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Celebrating Student and Faculty/Staff Collaborations 2012

St. Norbert College

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JOIN US!

celebrating student and faculty/staff collaborations

1:00 - 4:00
Presentations
in Todd Wehr Hall

4:00 - 5:00
Reception in
Hendrickson
Dining room

Please,
come and go as
your schedule allows.
Refreshments are
provided throughout
the event.



APRIL 3
2012

**During the reception and recognition ceremony in the
Hendrickson Dining Room of Bemis,
we will have remarks from Michael A. Foley, Ph.D.,
Director of the Chemical Biology Platform,
Broad Institute of MIT and Harvard**



**“Broad Institute Therapeutic Discovery and
Development: Relating Human Genetic
Variation to the Efficacy of Drugs”**

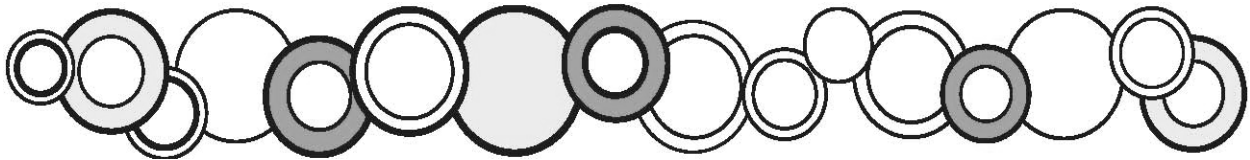
Michael Foley joined the Broad Institute in 2006 as director of the Chemical Biology Platform. He brings extensive knowledge of chemistry and chemical technology, including techniques based on diversity-oriented synthesis (DOS) and medicinal chemistry. Under his leadership, the platform oversees all aspects of chemical libraries and high-throughput chemical screening at the Broad. The platform works to systematically create DOS libraries and develop new approaches to target identification for cell-based screens.

Foley was a co-founder of Infinity Pharmaceuticals and served as Vice President of Chemistry from 2001 to 2006. He was also a co-founder of CombinatoRx Inc. and Forma Therapeutics Inc., and previously worked at Bristol-Myers Squibb and GlaxoSmithKline. He obtained his Ph.D. at Harvard, and helped establish the Harvard Institute of Chemistry and Cell Biology.

Foley received a B.S. in chemistry from St. Norbert College in 1984, an M.S. in chemistry from Utah State University in 1987, and a Ph.D. in chemistry from Harvard University in 1999.

Celebrating Student and Faculty/Staff Collaborations
focuses on the valued tradition at St. Norbert College of
collaborations taking place in labs, studios, and other scholarly
or creative settings, resulting in a rich array of
scholarly research and creative works.

This celebration features collaborative projects that evolved
out of independent studies, class assignments, and casual
interactions, as well as those formal collaborations supported
through the Office of Faculty Development, the Collaborative,
and the Research Fellows Program.



*Co-sponsored by the
Office of Faculty Development;
The Collaborative: The Center for
Undergraduate Research, Scholarship
and Creative Activities;
the Office of the Dean of the College;
and the Office of College
Advancement*

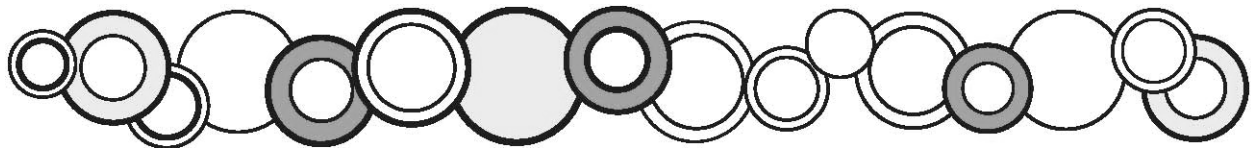
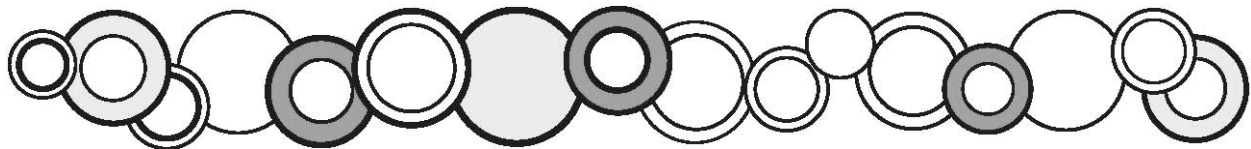


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Day-At-A-Glance

TWH is Todd Wehr Hall

Oral Presentations

1:00-2:00	TWH 146	Nikki Schommer	Humanities and the Fine Arts
1:00-2:00	TWH 146	Amy Diestler	Humanities and the Fine Arts
2:00-3:00	TWH 146	Bojan Francuz	Social Sciences
3:00-4:00	TWH 206	Gretchen Panzer Jens Paasen Hannah Schmitt	Humanities and the Fine Arts
3:00-4:00	TWH 149	Amanda Mohr Bryahna Rambo Rachel White Anna Wollwert	Humanities and the Fine Arts
3:00-4:00	TWH 146	Kaela Gedda	Humanities and the Fine Arts

Works of Art/Exhibits and Performances

3:00-4:00	Godschalx Gallery	Tori Chenault	Humanities and the Fine Arts
3:00-3:30	Godschalx Gallery Mulva Library	Adam Frost Austin Gueths Krista Hove Larry March Erika Quinn Rachael Rogers Elizabeth Van Sistine Rodrigo Villalobos Andriana Vogt Claire West Jacob Yorton	Humanities and the Fine Arts
3:00-3:30	TWH Lobby	Elizabeth Jolly	Humanities and the Fine Arts
3:00-3:30	TWH Lobby	Jon DesChane Jeff LaJeunesse	Natural Sciences
3:30-4:00	Godschalx Gallery	Devon Englebretson	Humanities and the Fine Arts
3:30-4:00	Godschalx Gallery Mulva Library	Adam Frost Austin Gueths Krista Hove Larry March Erika Quinn Rachael Rogers Elizabeth Van Sistine Rodrigo Villalobos Andriana Vogt Claire West Jacob Yorton	Humanities and the Fine Arts

Day-At-A-Glance

TWH is Todd Wehr Hall

Poster Presentations

1:00-1:30	TWH Lobby	HanQin Cai	Natural Sciences
1:00-1:30	TWH Lobby	Megan King	Humanities and the Fine Arts
1:00-1:30	TWH Lobby	Maria Slusarek EDUC310	Humanities and the Fine Arts
1:00-1:30	TWH Lobby	Daniel Sjoquist	Natural Sciences
1:00-1:30	TWH Lobby	Amanda Crupi Arielle Tremel	Natural Sciences
1:00-1:30	TWH Lobby	Yekaterina Makeyeva Tara Mendez Natasha Thern	Natural Sciences
1:00-1:30	TWH Lobby	KateLyn White Niki Nelson	Natural Sciences
1:30-2:00	TWH Lobby	Alison Schaefer	Natural Sciences
1:30-2:00	TWH Lobby	Amanda Sigl	Natural Sciences
1:30-2:00	TWH Lobby	Billy Fischer	Natural Sciences
1:30-2:00	TWH Lobby	Amanda Crupi Arielle Tremel	Natural Sciences
1:30-2:00	TWH Lobby	Sarah Lottes Kevin Beine	Natural Sciences
2:00-2:30	TWH Lobby	Devan Scherer	Social Sciences
2:00-2:30	TWH Lobby	Devin Thomas	Humanities and the Fine Arts
2:00-2:30	TWH Lobby	Kelley Catenacci Arielle Tremel	Social Sciences
2:00-2:30	TWH Lobby	Jordan Zeni KJ Scribner	Social Sciences
2:00-2:30	TWH Lobby	Megan King Olivia Poepping	Social Sciences
2:30-3:00	TWH Lobby	Derek Harrington	Natural Sciences
2:30-3:00	TWH Lobby	Jon DesChane	Natural Sciences
2:30-3:00	TWH Lobby	Yekaterina Makeyeva Tara Mendez Natasha Thern	Natural Sciences
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2:30-3:00	TWH Lobby	Jordan Zeni KJ Scribner	Social Sciences
2:30-3:00	TWH Lobby	Megan King Olivia Poepping	Humanities and the Fine Arts

Day-At-A-Glance

TWH is Todd Wehr Hall

Poster Presentations

3:00-3:30	TWH Lobby	Jordan Mayer	Natural Sciences
3:00-3:30	TWH Lobby	Eric Gale	Natural Sciences
3:00-3:30	TWH Lobby	Steve Sprung	Natural Sciences
3:00-3:30	TWH Lobby	Sarah Lottes Kevin Beine	Natural Sciences
3:00-3:30	TWH Lobby	Callie Schroeder	Social Sciences
3:00-3:30	TWH Lobby	Jordan Mayer	Natural Sciences
3:00-3:30	TWH Lobby	Matthew VanLannen Robert Schadrie	Social Sciences
3:00-3:30	TWH Lobby	Sarah Stiemke Bradley Blank	Natural Sciences
3:00-3:30	TWH Lobby	Louis Ayensu-Mensah Jacob Schneider	Natural Sciences
3:00-3:30	TWH Lobby	Isabella Benassi Shanna Dennis Emily Goetz Riley Smith	Natural Sciences
3:30-4:00	TWH Lobby	Morgan Johnson	Humanities and the Fine Arts
3:30-4:00	TWH Lobby	KateLyn White Niki Nelson	Natural Sciences
3:30-4:00	TWH Lobby	Matthew VanLannen Robert Schadrie	Social Sciences
3:30-4:00	TWH Lobby	Sarah Stiemke Bradley Blank	Natural Sciences
3:30-4:00	TWH Lobby	Louis Ayensu-Mensah Jacob Schneider	Natural Sciences
3:30-4:00	TWH Lobby	Isabella Benassi Shanna Dennis Emily Goetz Riley Smith	Natural Sciences
3:30-4:00	TWH Lobby	Mara Aparnieks	Humanities and the Fine Arts
3:30-4:00	TWH Lobby	Rakel Zarb	Social Sciences
3:30-4:00	TWH Lobby	Brandon Fox	Natural Sciences
3:30-4:00	TWH Lobby	Brianna Skrzypcak	Natural Sciences
3:30-4:00	TWH Lobby	Viktoriya Zotova	Social Sciences
3:30-4:00	TWH Lobby	Rachel Conrad	Natural Sciences
3:30-4:00	TWH Lobby	Sandra Maria Payan Catano	Humanities and the Fine Arts

- TWH 146**
1:00-2:00
Project Number: 43
- Alumni Graduate Survey**
Amy Diestler, Sophomore Accounting Major
Mandy Nycz, Director of Career Services
Each year, Career Services surveys new graduates about their post-graduation pursuits to learn whether they have secured employment, are attending graduate school, or are volunteering full-time. The results can provide a snapshot of where our graduates have gone after graduation and how their education has assisted them with their career goals. Data collection begins in December and continues through February. Responses are collected from undergraduate and graduate students through an online web site instrument and phone calls. Results are published on the Career Services website and used to create handouts for each major area of study.
- TWH 146**
1:00-2:00
Project Number: 41
- Functional Double-Employment of the Submediant Triad**
Nikki Schommer, Sophomore Music and Spanish Major
Blake Henson, Assistant Professor of Music
The Submediant triad functions as either Tonic or Dominant depending upon harmonic context. Rameau's theory of double-employment provides the opportunity for the Subdominant and Supertonic triads to possess two opposing functions simultaneously. Following the function paradigms as discussed by Agmon, Riemann, and Miller, it is possible to envision a scenario in which the Submediant likewise functions in opposing manners. Following Rameau's argument, the Submediant may therefore follow the principle of double-employment.
- TWH Lobby**
1:00-1:30
Project Number: 2
- A Parameterization of the Koch Curve**
HanQin Cai, Senior Math and Computer Science Major
Kevin Murphy, Assistant Professor of Mathematics
John Frohlinger, Associate Professor of Mathematics
The Koch curve is one of the most famous and fundamental fractals. It can be generated by infinite iterations of a replacement rule. We noted this replacement rule can be represented by four affine transformations f_0, f_1, f_2, f_3 . Using these affine transformations along with a base four addressing scheme, we can define a parameterization function of the Koch curve where the parameterization function, $F(t): [0,1] \rightarrow \mathbb{R}^2$, is one-to-one, well-defined, and continuous.
- TWH Lobby**
1:00-1:30
Project Number: 35
- Meeting the Needs of Diverse Students: How Teachers use Critical Literacy as Effective Pedagogy in the Elementary Classroom**
Megan King, Senior Sociology-Human Services Major
Tynisha Meidl, Assistant Professor of Education
Bola Delano-Oriaran, Assistant Professor of Education
Debbi Faase, Director of Field Experience
The research study sought to examine the literacy approaches that teachers use in the classroom to meet the needs of diverse learners. It explored how teachers perceive, identify, define, and respond to the needs of diverse learners, especially when they are teaching functional literacy. The goal of the study is to evaluate

and identify literacy instructional practices and determine their effectiveness when working with diverse learners. The findings from this study are intended to support teacher educators, school districts and in-service teachers on using culturally relevant and appropriate teaching methods within the classroom.

TWH Lobby

1:00-1:30

Project Number: 1

Sheltered Instruction Observation Protocol Analysis of ESL Classroom

*Maria Slusarek, Senior Secondary Education and Spanish Major
EDUC310*

Yoko Mogo-Hein, Adjunct Assistant Professor of Education

This poster and project highlights the analysis of Sheltered Instruction Observation Protocol method in an English Language Learning (ELL) classroom at Edison Middle School in Green Bay, WI. The purpose of the project was to observe the pedagogy of professional educators and their ELL classroom. Based on SIOP guiding questions, this study provides a personal critique of the lessons observed. Also included is a chart that graphically demonstrates the students' general strengths and weakness within the classroom based on participant observational visits. Preparation, building background, comprehensible input, strategies, and interaction are the 5 different types of criteria represented in the graph.

TWH Lobby

1:00-1:30

Project Number: 7

The Effect of the Stress Hormones Corticosterone and Epinephrine on Bacteria Isolated from the Zebra Finch Gut

Daniel Sjoquist, Senior Biology Major

David Hunnicutt, Associate Professor of Biology

David Bailey, Assistant Professor of Biology

Bacteria are common residents of the gut and respond to various conditions produced within their host. To begin examining the potential interaction between stress and intestinal bacteria, several bacterial species were isolated from the zebra finch gut and incubated with varying levels of the hormones epinephrine and corticosterone. The growth rates of *Enterobacter cowanii* and *Pseudomonas* sp. were enhanced in response to the hormone treatments compared to the controls; data regarding biofilm formation of these bacterial species are currently being collected. These data suggest levels of bacteria in the zebra finch gut could be modified during conditions of stress.

TWH Lobby

1:00-1:30

1:30-2:00

Project Number: 31

Biodiesel and Soap Production

Amanda Crupi, Senior Chemistry and Education Major

Arielle Tremel, Sophomore Biochemistry Major

Larry Scheich, Associate Dean of Natural Sciences and Professor of Chemistry

Throughout the summer of 2011, used oil from Phil's and the Cafeteria was collected and converted into biodiesel using a 40-gallon NWR Liberty Biodiesel Processor located in the basement of JMS. The biodiesel is created through base-catalyzed transesterification of vegetable oil, which must first be filtered, heated, and mixed with methoxide before being left to settle for twenty-four hours. This production of biodiesel is nearly 100% green, and the only by-product, glycerin, can be made into soap by adding potassium hydroxide. Fuel

batches of forty gallons are continuously being produced every two weeks and used daily in the SNC recycle truck.

TWH Lobby

1:00-1:30

2:30-3:00

Project Number: 8

Quantification of Vesicular Glutamate Transporter Proteins in Zebra Finch Neurons

Yekaterina Makeyeva, Sophomore Biology Major

Tara Mendez, Junior Biology Major

Natasha Thern, Sophomore Biology Major

David Bailey, Assistant Professor of Biology

Work in our lab focuses generally on how hormones, produced peripherally or within the brain, affect the structure and function of neurons. One hormone in particular, 17 β -estradiol (“estrogen”), can increase the strength of connections between brain cells, especially those in the hippocampus, a region central to memory formation. Glutamate, a common neurotransmitter in the brain including the hippocampus, is packed into synaptic vesicles by vesicular glutamate transporter proteins (VGLUT) prior to its release. We labeled and are quantifying VGLUT levels in zebra finch brain, which is novel and central to our understanding of estrogen-induced changes in neuron structure and function.

TWH Lobby

1:00-1:30

3:30-4:00

Project Number: 15

The Effects of Resveratrol, DFMO and DCA on the Human Cell Lines MCF-7, MB-231 and MCF-10a.

KateLyn White, Junior Biology Major

Niki Nelson, Junior Biology-Biomedical Major

Russ Feirer, Associate Professor of Biology

Cancer cells utilize glycolysis rather than mitochondrial glucose oxidation to produce ATP. This metabolic shift reduces the rate of apoptosis, a process dependent upon the mitochondria (Michelakis, 2008). By treating cancer cells with dichloroacetate (DCA) and resveratrol, glucose intake was decreased in breast cancer cell lines. DCA causes the cells to revert back to mitochondrial glucose oxidation, while resveratrol is believed to mimic conditions of nutrient deprivation forcing cells to conserve glucose (Kueck 2007). It is our hypothesis that these non-toxic compounds will have minimal effect on non-cancerous MCF-10a cell lines while they induce apoptosis, cell death, in the breast cancer lines.

TWH Lobby

1:30-2:00

Project Number: 20

Allelopathic Facilitation of Aulacoseira Granulata by Gloeocystis Planctonica

Alison Schaefer, Senior Chemistry Major

David Poister, Associate Professor of Chemistry and Environmental Science

Analysis of the phytoplankton community composition in the Fox River at De Pere in 2010 revealed a July bloom of the centric diatom Aulacoseira granulata that was preceded by an increase in the green algae Gloeocystis planctonica. The hypothesis that G. planctonica facilitates the growth of A. granulata was evaluated with a series of controlled cross-culture experiments. Dormant A. granulata exposed to G. planctonica-treated medium grew faster relative to controls. These results suggest that a chemical cue from G. planctonica can trigger the transition of A. granulata out of dormancy into rapid growth.

TWH Lobby
1:30-2:00
Project Number: 33

Modeling Chemical Structures Using Origami

Amanda Sigl, Sophomore Chemistry Major

Teena Carroll, Assistant Professor of Mathematics

Many different organic compounds exist in nature in varying sizes, shapes, and structures. We focus on using origami to model some of these structures - buckyballs and nanotubes - in order to determine key mathematical properties, including angles of bonds, ways the structure can be closed, as well as the number of carbon rings in the diameter. In addition, looking at the physical model, we are able to use graph theory to determine whether or not the molecules' face graphs are planar.

TWH Lobby
1:30-2:00
Project Number: 3

Petrogenesis of Approximately 1.5GA Granitic Rocks from Wausau, WI with Emphasis on Riebeckite Mega-Crystals

Billy Fischer, Senior Geology Major

Tim Flood, Professor of Geology

The Wausau Syenite Complex is an approximately 1.5 billion year old intrusion located near Wausau, Wisconsin. This study examines a recently exposed 1200' long outcrop. The purpose of this investigation was to map the outcrop, determine the various rock types and textures, and perform a petrographic analysis on selected samples. Special attention was given to a 15' long pegmatitic dike, which contains quartz, potassium feldspar and mega-crystals (length: 15-30cm) of riebeckite. Micro-Probe, SEM, and WDS-XRD analyses were completed on the riebeckite crystals to determine exact composition. We infer the mega-crystals and the dike formed from a high volatile phase.

TWH Lobby
1:00-1:30
1:30-2:00
Project Number: 31

Biodiesel and Soap Production

Amanda Crupi, Senior Chemistry and Education Major

Arielle Tremel, Sophomore Biochemistry Major

Larry Scheich, Associate Dean of Natural Sciences and Professor of Chemistry
Refer to page 8 for abstract.

TWH Lobby
1:30-2:00
3:00-3:30
Project Number: 9

The Effect of Corticosterone Treatment on Hippocampal Cell Morphology and Spatial Memory in Zebra Finches

Sarah Lottes, Senior Biology Major

Kevin Beine, Sophomore Biology Major

David Bailey, Assistant Professor of Biology

Episodic-like memory in zebra finches, as in most vertebrates, is dependent on the hippocampus. This memory can be enhanced by short-term stress but disrupted by chronic stress due in part to hormones known as glucocorticoids, like corticosterone, as prolonged exposure promotes cell death. Previous work in our lab examined long-term (7d) and short-term (2d) corticosterone treatment in birds. We are investigating whether an acute (overnight) increase in corticosterone impairs memory performance and affects levels of the calcium-binding protein calbindin and immediate early gene ZENK. The work adds to our timeline of corticosterone's effects on hippocampal function in zebra finches.

TWH 146
2:00-3:00
Project Number: 42

Abroad from Abroad: Understanding Kolb's Experiential Learning Cycle Through the Lens of an International Student Studying Abroad

Bojan Francuz, Junior Political Science and International Studies Major
Jeremy Doughty, Study Abroad Advisor

The case study, Abroad from Abroad, examines a unique international educational experience by utilizing Kolb's Experiential Learning Cycle. The collaborative research project analyzes a Serbian student's semester abroad in Jordan. By immersing himself in the study, the student was afforded an opportunity to unpack his international experiences - a step that is often excluded from the study abroad process. Through a critical reflection, the study aims to identify the student's level of intercultural sensitivity and examine the practical implications for future international students who chose to study abroad.

TWH Lobby
2:00-2:30
Project Number: 34

Effects of Social Support and Stress on Health

Devan Scherer, Junior Psychology Major
Stuart Korshavn, Associate Professor of Psychology

Illness today is defined by chronic illnesses and how stress plays a crucial role in this. The current study examined social support's effect on the relationship between stress and illness at a small Midwestern college. The study utilized two health/illness measures, two stress measures, and two social support measures. Social support was found to buffer the effect of stress on illness in 10 instances, have no impact on the stress-illness relationship in 16 instances, and to aggravate the effect of stress on illness in 10 instances. Understanding how social support impacts stress and health will enable individuals to decrease illnesses.

TWH Lobby
2:00-2:30
Project Number: 32

Happy Pig Day!

Devin Thomas, Senior Elementary Education Major
April Beiswenger, Assistant Professor of Theatre Studies

The book, "Happy Pig Day," by Mo Williams, was adapted into a play. Part of the design process to accomplish this was the writing of the script and designing the scenery and costumes.

TWH Lobby
2:00-2:30
2:30-3:00
Project Number: 19

Infant Engagement and Regulation in the Still-Face Paradigm

Kelley Catenacci, Junior Psychology Major
Arielle Tremel, Sophomore Biochemistry Major
Ashley Hill-Soderlund, Assistant Professor of Psychology

The Still Face is a behavioral paradigm used to exhibit a social interaction between a mother and her infant. The still-face paradigm (SFP) elicits regulatory behaviors from the infant who must cope with a mother who is unresponsive (displaying a "still-face"). Raters coded the behaviors of the infant-mother dyads ($n \approx 80$) expressed during the SFP using a novel behavioral code. The code included both self-regulatory and engagement behaviors and will be used to analyze the sequence of behaviors. The interaction between mom and baby in the SFP is dynamic and illustrative of how emotion regulation begins to develop in childhood.

TWH Lobby
2:00-2:30
2:30-3:00
Project Number: 28

The Impact of Social Media Policies on the Staffing and Socialization Process

Jordan Zeni, Junior Business Administration Major
KJ Scribner, Junior Business Administration Major
Matthew Stollak, Associate Professor of Business Administration
Amy Vandenberg, Assistant Professor of Business Administration

Social networking has grown into what has become a major aspect of everyday life, especially among college students and recent graduates. However, this online interaction has led to an ever thinning line between work and private life. Many institutions have begun adopting and implementing social networking policies in an attempt to protect themselves and their employees. These new policies are controversial as many argue that they infringe on employee rights. Given the issues involved, we were interested in examining the impact of how these social media tools are impacting the recruitment, selection, and socialization of new employees.

TWH Lobby
2:00-2:30
2:30-3:00
Project Number: 22

The Influence of Collegiate Education on Knowledge and Perceptions of Health Disparities in the United States.

Megan King, Senior Sociology-Human Services Major
Olivia Poepping, Junior Sociology-Human Services Major
Jamie Lynch, Assistant Professor of Sociology

How does a college major matter? Through researching St. Norbert College student knowledge and perceptions of national health disparities, this study investigates how a college major may influence beliefs and attitudes. This study examines the relationship between educational statuses, student background and the knowledge and perceptions held on disparities among nationally recognized health issues. This study assesses knowledge and perceptions through a survey focusing on four of the major health disparities. Asthma, Obesity, HIV/AIDS and Mental Illness are the four distinct diseases analyzed. The results will show how a college major may influence knowledge and perceptions on social issues, specifically health disparities.

TWH Lobby
2:30-3:00
Project Number: 23

Controlling Laser Frequencies with Atomic Transitions

Jon DesChane, Senior Physics and Mathematics Major
Erik Brekke, Assistant Professor of Physics

Diode lasers provide a cheap and easily accessible source of low power laser light, but they require external means to control the range of frequencies that are emitted. Atomic vapors provide an excellent means to control these frequencies by observing the absorption of the laser through an atomic sample. Two techniques have been accomplished to eliminate Doppler broadening and control the frequency of a home-built diode laser system. One method uses the saturated absorption of single photon transition in Rubidium, and another uses a two-photon transition. The control demonstrated will be essential in pursuing future laser-atom interactions.

TWH Lobby
2:30-3:00
Project Number: 18

MetaSWOT: A User-Friendly GUI Based Strategic Planning Tool in C#
Derek Harrington, Senior Computer Science Major
Ravi Agarwal, Assistant Professor of Computer Science
A new method of strategic planning for businesses has been developed by Wolfgang Grassl, Joy Pahl, and Ravi Agarwal that focuses on the resource-based view of a firm. In a sequential and integrated way, it guides decision-makers from brainstorming, via the identification and quantification of relevant factors, to a list of strategic priorities. A working prototype for this methodology was implemented in an excel workbook. This collaborative project resulted in the implementation of a GUI application that converted the excel prototype into a portable software tool implemented in C# that can be used to put this new methodology into practice. This newly developed tool can be run as an independent application without dependencies on any other software. This conversion made the new methodology both marketable and distributable which should enhance the usability and accessibility of this new research. As well as extending usability, new features were added. A new user-friendly graphical interface was developed. Robust usability and error-handling were implemented. Some new features include the ability to print custom reports, enhanced data integrity, and user-friendly bubble charts.

TWH Lobby
2:00-2:30
2:30-3:00
Project Number: 28

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Matthew Stollak, Associate Professor of Business Administration
Amy Vandenberg, Assistant Professor of Business Administration
Refer to page 12 for abstract.

TWH Lobby
2:00-2:30
2:30-3:00
Project Number: 22

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Jamie Lynch, Assistant Professor of Sociology
Refer to page 12 for abstract.

TWH Lobby
2:00-2:30
2:30-3:00
Project Number: 19

Infant Engagement and Regulation in the Still-Face Paradigm
Kelley Catenacci, Junior Psychology Major
Arielle Tremel, Sophomore Biochemistry Major
Ashley Hill-Soderlund, Assistant Professor of Psychology
Refer to page 11 for abstract.

TWH Lobby
1:00-1:30
2:30-3:00
Project Number: 8

Quantification of Vesicular Glutamate Transporter Proteins in Zebra Finch Neurons
Yekaterina Makeyeva, Sophomore Biology Major
Tara Mendez, Junior Biology Major
Natasha Thern, Sophomore Biology Major
David Bailey, Assistant Professor of Biology
Refer to page 9 for abstract.

TWH 206

3:00-4:00

Project Number: 46

Critical essays on literature presented at the Sigma Tau Delta National Convention in New Orleans, February 2012*Gretchen Panzer, Senior English and Women's and Gender Studies Major**Jens Paasen, German Major**Hannah Schmitt, Sophomore English Major**John Pennington, Professor of English**Laurie MacDiarmid, Associate Professor of English**Karlynn Crowley, Associate Professor of English*Gretchen Panzer, "Gender and Power in Salman Rushdie's *Midnight's Children*: The Implications of 'The Widow'"

Jens Paasen, "If You Want to Belong You Have to Buy: Disney's Pocahontas and Consumerism in a Natural Disguise"

Hannah Schmitt, "Girl Talk: Female Friendships in Hannah Webster Foster's 'The Coquette'"

TWH 149

3:00-4:00

Project Number: 44

Gender and Politics in Latin America*Amanda Mohr, Freshman International Business and**Language Area Study Major**Bryahna Rambo, Freshman Biology Major**Rachel White, Freshman International Business and Language Area Study and Spanish Major**Anna Wollwert, Freshman Spanish and Sociology Major**Gratzia Villarroel, Associate Professor of Political Science*

This oral presentation is based on the research the first year Freshman Fellows have been carrying out at St. Norbert College under the direction of Dr. Gratzia Villarroel in Political Science. Students will discuss the changing roles of women in the political process of Latin America from various interdisciplinary perspectives. They will also focus on the challenges that women face due to cultural values that inhibit women's political activity, and a political context of repression.

TWH 146

3:00-4:00

Project Number: 40

Paving the Way for a New Masculinity: Redefining Gender Roles*Kaela Gedda, Senior Communication and English Major**Deirdre Egan-Ryan, Assistant Professor of English*

This study provides insight on gender assumptions and the limitations of the current definition of masculinity used in higher education and the workforce. The study uses specific evidence from the U.S. Department of Education, the "Gender Matters" study from the Office of Institutional Effectiveness at St. Norbert College, and The Shriver Report: "A Woman's Nation Changes Everything" to emphasize the position men currently hold in higher education and the economy. Citing evidence from New York Times articles and Atlantic's "The End of Men" by Hanna Rosin, real life stories and experiences are shared to offer evidence in another form than statistics. The study concludes with specific suggestions to redefine masculinity so men will continue to succeed in higher education and in their careers.

TWH Lobby
3:00-3:30
Project Number: 37

Determination of the Petrochemistry of Rocks from near Mount Achernar, Trans-Antarctic Mountains, Antarctica

Jordan Mayer, Senior Geology and Environmental Science Major
Tim Flood, Professor of Geology

Mount Achernar, located within the Trans-Antarctic Mountains, is composed primarily of mafic rocks believed to be part of a continental flood basalt province known as the Ferrar Dolerite. However, some of the rocks collected during the 2010-2011 field season appeared to be ultramafic in hand sample. The purpose of this study was to determine if the rocks are part of the mafic Ferrar Dolerite or are ultramafic in origin. Samples were analyzed via modal point count analysis and whole-rock geochemistry. Modal analysis revealed that the rocks were mafic. The geochemistry is consistent with published data on the Ferrar Dolerite.

TWH Lobby
3:00-3:30
Project Number: 26

Diet of Rainbow Trout, *Oncorhynchus mykiss*, in the Colorado River, Grand Canyon

Eric Gale, Senior Biology Major
Anindo Choudhury, Professor of Biology

The completion of the Glen Canyon dam drastically altered the hydrology and ecology of the Colorado River in the Grand Canyon. Since then the 15-mile long Lee's Ferry reach below the dam has served as a premium 'Blue Ribbon' rainbow trout (*Oncorhynchus mykiss*) fishery. This study focuses on the dietary habits of trout during the last 5 years. All dietary items were identified and classified to family or species where possible; in total, 12 taxa were identified to date. Results show that trout prey opportunistically but have a clear preference for dipteran larval and emergent stages rather than gammarids that were stocked as a main food source.

TWH Lobby
3:00-3:30
Project Number: 13

Effect of Glyphosate on Non-Target, Agricultural Field Margin Tree Seedlings

Steve Sprung, Senior Environmental Science Major
Jason Mills, Visiting Assistant Professor of Biology

Over 99% of Wisconsin's farmers use glyphosate, commonly known as Round Up, on their fields to reduce unwanted vegetation in the crop planting area. Since the effects of glyphosate on non-target plants are little known, we examined the glyphosate sensitivity of seedlings in several common Wisconsin tree species that grow near agricultural fields. We measured glyphosate sensitivity by treating seedlings with glyphosate solutions ranging in concentration from 0.00001% to 1% (a typical agricultural concentration). If glyphosate sensitivity varies among field margin plant species, its continued use may lead to changes in species composition.

TWH Lobby
3:00-3:30
Project Number: 11

Leadership Programs at St. Norbert College

Callie Schroeder, Senior Psychology and Sociology Major
Raymond Zurawski, Associate Professor of Psychology

The development of student leadership skills is an increasingly important goal of academic and student life professionals at many colleges and universities. However, there have been relatively few systematic investigations of the effects or the accompaniments of participation in formal leadership programs. Our study sought to examine the correlates of participation in leadership programs at St. Norbert College. Participants in the study were 272 male and female undergraduates who took part in a leadership program. This sample was compared to 800 students who did not participate in these programs. All participants completed the Higher Education Research Institute (HERI) Freshman CIRP survey at orientation and the HERI College Senior Survey. Those who participated in one or more of the various formal leadership experiences at the College reported more self-confidence than did their counterparts who did not participate in formal leadership experiences and gender differences emerged in these findings. Future research examining effects and correlates of other leadership experiences, including leadership roles in varsity sports and/or student government, is necessary.

TWH Lobby
3:00-3:30
Project Number: 14

SNC as Arboretum: Mapping the Trees on Campus

Jordan Mayer, Senior Geology and Environmental Science Major
Jason Mills, Visiting Assistant Professor of Biology
David Hunnicutt, Assistant Professor of Biology

The St. Norbert College campus covers about 90 acres and includes hundreds of trees, many of which were planted in the mid-20th century by Fr. Anselm Keefe, a long-time member of the Biology Discipline. The purpose of this project was to develop a digital map of the trees currently growing on the SNC campus. For each tree, we recorded species, diameter and height using a GPS unit. These data can be utilized to create maps using a geographic information system (ArcGIS software). The digital maps we are developing can be linked to mobile devices and used by students or campus visitors as a guide to tree identification.

TWH Lobby
1:30-2:00
3:00-3:30
Project Number: 9

The Effect of Corticosterone Treatment on Hippocampal Cell Morphology and Spatial Memory in Zebra Finches

Sarah Lottes, Senior Biology Major
Kevin Beine, Sophomore Biology Major
David Bailey, Assistant Professor of Biology

Refer to page 10 for abstract.

TWH Lobby
3:00-3:30
Project Number: 30

“The Love of The Nightingale”

Elizabeth Jolly, Senior Theater Studies and Classical Studies Major
April Beiswenger, Assistant Professor of Theatre Studies
Stephen Rupsch, Director of Theatre Studies

In any theatrical production, there are many integral parts that come together to make the performance possible. These parts are the designers, directors, actors,

and production staff. By nature, theatre must always be a collaboration to be successful. Our project is the creation of the SNC Theatre Department's production of "The Love of the Nightingale" by Timberlake Wertenbaker. Dr. Stephen Rupsch is the director of the production, Elizabeth Jolly (as her senior capstone) designed the costumes, and Ms. April Beiswenger designed the set and lights.

TWH Lobby

3:00-3:30

Project Number: 39

Using Flames to Visualize Sound Waves

Jon DesChane, Senior Physics and Mathematics Major

Jeff LaJeunesse, Junior Physics and Mathematics Major

Erik Brekke, Assistant Professor of Physics

The Ruben's Tube is a unique means of demonstrating sound waves and resonant frequencies using small flames. We have constructed a Ruben's Tube using a 6' aluminum pipe sealed with Theraband rubber. Small flames fueled by propane gas allow the demonstration of standing waves with a fundamental frequency of 68 Hz, and pressure variations can be seen when music is played.

TWH Lobby

3:00-3:30

3:30-4:00

Project Number: 21

A Cost-Benefit Analysis of Accounting Undergraduate Education

Matthew VanLannen, Senior Accounting Major

Robert Schadrie, Senior Accounting Major

Jason Haen, Instructor of Accounting

Amy Vandenberg, Assistant Professor of Business Administration

A post-secondary education is one of the most important and coveted credentials for the working professional. In the modern era, an undergraduate degree has become an invaluable certification that allows for countless opportunities in both public and private industry. Barring all limitations, the ambitious and rational individual would undoubtedly seek such a level of education. Though its perceived benefits are substantial and real, the cost of attaining an undergraduate education is ever increasing, now more than ever. You should never underestimate the value of a college education, however at the same time neither should you underestimate its price. College tuition costs are rising at twice the rate of inflation. Few students can afford to pay for college without some form of education financing. In 2007-2008, among graduating 4-year undergraduate students who applied for federal student aid, 86.3% borrowed to pay for their education. (2007-08 National Postsecondary Student Aid Study).

Could increased student debts, interest rates, and loss of government financial aid support threaten the value of a college education? As current and future accounting professionals, we intend to conduct a cost-benefit analysis on the projected total costs of an Accounting undergraduate education assuming historical market trends in both costs and future earnings power.

TWH Lobby

3:00-3:30

3:30-4:00

Project Number: 4

A Scale, Some Coins, A Problem

Sarah Stiemke, Freshman Mathematics and Education Major

Bradley Blank, Freshman Mathematics and Physics Major

John Frohlinger, Associate Professor of Mathematics

We are given a collection of n coins of various weights (1, 2, or 3 grams) and a balance scale. This collaboration seeks to determine the weight of each coin in

the fewest number of weighings. A key to solving the problem is identifying a 2-gram or two 1-gram coins. We proved the minimum number of weighings needed to solve a set of n coins is either n or $n + 1$. We have solved some sets in as few as n weighings; however, we have not yet found a method that guarantees this for every collection of coins.

Godschalx Gallery
Mulva Library
3:00-3:30
3:30-4:00
Project Number: 29

Colliding Thoughts: Three Dimensional Mixed-Media Works

Adam Frost, Senior Art Major
Austin Gueths, Senior Art Major
Krista Hove, Senior Art Major
Larry March, Junior Art Major
Erika Quinn, Junior Art Major
Rachael Rogers, Senior Art Major
Elizabeth Van Sistine, Sophomore Art Major
Rodrigo Villalobos, Senior Art Major
Andriana Vogt, Senior Art Major
Claire West, Senior Art Major
Jacob Yorton, Senior Art Major
James Neilson, Assistant Professor of Art
Candy Klos, Library Operations and Circulation Assistant
Karen Mand, Cataloging Management Specialist

Students will explore inventive and experimental approaches to a variety of conventional and non-traditional media. Extending the ritual and creation of cabinets of wonders, with special regard to the imagination of Joseph Cornell and Chris Jordan, and valuing the Arte Povera esthetic, students will engage in the art of creating a collection of mixed media works. Students will work with collage, using found objects, text and image, and investigate the art of assemblage. Intuitive and creative uses of traditional materials are explored as well as the boundaries between painting, drawing, and sculpture.

TWH Lobby
3:00-3:30
3:30-4:00
Project Number: 10

Synthesis of Methylated 1,10-phenanthrolines and the Photochemistry of their Copper(I) Complexes

Louis Ayensu-Mensah, Junior Chemistry Major
Jacob Schneider, Sophomore Chemistry Major
Kari Cunningham, Assistant Professor of Chemistry

From analytical protocols to luminescent metal complexes, 1,10-phenanthroline and its derivatives can be found throughout the literature. The reason for this interest has been the wide variety of possible substitutions along the backbone. Our current work has found that a direct relationship exists between the electronics of the phenanthroline derivative and the ratio of mono-substituted to di-substituted products when using $\text{CH}_3\text{-Li}$ as the nucleophile. These unique ligands allow for direct comparison of effect that simple methyl groups can exert on the photochemistry of these 1,10-phenanthroline complexes of copper (I).

TWH Lobby
3:00-3:30
3:30-4:00
Project Number: 16

The Effect of Resveratrol, DFMO, and DenSpm on Breast Epithelial and Cancer Cell Lines

Isabella Benassi, Senior Biology-Biomedical Major
Shanna Dennis, Junior Biology-Biomedical Major
Emily Goetz, Sophomore Biology-Biomedical Major
Riley Smith, Sophomore Biology-Biomedical Major
Russ Feirer, Associate Professor of Biology

Resveratrol was first reported to act as a chemopreventative anticancer compound in mice by Jang et al. (1997), and has been shown to induce apoptosis and reduce both cell viability and mitotic index in many cancer cell lines, including MCF-7. This study extends these findings to the breast cancer cell line, MDA-231, and the non-cancerous breast epithelial line, MCF-10a. The effects of resveratrol, and the compounds which affect polyamine metabolism, difluoromethylornithine (DFMO) and diethylnorspermine (DenSpm) and their interactions were studied. Cell viability, morphology, expression of the transcription factor myc, p21, and the enzymes involved in polyamine metabolism were measured.

TWH Lobby
3:30-4:00
Project Number: 27

A Cross-Cultural Comparison of Ecuadoran and U.S. College Students' Face, Facework, and Communication Conflict Styles: An Extension of Face Negotiation Theory

Morgan Johnson, Senior Communication and Spanish Major
Jim Neuliep, Professor of Communication and Media Studies

This study is a cross-cultural comparison of Ecuadorian and U.S. college students on several communication variables including face, facework, and conflict resolution communication styles. Students from both countries (N = 275) recalled a conflict they recently experienced and then completed surveys designed to measure face, facework, and conflict resolution preferences employed during the conflict. Using inferential statistical analyses, cross-cultural comparisons were made on each of the communication variables. The results of the comparisons are discussed within the dominant cultural orientations of U.S. and Ecuadorian culture, including ethnocentrism and power distance, within the fundamental assumptions of Face Negotiation Theory.

TWH Lobby
3:00-3:30
3:30-4:00
Project Number: 21

A Cost-Benefit Analysis of Accounting Undergraduate Education

Matthew VanLannen, Senior Accounting Major
Robert Schadrie, Senior Accounting Major
Jason Haen, Instructor of Accounting
Amy Vandenberg, Assistant Professor of Business Administration

Refer to page 17 for abstract.

TWH Lobby
3:00-3:30
3:30-4:00
Project Number: 4

A Scale, Some Coins, A Problem

Sarah Stiemke, Freshman Math and Education Major
Bradley Blank, Freshman Math and Physics Major
John Frohlinger, Associate Professor of Mathematics

Refer to page 17 for abstract

Godschalx Gallery
Mulva Library
3:00-3:30
3:30-4:00
Project Number: 29

Colliding Thoughts: Three Dimensional Mixed-Media Works

Adam Frost, Senior Art Major
Austin Gueths, Senior Art Major
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Larry March, Junior Art Major
Erika Quinn, Junior Art Major
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Elizabeth Van Sistine, Sophomore Art Major
Rodrigo Villalobos, Senior Art Major
Andriana Vogt, Senior Art Major
Claire West, Senior Art Major
Jacob Yorton, Senior Art Major
James Neilson, Assistant Professor of Art
Candy Klos, Library Operations and Circulation Assistant
Karen Mand, Cataloging Management Specialist
Refer to page 18 for abstract

TWH Lobby
3:00-3:30
3:30-4:00
Project Number: 10

Synthesis of Methylated 1,10-phenanthrolines and the Photochemistry of their Copper(I) Complexes

Louis Ayensu-Mensah, Junior Chemistry Major
Jacob Schneider, Sophomore Chemistry Major
Kari Cunningham, Assistant Professor of Chemistry
Refer to page 18 for abstract

TWH Lobby
3:00-3:30
3:30-4:00
Project Number: 16

The Effect of Resveratrol, DFMO, and DenSpm on Breast Epithelial and Cancer Cell Lines

Isabella Benassi, Senior Biology-Biomedical Major
Shanna Dennis, Junior Biology-Biomedical Major
Emily Goetz, Sophomore Biology-Biomedical Major
Riley Smith, Sophomore Biology-Biomedical Major
Russ Feirer, Associate Professor of Biology
Refer to page 19 for abstract

TWH Lobby
3:30-4:00
Project Number: 5

Analysis of Potential Virulence Factors in the Fish Pathogen *Flavobacterium columnare*

Rachel Conrad, Sophomore Biology Major
David Hunnicutt, Associate Professor of Biology
Flavobacterium columnare is a gram negative bacterium that causes Columnaris Disease in a variety of fish, including ecologically and economically important species in Wisconsin. Two features of F. columnare suggested to be involved in virulence are gliding motility and the secretion of digestive enzymes. Zebra fish (*Danio rerio*) were exposed to the bacteria using the bath infection method. Fish were submerged in solutions containing wild-type F. columnare (Fc2), a mutant deficient in motility (*gldJ*-), or a mutant deficient in the digestive enzyme (*cslA*-). Preliminary data indicates that a loss of the *cslA* gene, but not the *gldJ* gene, reduces virulence.

TWH Lobby

3:30-4:00

Project Number: 24

Ethnographic Research on the Xilonen Ceremony*Sandra Maria Payan Catano, Junior Sociology Major**Sabine Hyland, Associate Professor of Anthropology*

This research consists of ethnographic observation of the community of ritual dancers known as the Kalpulli Ketzal Coatlique [“Community of the Divine Bird of the Serpent Skirt”]. These dancers form part of a larger community of neo-Aztec religious practitioners found in Mexico and throughout Mexican-American groups in the U.S. Ms. Payan observed and participated in the activities of the Kalpulli Ketzalcoatlique for a two-month period in 2011. She made more observation of the rituals in January, 2012. Working with Dr. Sabine Hyland, she prepared an analysis and poster session about female roles and gender symbolism in this growing Mexican and Mexican-American religious tradition.

TWH Lobby

1:00-1:30

3:30-4:00

Project Number: 15

The Effects of Resveratrol, DFMO and DCA on the Human Cell Lines**MCF-7, MB-231 and MCF-10a.***KateLyn White, Junior Biology Major**Niki Nelson, Junior Biology-Biomedical Major**Russ Feirer, Associate Professor of Biology*

Refer to page 9 for abstract.

TWH Lobby

3:30-4:00

Project Number: 17

Go Abroad or Stay at Home: University Choice Among Bulgarian Students*Viktoriya Zotova, Junior Economics Major**Wolfgang Grassl, Associate Professor of Business Administration*

The goal of the proposed research is to empirically find what factors determine the foreign university choice among Bulgarian students in order to gain better understanding of the specifics of their higher education demand and provide that knowledge to educational institutions in Bulgaria and abroad, such as St. Norbert College, so that the more of those demands can be met. The project consists of the development of a research model, creation and online distribution of a questionnaire, evaluation and presentation of findings, and submission of a paper to a refereed journal.

TWH Lobby

3:30-4:00

Project Number: 6

Identification of Bacteria of the Zebra Finch Gut*Brianna Skrzypczak, Junior Biology-Biomedical Major**David Hunnicutt, Associate Professor of Biology**David Bailey, Assistant Professor of Biology*

Zebra finches are a valuable model system in neuroscience and endocrinology. We have been characterizing the bacteria in zebra finch fecal samples to select organisms for further analysis as candidates for interactions with the nervous and endocrine systems of the host. Using 16S rRNA gene sequencing we have identified several bacterial species under varying culture conditions and from different birds. Common isolates include *Micrococcus* sp, *Staphylococcus* sp, *Pseudomonas* sp., and *Enterobacter* sp. The same mix of organisms has been detected in both male and female birds and under aerobic and anaerobic culture conditions.

TWH Lobby
3:30-4:00
Project Number: 36

iGradeBook: An iOS based Teacher's Logging Tool

Brandon Fox, Sophomore Computer Science Major

Ravi Agarwal, Assistant Professor of Computer Science

This project involves development of an iOS application that will help teachers in maintaining class attendance, student's grades, and evaluations. iOS is an operating system developed by Apple for devices such as iPad, iPhone, iPods, etc. This application was implemented in Objective C programming language using Xcode integrated development environment. The app can be used by teachers in their classrooms and has features such as attendance taking and grade recording. The app contains a database of teachers courses and all the students in those courses. The app allows the teacher to add pictures of each student so that a name can easily be put to a face. The students are organized in a checklist so that the teacher can easily scroll through the class list in order to take attendance. Also, there is an information page for each student, where his or her picture and grades can be displayed. If desired, the teacher can setup a meeting time with individual students and can enter the information on their info-page. The app then notifies the teacher with meeting reminders. All of this functionality is wrapped in this simple to use app called iGradeBook, designed to make teachers' lives easier in the classroom and beyond.

TWH Lobby
3:30-4:00
Project Number: 12

Is Necessity the Mother of Invention? Being Innovative in Social Ventures

Rakel Zarb, Sophomore Biology and Chemistry Major

Jason Senjem, Assistant Professor of Business Administration

This research examines the entrepreneurial processes at work in organizations pursuing a triple bottom line of people, planet, and profit. Based on case study data, we developed a model to understand how entrepreneurs identify and create new resources as they balance these goals in penurious environments. Our model builds on research of values-centered organizations linking concepts of liability of newness, innovation, and resource exploration and exploitation.

TWH Lobby
3:30-4:00
Project Number: 38

Multi-Institutional Study of Leadership Fellowship

Mara Aparnieks, Freshman Education Major

Corday Goddard, Associate Dean for Student Development

In this Multi-Institutional Study of Leadership (MSL) Fellowship, we analyzed data from a national survey, focusing on the data pertaining to SNC students. We also looked at leadership models and their intersection with the MSL data. How does this connect to SNC? Why does it matter? We also studied the effectiveness of leadership development initiatives at the College. Through a survey, we asked alumni of St Norbert leadership programs to rate the effectiveness of their St. Norbert experiences and the degree to which it has prepared them for their careers.

Godschalx Gallery
3:00-4:00
Project Number: 45

Advertising Design Survey

Tori Chenault, Senior Business Administration Major

Brian Pirman, Associate Professor of Art

This is a graphic design collaboration that researches 5 different topics related to Advertising and Design. The collaboration occurred during the design process

of 5 different posters that address Typography, Pioneers Of Graphic Design, Graphic Design, Trends In Advertising and Introduction to Graphic Design. The final outcome is 5 30" x 40" posters that communicate Advertising Design topics. The posters will be exhibited in the Godschalx Gallery, Bush Art Center.

Godschalx Gallery
3:30-4:00
Project Number: 25

aDOORation

Devon Englebretson, Senior Art and Graphic Design Major

James Neilson, Assistant Professor of Art

A three-dimensional, mixed-media assemblage, this work of discarded domestic architecture and furniture is a collaborative inquiry into methods of reclassifying thoughts about thresholds and table culture. Unexpected and unconventional methods and processes of addressing doors and tables is the motivating consideration in this work. Of particular significance is the manner by which the surface of these materials has been addressed, recalling both primitive and modern techniques, materials, and tools. Conceptualist and Minimalist art, particularly works by Duchamp, Rauschenberg, and Nevelson have inspired the approach of the artists.

Student Recognition

Number of Years Participated in this Event

Third Year

Sarah Lottes
Gretchen Panzer
Isabella Benassi

Second Year

Megan King
Louis Ayensu-Mensah
Kelley Catenacci
Amy Diestler
Eric Gale

Derek Harrington
Yekaterina Makeyeva
Alison Schaefer
Devan Scherer
Amanda Sigl

Arielle Tremel
KateLyn White
Rachel White
Anna Wollwert
Rakel Zarb

First Year

Kaela Gedda
Austin Gueths
Elizabeth Jolly
Devon Englebretson
Adam Frost
Bojan Francuz
Nikki Schommer
Tori Chenault
Rodrigo Villalobos
Erika Quinn
Andriana Vogt
Krista Hove
Rachael Rogers
Jacob Yorton
Claire West
Amanda Crupi
HanQin Cai

Daniel Sjoquist
Tara Mendez
Billy Fischer
Kevin Beine
Devin Thomas
Jordan Zeni
KJ Scribner
Jon DesChane
Olivia Poepping
Natasha Thern
Shanna Dennis
Jordan Mayer
Elizabeth Van Sistine
Matthew VanLannen
Callie Schroeder
Steve Sprung
Sarah Stiemke
Viktoriya Zotova

Rachel Conrad
Bradley Blank
Sandra Maria Payan Catano
Brandon Fox
Robert Schadrie
Morgan Johnson
Niki Nelson
Jacob Schneider
Brianna Skrzypcak
Riley Smith
Larry March
Mara Aparnieks
Emily Goetz
Jens Paasen
Hannah Schmitt
Amanda Mohr
Bryahna Rambo
Jeff LaJeunesse

**Thank you for your commitment to
Undergraduate Research and Creative Works**

Student Participants

Mara Aparnieks	22	Gretchen Panzer	14
Louis Ayensu-Mensah	18, 20	Sandra Maria Payan Catano ..	21
Kevin Beine	10, 16	Olivia Poepping	12, 13
Isabella Benassi	19, 20	Erika Quinn	18, 20
Bradley Blank	17, 19	Bryahna Rambo	14
HanQin Cai	7	Rachael Rogers	18, 20
Kelley Catenacci	11, 13	Robert Schadrie	17, 19
Tori Chenault	22	Alison Schaefer	9
Rachel Conrad	20	Devan Scherer	11
Amanda Crupi	8, 10	Hannah Schmitt	14
Shanna Dennis	19, 20	Jacob Schneider	18, 20
Jon DesChane	12, 17	Nikki Schommer	7
Amy Diestler	7	Callie Schroeder	16
Devon Englebretson	23	KJ Scribner	12, 13
Billy Fischer	10	Amanda Sigl	10
Brandon Fox	22	Daniel Sjoquist	8
Bojan Francuz	11	Maria Slusarek	8
Adam Frost	18, 20	Brianna Skrzypcak	21
Eric Gale	15	Riley Smith	19, 20
Kaela Gedda	14	Steve Sprung	15
Emily Goetz	19, 20	Sarah Stiemke	17, 19
Austin Gueths	18, 20	Natasha Thern	9, 13
Derek Harrington	13	Devin Thomas	11
Krista Hove	18, 20	Arielle Tremel	8, 10, 11, 13
Morgan Johnson	19	Elizabeth Van Sistine	18, 20
Elizabeth Jolly	16	Matthew VanLannen	17, 19
Megan King	7, 12, 13	Rodrigo Villalobos	18, 20
Jeff LaJeunesse	17	Andriana Vogt	18, 20
Sarah Lottes	10, 16	Claire West	18, 20
Yekaterina Makeyeva	9, 13	KateLyn White	9, 21
Larry March	18, 20	Rachel White	14
Jordan Mayer	15, 16	Anna Wollwert	14
Tara Mendez	9, 13	Jacob Yorton	18, 20
Amanda Mohr	14	Rakel Zarb	22
Niki Nelson	9, 21	Jordan Zeni	12, 13
Jens Paasen	14	Viktoriya Zotova	21

Faculty/Staff Participants

Ravi Agarwal.....13, 22
David Bailey....8, 10, 13, 16, 21
April Beiswenger 11, 16
Erik Brekke12, 17
Teena Carroll10
Anindo Choudhury.....15
Karlyn Crowley14
Kari Cunningham 18, 20
Bola Delano-Oriaran7
Jeremy Doughty 11
Deirdre Egan-Ryan.....14
Debbi Faase7
Russ Feirer.....19, 20, 21
Tim Flood10, 15
John Frohlinger7, 17, 19
Corday Goddard22
Wolfgang Grassl.....21
Jason Haen.....17, 19
Blake Henson7
Ashley Hill-Soderlund 11, 13
David Hunnicutt8, 16, 20, 21
Sabine Hyland21

Candy Klos 18, 20
Stuart Korshavn11
Jamie Lynch..... 12, 13
Laurie MacDiarmid 14
Karen Mand 18, 20
Tynisha Meidl 7
Jason Mills..... 15
Yoko Mogi-Hein.....8
Kevin Murphy 7
James Neilson..... 18, 20, 23
Jim Neuliep..... 19
Mandy Nycz 7
John Pennington 14
Brian Pirman..... 22
David Poister 9
Stephen Rupsch 16
Larry Scheich..... 8, 10
Jason Senjem 22
Matthew Stollak..... 12, 13
Amy Vandenberg 12, 13, 17, 19
Gratzia Villarroel 14
Raymond Zurawski 16

On behalf of the
Office of Faculty Development,
The Collaborative: The Center for Undergraduate Research,
Scholarship and Creative Activities,
the Office of the Dean of the College, and the
Office of College Advancement
we extend

A Big Thank You to:

All Participating Student, Faculty and
Staff Collaborators

Copy Center

Conference and Event Services

And We Especially Thank:

Niki Nelson ('13)

Faculty Development Intern
Lead Student Organizer of this Event

Sarah Christensen ('13)

Faculty Development Assistant

Tori Chenault ('12)

Graphic Designer

*for consistently practicing a high level of professionalism and
foresight in the preparation for and execution of this event, making
it possible for this Celebration to take place.*

