



a celebration of
CREATIVE
INQUIRY

HONORS 2014 | FRIDAY, MAY 2

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 seventh 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 and Thomas Huber for organization and support; Marketing and Communication and Print Services for design, layout, and print; 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, and 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, one of the primary areas supported by the Kendall Center, demonstrates faculty and student engagement in learning.

PARTICIPANTS

Erik Anderson '14, Brock Gunderson '14, Eric Talus '14, Nevada Wendlandt '14, Paul Young '14, Mark Zorrilla '15

Adviser: Brenda Kelly, Chemistry
Board Room, Session A

“The Optimization of a Method for Myohemerythrin Purification”

Matthew Baker '15, Jackson Eliason '15

Adviser: Janine Wotton, Neuroscience
Board Room, Session B

“Salicylate-Induced Tinnitus: Fear and Anxiotal Effects on Exploratory Behavior”

Samantha Banks '15, Lindsay Ortlip '15

Adviser: Janine Wotton, Psychological Science
Board Room, Session B

“Effects of Salicylate (Aspirin) on Motor Function in Long Evans Rats”

Kit Baumer '15

Adviser: Terena Wilkens, Theatre & Dance
Board Room, Session A

“Lighting Design, Trojan Barbie”

Kate Belschner '16, Kyle Chambers (Psychological Science), Allison Conrad '15, Caroline David '16, Sam Fransen '14, Madison Heckel '14, Maren Kind '15, Alyssa Maxson '16, Gretchan Menze '15, Brooke Meyer '14, Andrea Rosenberg '14, Taylor Sommers '15

Adviser: Kyle Chambers, Psychological Science
Board Room, Session B

“Factors Influencing Motor Imitation”

Estee Elle Berg '14, Grace Lauren Henke-Raatz '14

Adviser: Bruce Van Duser, Health & Exercise Science
Board Room, Session A

“Relationship among Leg Strength and Core Strength and Agility in Female Collegiate Soccer Athletes”

Kammie Beyer '16

Adviser: Beatriz Torres, Communication Studies
Heritage Room, Session B

“Cyberethnography of 43 Things: An Online Goal Setting Community”

Andrea K. Blom '14, Janine Wotton (Neuroscience)

Adviser: Janine Wotton, Neuroscience
Board Room, Session A

“Word Placement and Sentence Context Impact Vowel Recognition in Noise”

Samantha Broeckert '14

Adviser: Barb Zust '76, Nursing
Board Room, Session A

“Perceived Anxiety of Junior and Senior Nursing Students”

Jamie Brooks '14, Ben Orpen '14, Paul Young '14, Dwight Stoll (Chemistry), Scott Bur (Chemistry)

Adviser: Dwight Stoll, Chemistry
Board Room, Session B

“Synthesis and Characterization of Fullerene-Modified Silica Columns for Reverse Phase Liquid Chromatography”

Morgan Cassman '14

Adviser: Jill Locke, Political Science
Board Room, Session A

“An Arendtian Analysis of the Patriot Act and Islamophobia in the United States”

Amy Christiansen '15, Alexa Peterson '16

Adviser: Amanda Nienow, Chemistry
Board Room, Session A

“Photodegradation of Imidazolinone Herbicides and Pesticides”

Matt Collins '14

Adviser: Bruce Van Duser, Health & Exercise Science
Board Room, Session B

“Effects of Traditional Stretching versus Myofascial Release on Lower Body Range of Motion”

Susan Crane '14

Adviser: Mary McHugh, Classics
Board Room, Session A

“Preserving Memory in Ruins: An Archaeological Study of Cultural Memory”

Megan Crow '14, Kristian Hartmann '15

Adviser: Heather Haemig, Chemistry

Board Room, Session B

“Optimizing the Imidazole Elution Step in the Purification of His-Tagged Fumarase from Baker’s Yeast Using Affinity Chromatography”

John Danforth '16, Anna Krieger '17

Adviser: Dwight Stoll, Chemistry

Board Room, Session A

“Synthesis and Characterization of Carbon Nanoparticle Modified Silicas for Use in Analytical Liquid Chromatography”

Dominic Delmont '15

Adviser: Hilary Christensen, Geology (supported by Sigma Xi)

Board Room, Session B

“Taphonomy of Fossil Bison in the Des Moines River”

Katie Diederichs '15, Emily Hamberg '14, Stefano Rosati '15, Beth Wiese '15

Adviser: Brenda Kelly, Biochemistry and Molecular Biology (supported by Sigma Xi)

Board Room, Session A

“Characterization of Monomeric and Dimeric Gamma-Glutamylcysteine Ligase”

Laura Celeste Dobler '15

Adviser: Stephanie Otto '00, Health & Exercise Science

Board Room, Session B

“Differences in Psychological and Physiological Factors between Individuals Who Consume Caffeinated Soft Drinks Compared to Those Who Do Not”

Will Doebler '15, Joshua Wolanyk '15

Adviser: Jessie Petricka, Physics (supported by Sigma Xi)

Faculty/Staff Lounge, Session A

“The Gustavus AMO Lab: Time of Flight Mass Spectrometer and Coulomb Crystals”

Kelly Dumais '14

Adviser: Jill Locke, Political Science

Faculty/Staff Lounge, Session B

“Where Does Freedom Come From?”

Becca Eastwood '14

Adviser: Jill Locke, Political Science

Faculty/Staff Lounge, Session A

“Statelessness in the United States: The Politics of Post-Incarceration”

Nicole Ektnitphong '15 (Phillips Scholars Program)

Adviser: David Newell '03, Center for Servant

Leadership

Faculty/Staff Lounge, Session B

“Be the Change: Leadership on Purpose”

Lance Erickson '14, Florencia Meana-Prado (University of New Hampshire), Martin Wik (Stockholm University, Sweden), Joel P. Destasio, Madison J. Halloran, Jacob B. Setera, Julia Bryce, Patrick Crill, Joel E. Johnson, Ruth K. Varner

Adviser: Laura Triplett, Geology (supported by Sigma Xi)

Faculty/Staff Lounge, Session A

“Mercury Dynamics in Sub-Arctic Lake Sediments across a Methane Ebullition Gradient”

Chelsea M. Farr '15

Adviser: Joshua Brown, Philosophy

Faculty/Staff Lounge, Session B

“Proving the Empty World”

Katie Feterl '15

Adviser: Anna Versluis, Geography

Faculty/Staff Lounge, Session A

“The Role of Urban Agriculture in Community Food Security: A North Minneapolis Case Study”

Sydney Firmin '14

Adviser: Julie K. Bartley, Geology

Faculty/Staff Lounge, Session B

“An Unusual Mesoproterozoic Carbonate Unit: Relic of a Saline Lake?”

Hana M. Fischer '15, Monica E. Johnson '16, Stefano W. Rosati '15, Claire E. O'Neill '14, Karla E. Marz (Biology)

Adviser: Karla E. Marz, Biology (supported by Sigma Xi)

Faculty/Staff Lounge, Session B

“Cryptochrome Interactions with Other Circadian Clock Proteins”

Annie Fittipaldi '16

Adviser: Beatriz Torres, Communication Studies

Heritage Room, Session A

“Cyber Ethnography: A One Direction Fan Website”

Evan Flolid '14

Adviser: Anna Versluis, Geography

Faculty/Staff Lounge, Session A

“Primary Factors That Influence Societal Perceptions of Water Quality Issues on the Minnesota River”

Brianna J. Furey '15

Adviser: Anna Versluis, Geography
St. Peter Room, Session B

“Wind Power Development: A Community-Level Analysis of Wind Turbine Acceptance in Minnesota”

Ana Gleason '14

Adviser: Heidi Meyer '98, Nursing
St. Peter Room, Session A

“Perceptions of Complementary Therapies and the Role They Play in Healthcare: An Exploratory Study of Nursing Students.”

Karl Grant '14, Laurel Boman '14, Susan Crane '14, Peter Westby '15, James Skoog '17

Adviser: Eric Dugdale, Classics
St. Peter Room, Session B

“The Homer Multitext Project: Understanding Composition in Performance”

Daria Grishina '14

Adviser: Thomas Gardner, Chemistry (supported by Sigma Xi)
St. Peter Room, Session A

“Towards Synthesis of a Novel Switchable Aromatic 8,10,21,23-tetrahydroxyhemiporphyrzine Ligand”

Daniel Gronau '14

Adviser: Baili Chen, Mathematics and Computer Science
St. Peter Room, Session B

“An Epidemic Model Using SIR Differential Equations”

Kayla E. Hanson '14, Gordon Mansergh '84 (Centers for Disease Control and Prevention, Division of HIV/AIDS Prevention), Beryl A. Koblin (New York Blood Center), David McKirnan (University of Illinois-Chicago), Stephen A. Flores (CDC Division of HIV/AIDS Prevention), Sharon M. Hudson (Health Research Association, LA), Lynnea Myers '05 (Nursing), Grant N. Colfax (San Francisco Department of Public Health)

Adviser: Lynnea Myers '05, Nursing
St. Peter Room, Session A

“Depressive Symptoms Are Differentially Associated with Unprotected Receptive and Insertive Anal Sex among MSM”

Madison Heckel '14

Adviser: Anna Jacobsen, Sociology & Anthropology
St. Peter Room, Session A

“The Importance of Multilingualism in Preserving and Extending Diversity of Cultures”

Madison Heckel '14

Adviser: Kyle Chambers, Psychological Science
St. Peter Room, Session B

“Second Language Learning and Its Influence on Executive Control”

Carlie Hedlund '15

Adviser: Anna Versluis, Geography
St. Peter Room, Session B

“From Sisu to Sauna: Influence of Finnish Immigration on Cokato, Minnesota”

Kara R. Helgeson '16

Adviser: Hilary Christensen, Geology (supported by Sigma Xi)
Three Crowns Room, Session B

“Bison Remains: Migration, Diet and Climate”

Jason Helland '14

Adviser: Jill Locke, Political Science
Three Crowns Room, Session A

“Presidential Lying in Politics”

R. Eiler Henrickson '14

Adviser: Jillian Locke, Political Science
Three Crowns Room, Session B

“Tricolor over Africa: Françafrique through the Arendtian Lens, 1960–Present”

Mariecus Jarvis '14, Lauren Johnson '15, Josie Steinmetz '14

Adviser: Heather Haemig, Chemistry
Three Crowns Room, Session A

“Cloning PrgX Single Mutants I251A and T290A into Tagged Overexpression Vectors pGEX and pET28b(+)”

Monica Johnson '16, Mariecus C.M. Jarvis '14, Audrey L. Messelt '12, Karla E. Marz (Biology)

Adviser: Karla Marz, Biology
Three Crowns Room, Session B

“Using CRY and PER Co-localization to Map CRY’s PER Binding Surface”

Matthew Keller '15

Adviser: Anna Versluis, Geography
Three Crowns Room, Session A

“Decreasing Walleye and Increasing Hostility:
Resource Conflict among Chippewa and Non-natives
on Minnesota’s Lake Mille Lacs”

Edward Kluender '14, Peter Crady '14

Adviser: Thomas Huber, Physics
Three Crowns Room, Session A

“Visualization of Vibrating Systems Using a Scanning
Laser Doppler Vibrometer”

Samuel Knutson '14

Adviser: Sheng-Ping Yang, Economics & Management
Three Crowns Room, Session B

“Implications of the Efficient Market Hypothesis and
the Drift Effect in Growth and Value Stocks”

**Adeline Konnad '16, Kendrick Hall '14, Garrison
Meyer '16, Ben Elvestrom '15, Erika Clifton
'15, Molly Butler '16, Wilson Fields '16, Kelsey
Hering '14, Video Artists: Cameron Blair '15, Leah
Creger '16, Olivia DelViscio '15, Patrick Dolan
'14, Alex Gunderson '15, Mara Johnson-Groh '14,
Abby Lyle '14, Mackenzie McCann '15, Spencer
Passmore '16, Oliver Sukhum '15, Kong Xiong '15**

Advisers: Phil Bryant, English, and Priscilla Briggs, Art
Three Crowns Room, Session B

“Writing Poetry: Student Chapbooks”

Emily Bo LaFontaine '15, Kaitlin Lang '15

Adviser: Stephanie M. Otto '00, Health & Exercise
Science
Three Crowns Room, Session A

“Comparison of Hand-Eye Coordination between
Gymnasts, Soccer, and Tennis Athletes”

Samara L. Lenort '16, Ashley Greeder '14

Adviser: Barbara Zust '76, Nursing
Three Crowns Room, Session B

“College Students’ Knowledge of Sexually Transmitted
Diseases”

Serenity Mahoney '15, Dominic Delmont '15, Kara Helgeson '16

Adviser: Hilary Christensen, Geology (supported by
Sigma Xi)
Three Crowns Room, Session A

“Radiocarbon Dating and Rare Earth Element Tracing
Leads to Origins of Bison Remains Found along the
Des Moines River”

Brianna Malecha '17

Adviser: Angelique Dwyer, Modern Languages,
Literatures, and Cultures
Three Crowns Room, Session B

“A Victim of His Work”

Andrew Malo '17

Adviser: Angelique Dwyer, Modern Languages,
Literatures, and Cultures
Three Crowns Room, Session B

“*Encontrar el camino destinado*: An Indirectly Relevant
Message for College Students in a Mexican Short
Film”

Ciara Marshall '14, Josef Haas '14

Adviser: Kristian Braekkan, Economics & Management
Three Crowns Room, Session A

“Psychological Contract Violations and Organizational
Citizenship Behaviors: A Study of Exploitation by
Economic Necessity”

Zoë May '14

Adviser: Jill Locke, Political Science
Three Crowns Room, Session B

“Forgiving for the Future? An Exploration of Arendt
and Tutu’s Theories of Forgiveness”

Will Metcalf '15

Adviser: Anna Versluis, Geography
Three Crowns Room, Session A

“Impact of Hydrologic Modeling on the Results of
GRACE-Derived Ice Sheet Mass Balance Calculations”

Brooke Meyer '14

Adviser: Kyle Chambers, Psychological Science
Three Crowns Room, Session B

“Influence of Conformity on Preschoolers’ Selective
Trust”

Lacie Micek '14

Adviser: David Obermiller, History
Three Crowns Room, Session A

“Judicial and Historical Denial: Judge Jack Weinstein’s
Exoneration of Agent Orange”

Paige Miller '15, Andrew Park (University of Georgia)

Adviser: Tom LoFaro, Mathematics and Computer Science

Three Crowns Room, Session B

“Factors Leading to Increased Transmission and Drug Resistance Emergence of Heartworm in the United States”

Larissa Milne '14, Angel MacDonald '14, Alexandra Buelow '14

Adviser: Barb Zust '76, Nursing

Three Crowns Room, Session A

“Correlating Menstruation & Alcohol”

Steve Moertel '15, Matt Gantz (Concordia College, Moorhead)

Adviser: Kathy Lund Dean, Economics & Management

Three Crowns Room, Session B

“Draw: A Social Entrepreneurship Project from India”

Talia Moorman '16

Adviser: Anna Versluis, Geography

Three Crowns Room, Session A

“Lasting Impacts of 20th-Century Transportation Infrastructure on Racial Segregation in the Twin Cities”

Neo Mpunga '15

Adviser: Anna Jacobsen, Sociology & Anthropology

Three Crowns Room, Session B

“I Wish I Never Crossed the Border: Xenophobic Violence against Foreign Nationals and ‘Outsiders’ in South Africa ”

Mikie Phan '14, Joseph Thayer '15, Christian Medrano '14

Adviser: Margaret Bloch Qazi, Biology

Three Crowns Room, Session A

“Transgenerational Effects of Female Age on Offspring Viability in *Drosophila Melanogaster*”

Sanjive Qazi (Biology), Shelby Roles '15, Sara Kullberg '15

Adviser: Sanjive Qazi, Biology

Three Crowns Room, Session A

“Transgenic Mouse Model System for Childhood Leukemias Driven by Genetic Lesions in B-cell CD22 Receptor.”

Madeline Randall (14)

Adviser: Lynnea Myers '05, Nursing

Three Crowns Room, Session B

“An Exploration of the Perceptions of High School Students Related to the Profession of Nursing”

Olivia Reininger '14, Carl Skrukud '14

Adviser: Jessica Stadick, Nursing

Heritage Room, Session B

“The Effects of Classical Music on Perceived Stress and Physiologic Measures”

Joseph Renier '14, Oghenemine Obrik-Uloho '15

Adviser: Margaret Bloch Qazi, Biology

Heritage Room, Session B

“Oviposition Rate Fertilization Success, Embryo Size, and Offspring Viability Decline with Increasing Female Age in *Drosophila Melanogaster*”

Matt Saemrow '14

Adviser: Mary Joos, Health & Exercise Science

Heritage Room, Session A

“Adolescent ACL Injury: A Case Study”

Ray Sajulga '17, Dwight Stoll (Chemistry)

Adviser: Dwight Stoll, Chemistry

Heritage Room, Session A

“Simulation of Sample Matrix Effects in Liquid Chromatography with Large Injection Volumes”

Carl Schiltz '14, Grant Walters '14, Ryan Ragan '15

Adviser: Heather Haemig, Chemistry

Heritage Room, Session B

“Expression and Purification of DnaK within *Escherichia Coli*”

Madeline Schmitz '14, Anna Torborg '14

Adviser: Barbara Zust '76, Nursing

Heritage Room, Session B

“Exploring First-Year Students’ Experience with Digital Abuse”

Dempsey Schroeder '14

Adviser: Lisa Heldke '82, Philosophy

Heritage Room, Session A

“The Bi-Fortnightly Anodyne”

Anna Schulte '14, Laura Dack '14

Adviser: Lynnea Myers '05, Nursing
Heritage Room, Session B

“Survey of High School Students’ Anxiety during High-Fidelity Simulation”

Lyndsi M. Schwichtenberg '14

Adviser: Heidi Meyer '98, Nursing
Heritage Room, Session B

“Exploring Sleep Quality of First-Year Students Related to Sleep Habits and Lifestyle”

Emilie Scott '14

Adviser: Valerie Walker, Elementary & Secondary Education
Heritage Room, Session A

“The Price of Privilege”

Travis Sigafos '16

Adviser: Janine Wotton, Neuroscience (supported by Sigma Xi)
Heritage Room, Session B

“Investigating the Relationship between Salicylate-Induced Tinnitus and Circadian Rhythmicity”

Caitlin Skvorc '14

Adviser: Lisa Heldke '82, Philosophy
Heritage Room, Session B

“Wabi-Sabi World: An Artist’s Search”

Victoria Sowa '16

Adviser: Kristian Braekkan, Economics & Management
Heritage Room, Session A

“The Exercise of Creative Potentials: An Examination of Labor Rights, Gender Equality, and Innovation”

Ashley Steinberg '14

Adviser: Lisa Heldke '82, Gender, Women, and Sexuality Studies
Heritage Room, Session B

“Redefining Marriage: Choosing Dependency”

Janelle Thienes '16

Adviser: Beatriz Torres, Communication Studies
Heritage Room, Session B

“The Power of Certainty in International Adoptions”

Rebecca Thompson '14, Jessica Skaare '14, Megan Hennen '14 (St. Scholastica), Jaira Wilsey (Colorado College)

Adviser: Thia Cooper, Religion
Heritage Room, Session B

“Peace Lines, Interfaces, and a Divided Mindset in Northern Ireland”

Liz Underwood '14

Adviser: Anna Versluis, Geography
Heritage Room, Session A

“A Comparison of the Environmental Footprints of Locals and Second Homeowners in Ottertail County, Minnesota”

Ka Bao Vang '14, Katie Hopfner '14

Adviser: Bruce VanDuser, Health & Exercise Science
Heritage Room, Session A

“The Effects of Exercise on Memorization ”

Avery Wallace '14

Adviser: Kate Wittenstein, History
Heritage Room, Session B

“Pirates of the Caribbean: The Roots of Piracy’s Popular Culture Representation in the English and Spanish Empire”

Kayla C. Warner '14, Alecia K. Woods '14

Adviser: Lynnea Myers '05, Nursing
Heritage Room, Session A

“Students’ Perceptions of Teaching and Education in the Role of a Registered Nurse”

Mikaela Warner '16

Adviser: Gaywyn Moore, English
Heritage Room, Session B

“How to Reject a Knight: Contortions of Unrequited Love”

Helen Wauck '14

Adviser: Michael Hvidsten, Mathematics and Computer Science
Heritage Room, Session A

“Algorithms for Real-Time Hand Recognition on the Raspberry Pi”

Brian White '14

Adviser: Anna Versluis, Geography

Heritage Room, Session B

“Assessing the Socioeconomic Impact of Sports Stadium Development for Thunder Bay, Ontario”

Kelsey Wiebusch '15

Adviser: Bruce Van Duser, Health & Exercise Science

Heritage Room, Session A

“Core Strength Training Does Not Influence Distance Running Performance in Collegiate Cross-Country Runners”

Miles Wilson '14

Adviser: Anna Versluis, Geography

Heritage Room, Session B

“Effects of Aquatic Invasive Species on Minnesota Lakes and Economic Valuation of Species Removal.”

2014 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 2014 Sigma Xi Undergraduate Research Symposium is held in the Alfred Nobel Hall of Science during the late afternoon and early evening of Friday, May 2. 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.

Carl Schiltz '14

Adviser: Brian O'Brien, Chemistry
Nobel Hall 201, 2:30 p.m.

“Developing a New Method for Synthesizing Primary Arylphosphines”

Mikie Phan '14

Adviser: John M. Lammert, Biology
Nobel Hall 201, 2:50 p.m.

“The Prevalence and Plasmid Profile Analysis of Antibiotic Resistant *Escherichia coli* among College-Aged Adults”

Lance Erickson '14, Florencia Meana-Prado (Department of Earth Sciences, Univ. of New Hampshire, Durham), Martin Wik (Department of Geological Sciences, Stockholm Univ., Sweden), Joel P. DeStasio (Institute for the Study of Earth, Oceans, and Space, Univ. of New Hampshire), Madison J. Halloran (Department of Environmental Studies, Carleton College, Northfield, Minn.), Jacob B. Setera (Univ. of New Hampshire), Julia Bryce (Univ. of New Hampshire), Patrick Crill (Stockholm Univ.), Joel E. Johnson (Univ. of New Hampshire), Ruth K. Varner (Institute for the Study of Earth, Univ. of New Hampshire)

Adviser: Laura Triplett, Geology
Nobel Hall 201, 3:10 p.m.

“Mercury Dynamics in Sub-Arctic Lake Sediments across a Methane Ebullition Gradient”

Beth Wiese '15 and Katie Diederichs '15

Adviser: Brenda Kelly, Biochemistry and Molecular Biology
Nobel Hall 201, 3:30 p.m.

“Characterization of Gamma-Glutamylcysteine Ligase”

Dominic Delmont '15

Adviser: Hilary Christensen, Geology
Nobel Hall 201, 3:50 p.m.

“Taphonomy of Bison Bones from the Des Moines River”

Andrew Wallace Choquette '14

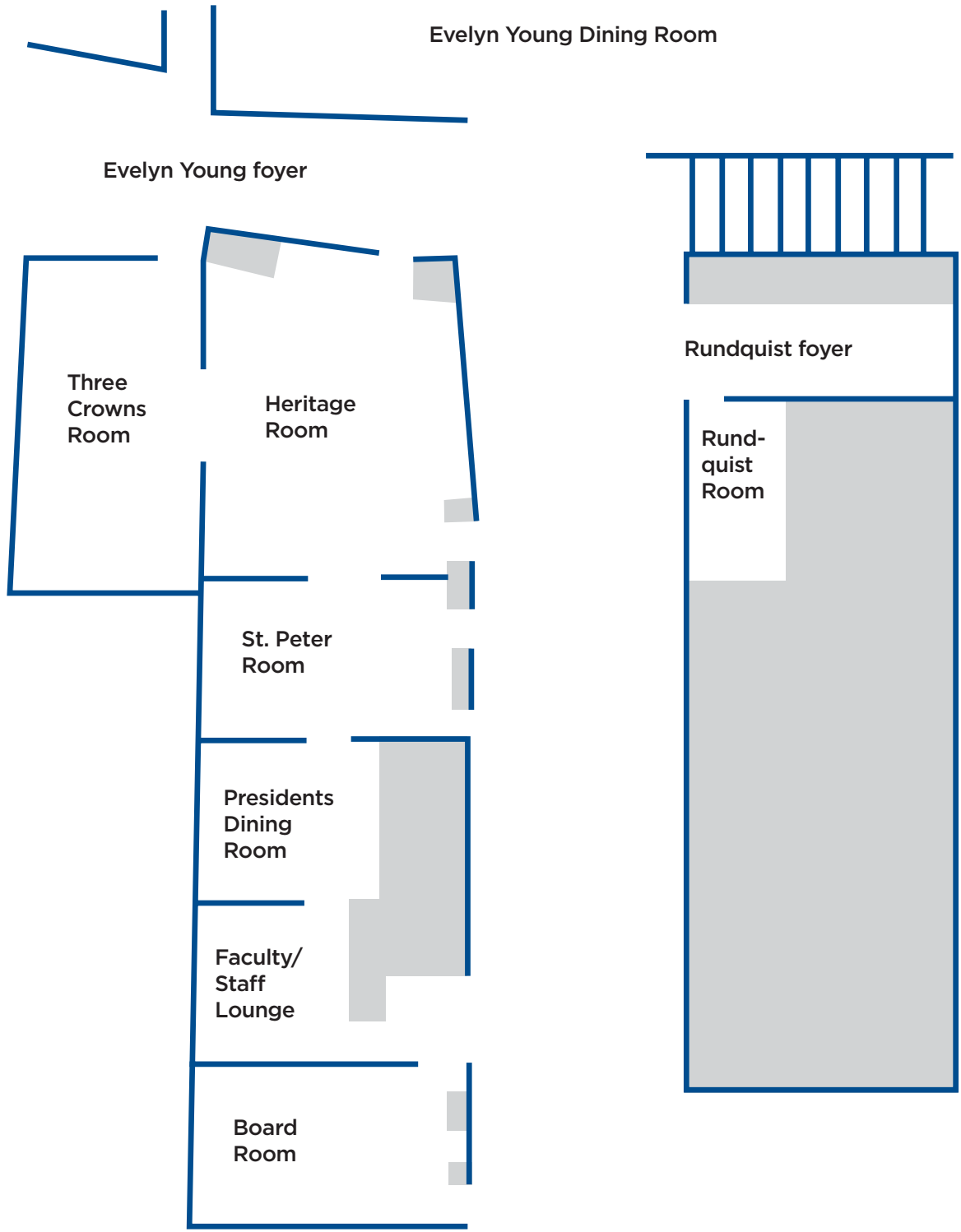
Adviser: Laura Triplett, Geology
Nobel Hall 201, 4:10 p.m.

“Sediment Mobilization in Ravines Draining Minnesota Cropland”

SESSION LOCATIONS AND TIMES

Session A: 5–6 p.m.

Session B: 6–7 p.m.



HONORS WEEKEND EVENTS

FRIDAY, MAY 2

- 2:30–5 p.m. **Sigma Xi Research Symposium** Alfred Nobel Hall of Science,
Supported by the Provost's Office and the Rooms 201 & 222
John S. Kendall Center for Engaged Learning
- 3–6 p.m. **"Books in Bloom" Exhibition** Folke Bernadotte Memorial Library
Hosted by Gustavus Library Associates
- 5–7 p.m. **"A Celebration of Creative Inquiry 2014"** C. Charles Jackson Campus Center
*A Showcase of Student Research, Scholarship,
and Creative Work*

SATURDAY, MAY 3

- 9:30 a.m. **Coffee Reception** Johns Courtyard (weather permitting) and
Hosted by Faculty Senate Courtyard Café, Jackson Campus Center
- 10 a.m.–5 p.m. **"Books in Bloom" Exhibition** Folke Bernadotte Memorial Library
Hosted by Gustavus Library Associates
- 10:30 a.m. **Honors Convocation** Christ Chapel
Celebration service and recognition of honored students
- 1 p.m. **Communication Studies Honors Reception** Torrey Atrium,
Warren & Donna Beck Academic Hall
- 1–6 p.m. **Senior Art Majors' Exhibition 2014** (running May 3–June 1) Hillstrom Museum of Art,
Opening reception, May 3, 4–6 p.m. Jackson Campus Center
- 1:30 p.m. **Senior Honors Recital 2014** Jussi Björling Recital Hall
- 1:30 p.m. **Political Science Research Symposium** Old Main, Second Floor
Abstract presentations of student research projects
- 7:30 p.m. **"Grace: The Gustavus Dance Company in Concert"** Anderson Theatre
Melissa Rolnick and Michele Rusinko, directors Schaefer Fine Arts Center
Tickets available online at gustavustickets.com or 507-933-7590

SUNDAY, MAY 4

- 10:30 a.m. **Service of Holy Communion** Christ Chapel
- 11 a.m.–2 p.m. **"Books in Bloom" Exhibition** Folke Bernadotte Memorial Library
Hosted by Gustavus Library Associates
- 7 p.m. **"Night of Distinction"** Alumni Hall,
Leadership, Service, and Achievement Honors O.J. Johnson Student Union
*including the Paul Magnuson Student Leadership
and Service Awards*