



CONCORDIA UNIVERSITY
NEBRASKA

6TH ANNUAL
ACADEMIC AND RESEARCH SYMPOSIUM
April 11, 2016

POSTER PRESENTATIONS		ORAL PRESENTATIONS			
TLEC Main Street			TLEC 111	TLEC 113	TLEC 106
		2:40 – 3:00	Suter	Lehmann	
		3:10 – 3:30	Snider	Gartner	
3:40 – 4:30	1. Olson/Tyree 2. Radic 3. White 4. Burma 5. Pope	3:40 – 4:00	Batt	Fofana	Campbell
		4:10 – 4:30	Schick	Spilker	Soenksen
4:40 – 5:30	1. McConnell 2. Beune 3. Grau 4. Anderson	4:40 – 5:00	Sjuts	Brassfield	
		5:10 – 5:30	Carpenter (Music)	Vanness	
		5:40 – 6:00	Rojas Aschenbrenner	Burma	
		6:10 – 6:30	Simonsen Miller Blomenberg	Carpenter (Religion)	

ART PRESENTATIONS	
TLEC Auditorium	
2:40-3:00	Sattler
3:00-3:20	Deepe
3:20-3:40	Baker
3:40-4:00	Braun
4:00-4:20	Witt
4:20-4:40	Volk
4:40-5:00	Harstad
5:00-5:20	Romine
5:20-5:40	Bowe

Presentation Schedule – Oral Presentations (Art Presentation Schedule—Pages 8-9)

2:40 – 3:00

Megan Suter

TLEC 111

Faculty Sponsor: Nancy Elwell

A Qualitative Study of the Influence of Music on Middle Schooler’s Social Development

This qualitative study explores how Concordia University, Nebraska female students perceive the influence music had on their social development in middle school. Individual interviews were conducted. Major and minor themes were found relating music to their social development in middle school.

Hallick Lehmann

TLEC 113

Faculty Sponsor: Nancy Elwell

Investigation of the Correlation Between Maternal-Child Relationship Satisfaction and Electronic Device Use

The present study explored the relationship between maternal electronic device use and maternal-child relationship satisfaction. An online survey was conducted with participants from Concordia University, Nebraska. Electronic device use of mothers while with the child, electronic device use of children, and mother-child relationship satisfaction were examined.

3:10 – 3:30

Amanda Snider

TLEC 111

Faculty Sponsor: Kyle Johnson

Recontamination Rates of Microfiber Cloths

Certain bacteria can cause diseases. Cleaning surfaces reduce this risk, but cleaning agents may recontaminate new areas. This study tests the potential for recontamination of microfiber and regular cloths after cleaning. Bacteria contamination was quantified by counting the colony forming units picked up by a swab after reusing a cloth.

Emily Gartner

TLEC 113

Faculty Sponsor: Kyle Johnson

Bacterial Concentrations in Household Cleaning Agents

Bacteria cause many diseases. Sanitation of surfaces can prevent exposure to pathogenic bacteria. A number of different products purport to superiorly clean surfaces compared to others. This study compares the ability of microfiber clothes, regular washcloths, and sponges to pick up bacteria. Bacteria concentrations were determined using an absorbance assay.

Allison Batt**TLEC 111**

Faculty Sponsor: Nancy Elwell

An Investigation of Anime and Escapism

This study investigates the relationship between time involved watching anime (Japanese cartoons) and escapism. One research question addresses gender, as it relates to the relationship between time involved watching anime and escapism. Other research questions address variables including genre of anime and degree of sexual material, as they relate to escapism. Participants were 18 to 30 year old Japanese residents and the data was collected using an online survey.

Musa Fofana**TLEC 113**

Faculty Sponsor: Erica Lamm

Effective Communication Between Professors and Students at Concordia University, Nebraska

This study seeks to review literature, collect data through interviews of some professors and students, analyze the data, and provide recommendations on how to improve communication between professors and students at Concordia University, Nebraska.

Mark Campbell**TLEC 106**

Faculty Sponsor: Kyle Johnson

The Detection of Sleep Deprivation Through the Quantification of Amylase Activity in the Saliva of Students on the Concordia University, Nebraska Campus

Salivary amylase activity (SAA) has been a reported biomarker for sleep deprivation. This study investigates whether self-reported sleep deprivation of Concordia University students correlates with their SAA. We report on the validation of a SAA assay and the results of a sleep survey and the SAA of our students.

Kendall Schick**TLEC 111**

Faculty Sponsor: Kyle Johnson

Kv11.1 Channel Activation Inhibits Breast Cancer Cell Migration Through Regulation of the β -Catenin Pathway

In this study, we investigated the anti-metastatic properties of NS1643, a novel drug therapeutic, and the molecular mechanisms through which it operates. We found that by stimulating the Kv11.1 channel, NS1643 inhibits breast cancer cell migration and metastasis via regulation of proteins such as β -Catenin and E-cadherin.

Ann Spilker**TLEC 113**

Faculty Sponsor: Joseph Gubanyi

How Prey Size Affects Barn Owl Diet at Ponca State Park by South Sioux City, Nebraska

Barn owl pellets collected from Ponca State Park, northeast Nebraska were dissected to identify and analyze their diet. Prey species sizes were compared to determine if size is a potential factor to their predation habits. This research can help to understand the relationship between prey characteristics and barn owl predation.

Gideon Soenksen

TLEC 106

Faculty Sponsor: Kyle Johnson

Affects of Caffeine on Zebrafish Metabolism

Substances have the potential to alter metabolic rate, which can have an effect on performance and weight loss. An assay using absorbance and a pH indicator was validated to measure changes in zebrafish metabolic rate. This assay was used to detect whether caffeine could change the metabolic rate in zebrafish.

4:40 – 5:00

Elizabeth Sjuts

TLEC 111

Faculty Sponsor: Kyle Johnson

How Washing Can Affect a Cloth's Cleaning Purpose

Household bacteria can multiply and be transferred rapidly in the right environment. This study's objective is to compare how washing versus not washing microfiber and regular cloths present the opportunity for bacteria to multiply and contaminate cleaned surfaces. The presence of bacteria was detected using colony counts on agar plates.

Rebekah Brassfield

TLEC 113

Faculty Sponsor: Joseph Gubanyi

Relative Abundance in Tardigrade Abundance in Moss and Lichen Samples

Tardigrades are microscopic creatures that inhabit moss, lichen, and aquatic environments. Samples from moss and lichen were collected from trees, and tardigrades were identified to genus to compare tardigrade distribution between mosses and lichens. Documenting these genera will aid tardigrade research and contribute to documented findings for Nebraska.

5:10 – 5:30

Sean Carpenter

TLEC 111

Faculty Sponsor: Joseph Herl

The Conservatism of Lutheran Service Book: The Process of Preserving Liturgy

An investigation of Lutheran Service Book as a conservative hymnal that preserves historic liturgy, arguing its conservatism emerges from the concept “lex orandi, lex credendi”, providing examples of conservatism in LSB, and arguing conservatism is practiced through LSB's liturgies. In addition, LSB's conservatism will be contrasted with normality in ELW.

Kendra Vanness

TLEC 113

Faculty Sponsor: Joseph Gubanya

Barn Owl Diet Analysis to Determine Hunting Habitat at Ponca State Park

Barn Owl pellets collected from Ponca State Park in northeast Nebraska were dissected and analyzed. Species of prey were identified and tallied to determine relative prey abundance. Based on known prey habitats, a map of suitable Barn Owl hunting habitat surrounding the nest site was created.

Jose Rojas &

Adam Aschenbrenner TLEC 111

Faculty Sponsor: Patricia Jensen

APA and Special Olympics

Get Involved. Accomplish ANYTHING. Health. Special Olympics creates opportunities for students and adults to grow, learn, compete, and be active. The Adapted Physical Activity class shares their real-world experiences with these athletes. We serve and are served through our own opportunities to learn and grow with local Special Olympians.

Megan Burma

TLEC 113

Faculty Sponsor: Joseph Gubanyi

Distribution of Tardigrades in South Dakota

Tardigrades are microscopic extremophiles inhabiting the film of water on mosses and lichens. With limited research on the phylum Tardigrada, no published records of tardigrades in South Dakota were found. In 30+ samples from several counties, specimens were preserved and identified to genus documenting all new tardigrades for South Dakota.

Angelica Blomenberg, Alyssa

Miller, & Sophie Simonsen TLEC 111

Faculty Sponsor: Patricia Jensen

Wise and Well in Christ

The Elementary Health Education and Physical Education Methods classes share their experiences and learning as they create a health and wellness fair for local parochial schools, with the goal of teaching youngsters to care for their temples of the Holy Spirit", 1 Corinthians 6:19."

Sean Carpenter

TLEC 113

Faculty Sponsor: Dirk Reek

Changing the Other: A Doctrine of Reconciliation based on Colossians 1:21-22

An investigation of how a doctrine of reconciliation, apo-othering, that is described in Colossians 1 could successfully solve the contemporary problem of "othering," how this doctrine contrasts the concept of "deothering," and how this doctrine relates to ethical paradigms established by Luther and Bonhoeffer.

Poster Presentations

TLEC Mainstreet

3:40 – 4:30

Sydney Olson & Julia Tyree

Faculty Sponsor: Joseph Gubanyi

Soil-Transmitted Helminthes Prevention Mission Trip for Belizean Children

We participated in a Belize medical mission trip in October 2015. We were asked to teach about soil-transmitted helminthes (STH) in an elementary school. We used posters, presentations, books, worksheets, and a board game we created. An STH was found in the lavatory affirming our need for the mission trip.

Alexa Radic

Faculty Sponsor: Jennifer Freund

Damselfish Behaviors of Belizean Marine Life

Damselfish fish are one of the feistiest fishes in the coral reef ecosystem. They are small, around the size of your hand, but they are not to be messed with. They protect their territory along structures of the reef, no matter who comes along.

Clarisa White

Faculty Sponsor: Jennifer Freund

A Spatial Conceptualization of South Water Caye Marine Reserve and Glovers Atoll Marine Reserve

South Water Caye Marine Reserve and Glovers Marine Reserve are two of seven World Heritage Sites located in Belize. Each were developed to protect separate portions of the second largest barrier reef ecosystem in the world. These locations are significant habitat for threatened coral and fish, as well as sea turtles, manatees, crocodiles, and migratory birds. This poster will represent not only the geographic locations but some of the ecological impacts of these reserve systems and the work that is being done to protect this beautiful coral reef ecosystem in Belize.

Megan Burma

Faculty Sponsor: Jennifer Freund

Marine Ecology of the Belizean Barrier Reef

The barrier reef system is a natural wave break for the main coastline and supports a wide spectrum of marine fish, coral and other species. During the 2016 Belize Study Tour, our group observed the relationships between these organisms that support an intricately balanced system that is currently at risk.

Lisa Pope

Faculty Sponsor: Jennifer Freund

Symbolic Association Between Fish

In my presentation, I will be relating and describing symbolic associations between fish, mainly in bluehead wrasse. Other than looking at their behavior to other species in general, my main focus is their cleaning behavior and how their cleaning stations work as a whole.

Samantha McConnell

Faculty Sponsor: Jennifer Freund

Cleaning Stations in the Caribbean

Bio 363 focuses on the marine biology of the Caribbean, specifically along the barrier reef in Belize. Cleaning stations are locations on the reef where fish congregate to be cleaned of dead skin cells, parasites, and bacteria. The neon goby was the primary cleaner seen at the stations observed.

Anna Beune

Faculty Sponsor: Jennifer Freund

The Turtle Grass Flats

The turtle grass flats are an interesting contribution to the ocean and the coral reef systems. My presentation will cover the different aspects of where it can be found and what organisms, besides the turtle grass itself, can be found there. I will also cover the relationship between the turtle grass flats and the coral reefs.

Michael Grau

Faculty Sponsor: Rob Hermann

Measurement of IR through UV Colors from Standard Household Light Sources

For this research, a solid state sensor is controlled by an Arduino microprocessor. The intensity of IR, visible, and UV light from incandescent, CFL, and LED bulbs was measured at standard voltages. The same intensities were measured at varying voltages and with different types of lightbulbs. The colors of different bulbs at different voltages is reported.

Mark Anderson

Faculty Sponsor: Rob Hermann

Measurement of Methane, Ozone, CO2 Concentration Fluctuations in Indoor Settings

In this investigation, chemical and solid state sensors were controlled using an Arduino processor. The concentrations of methane, ozone, and CO2 were measured throughout the day in a laboratory and a classroom. Correlations among concentrations, people present, and temperature are presented.

Art Presentations

TLEC Auditorium

2:40 – 3:00

Laura Sattler

Faculty Sponsor: Don Robson

BFA Senior Art Thesis Research

As a part of my BFA candidacy, this presentation is an introduction to my processes in creating this specific body of work. It will provide background information about my pieces in the senior thesis exhibition in the Marxhausen Gallery.

3:00 – 3:20

Amber Deepe

Faculty Sponsor: Lynn Soloway

Control Complex

My recent studio work emphasizes order, structure, and control within the medium of watercolor. Visual order and structure illustrate restfulness. A grid format and circle shape support this idea. However, watercolor yields outcomes that are difficult to predict. My work suggests one cannot recognize or appreciate order without some unpredictability.

3:20 – 3:40

Bailey Baker

Faculty Sponsor: Lynn Soloway

Hanboks with Janji

The traditional Korean attire, Hanbok, is a beautiful tradition that I was introduced to when living overseas. Each Hanbok is unique with colors, symbols, and patterns that captures the aesthetic value of the Korean people. Another beautiful tradition, that as an artist I was drawn to, was using traditional Korean paper called Hanji. In Korean crafts Hanji was handcut from patterns then pasted onto a surface covered in Hanji. From research I designed each element and then meticulously handcut those elements to create the pieces for my senior BFA show.

3:40 – 4:00

Syliva Braun

Faculty Sponsor: Jim Bockelman

Pliant Forms

This body of work exhibits my study in the different material stages of clay and the emotional marks those varying stages are capable of embodying. Placing clay vessels with structural and industrial objects, the vessels become physical records of space displacement.

4:00 – 4:20

Micah Witt

Faculty Sponsor: Seth Boggs

Face to Face

An exploration of people, product and play.

4:20 – 4:40

Mitchell Volk

Faculty Sponsor: Seth Boggs

Word & Image

When two images are combined, they create a new image. This new image brings with it the history, narrative and context of those two images. This information can be used to tell an entirely new story. This information is what I manipulate.

4:40 – 5:00

Danielle Harstad

Faculty Sponsor: Jim Bockelman

Senior Art Show

I will be presenting on the work I have produced this last year which will be featured in the gallery in April. I will talk about the journey that got me to where I am in my work and about the work itself.

5:00 – 5:20

Austin Romine

Faculty Sponsor: Don Robson

BFA Senior Thesis

I will be presenting my artist statement along with accompanying images of my work. The purpose of this presentation is to explain to my audience my thought process of my work.

5:20 – 5:40

Sarah Bowe

Faculty Sponsor: Don Robson

Arbitrary

An interest in using chance as a design tool led me to study the work of Jean Arp. My creative approach is a modern acknowledgement of Arp's process and bridges the divide between a designer's natural wish to resolve every detail and the surrender to a decreased level of control.

**Thank-you all participants, faculty sponsors, judges
and attendees for making this symposium a success!**

**2016 Academic and Research Symposium Committee:
Madison Euse---Marcel Hallaert---Nathan Northcutt---Maria Sasieta
Sponsors: Dr. Nancy Elwell & Jan Bruick**