“A Social, Political, Historical and Cultural Perspective on Urdu Linguistics”

Katelyn Warburton  
Sponsor: Lisa Rinehart, Counseling Center  
*Board Room, Session A*  
“Be the Light! Offering Therapeutic Light Boxes to Gustavus Adolphus Students and Faculty”

Breanna Wegner  
Sponsor: Mimi Gerstbauer, Peace Studies  
*Board Room, Session B*  
“Peace Keeping Bodies through the Years”

Brian White  
Sponsor: Anna Versluis, Geography  
*Board Room, Session A*  
“Declining Detroit: The Impact that Casinos have on the City’s Growth and Quality of Life”

Greg Wiessner  
Sponsor: Judy Douglas, Peer Education & Chemical Health  
*Board Room, Session B*  
“Be U: A Comprehensive Wellbeing Assessment”

Sydnie Wigand  
Sponsor: Mimi Gerstbauer, Peace Studies  
*Board Room, Session A*  
“Re-evaluating Just War Theory to Apply It to the Twenty-First Century”

Amanda Wood  
Sponsor: Eric Dugdale, Classics  
*Board Room, Session B*  
“Gender Performance in Aeschylus’ Tragedies and the Effects on Chorus-Character Interactions”

Blia Xiong  
Sponsor: Mimi Gerstbauer, Peace Studies  
*Board Room, Session A*  
“Gender Violence in the Military”

Kheng Xiong  
Sponsor: Mimi Gerstbauer, Peace Studies  
*Board Room, Session B*  
“China’s Military in the 21st Century”

Danielle Yaste  
Sponsor: Mimi Gerstbauer, Peace Studies  
*Board Room, Session A*  
“Faith Based Organizations: Are They Effective?”

Brian Zabel  
Sponsor: Ryan Bergstrom, Geography  
*Board Room, Session B*  
“Spatial Analysis of Viable Locations for Future Construction of Cabela’s Retail Stores”
2013 Sigma Xi Undergraduate Research Symposium

Sigma Xi is an international, multidisciplinary research society whose programs and activities promote the health of the scientific enterprise and honor scientific achievement. There are nearly 60,000 Sigma Xi members in more than 100 countries around the world. The Gustavus Adolphus Sigma Xi Chapter supports science by funding research grants, hosting an annual research symposium, and nominating student and faculty to become Sigma Xi members. The 2013 Sigma Xi Undergraduate Research Symposium in held in the Alfred Nobel Hall of Science during the afternoon and evening of Friday, May 3. Oral presentations (listed below) are scheduled in the afternoon and poster presentations are included in the Celebration of Creative Inquiry. The symposium also includes a ceremony to recognize this year’s nominations for membership in Sigma Xi.

Amanda Adams
Sponsor: Julie Bartley, Geology
“The Oxygen Isotopic Analysis of Belemnites: Implications for Water Temperature and Life Habits in the Jurassic Sundance Sea”

Jeffrey Allen
Sponsor: Laura Triplett, Geology
“Evaluating Trace Metal Contamination in an Abandoned Shooting Range”

Jake Bruihler
Sponsors: Laura Triplett, Julie Bartley, and James Welsh, Geology
“Origins of a Terrace Feature in Seven Mile Creek Park, Minn.”

Dawn Comstock
Sponsor: Sanjive Qazi, Biology
“The Impact of Innovation on Medical Education”

Michael DeLucia
Sponsor: Laura Triplett, Geology
“Analyzing and Presenting Resistivity Data from Emerald Mound Archeological Site in Attempt to Discover a Mississippian Trail”

Amanda Feeks
Sponsor: Lauren Hecht, Psychological Sciences
“The Effect of Color Contrast on Perception of Portion Size”

Daria Grishina
Sponsor: Tom Gardner, Chemistry
“Towards a Novel Switchable Aromatic Hemiporphyrizane Ligand”

Matt Illies
Sponsor: Julie Bartley, Geology
“Using Conodonts to Determine Depositional Variability within the Decorah Formation of Eastern Minnesota and Iowa”

Sarah Lucht
Sponsor: Sanjive Qazi, Biology
“Identifying and Targeting Progenitors of Cancer Cells through Data-mining Cell Sorting Data”

Rachel Oien
Sponsor: Laura Triplett, Geology
“Mapping Depth to Bedrock in a Tropical Pre-Montane Wet Forest”

Carl Schiltz
Sponsor: Jeff Dahlseid, Biochemistry
“Identifying an mRNA Directly Degraded by the Exosome in Saccharomyces Cerevisiae”

Tara Selly
Sponsor: Julie Bartley, Geology
“Qualitative and Quantitative Assessment of Taphonomic Patterns in Modern Algae and Cyanobacteria: Implications for Identifying Precambrian Microfossils”

Daniel Sinda
Sponsor: Sanjive Qazi, Biology
“Instituting the Concept of Well-Being in Clients with Mental and Physical Instability and Disability”

Tran Tuan
Sponsor: Brian O’Brien, Chemistry
“Nucleophilic Reactions of Potassium Phthaloylphosphide”

Zachary Wagner
Sponsor: Laura Triplett, Geology
“A Comparison of Biogenic Silica Analysis Using UV-Vis and ICP-MS Methods”
Session Locations and Times

Session A: 5–6 p.m.
Session B: 6–7 p.m.
Honors Weekend Events

FRIDAY, MAY 3

2:30–5 p.m.  Sigma Xi Research Symposium
Supported by the Provost’s Office and the
John S. Kendall Center for Engaged Learning
Alfred Nobel Hall of Science,
Rooms 201 & 222
3–5 p.m.  “Books in Bloom” Exhibition (guided tours)
Hosted by Gustavus Library Associates
Folke Bernadotte Memorial Library
5–7 p.m.  “A Celebration of Creative Inquiry 2013”
A Showcase of Student Research,
Scholarship, and Creative Work
C. Charles Jackson Campus Center

SATURDAY, MAY 4

9:30 a.m.  Coffee Reception
Hosted by Faculty Senate
Johns Courtyard (weather permitting) and
Courtyard Café, Jackson Campus Center
10 a.m.–
10:30 a.m.  “Books in Bloom” Exhibition (guided tours)
Hosted by Gustavus Library Associates
Folke Bernadotte Memorial Library
10:30 a.m.  Honors Convocation
Celebration service and recognition of honored students
Christ Chapel
11:30 a.m.  Honors Day Luncheon Buffet (ticket required)
Reserved for all honored students and families
Evelyn Young Dining Room,
Jackson Campus Center
1 p.m.  Communication Studies Honors Reception
Torrey Atrium,
Warren & Donna Beck Academic Hall
1–6 p.m.  Senior Art Majors’ Exhibition 2013 (running May 4–June 2)
Opening reception, 4–6 p.m.
Hillstrom Museum of Art,
Jackson Campus Center
1:30 p.m.  Senior Honors Recital 2013
Jussi Björling Recital Hall
1:30 p.m.  Political Science Research Symposium
Abstract presentations of student research projects
Old Main, Second Floor
7:30 p.m.  Gustavus and Vasa Wind Orchestra Spring Concert
Douglas Nimmo and Karrin Meffert-Nelson, conductor
Jussi Björling Recital Hall

SUNDAY, MAY 5

10:30 a.m.  Service of Holy Communion
Christ Chapel
11 a.m.–
11:30 a.m.  “Books in Bloom” Exhibition (guided tours)
Hosted by Gustavus Library Associates
Folke Bernadotte Memorial Library
4 p.m.
7 p.m.  “Night of Distinction”
Leadership, Service, and Achievement Honors
Alumni Hall,
O.J. Johnson Student Union