StarScapes

2015

Student Innovation and Creativity

Program

and

Project Descriptions

StarScapes:

LCC Student Innovation and Creativity Showcase
April 22-23, 2015 in the Gannon Commons

StarScapes is a showcase of creative, imaginative, novel, innovative, and interesting work produced by LCC students and provides an opportunity for students to share the exciting work that they are doing with the LCC community. Presentations include creative and research work produced for LCC classes, but also involve work developed through students' own independent study and research. This is an opportunity to share research, capstone presentations, honor's option projects or other creative, imaginative or interesting work that students have produced. Any student or group of students who pursued a research or creative project was invited to participate. Faculty sponsors were required.

Where possible, posters will be available for viewing throughout Wednesday and Thursday. Films and PowerPoint presentations will be played on a continuous rotating basis.

Thank you to all students and faculty that participated in the second annual StarScapes event at Lansing Community College.

The StarScapes Steering Committee:

Janis Elmore
Jeff Janowick
David Shane
Mindy Wilson

Displayed throughout both days of StarScapes:

Fashion Program Eco-Couture - Eco-Couture" is LCCs version of Trashion - (a portmanteau of "trash" and "fashion") is a term for fashion created from used, thrown-out, found, recycled, and repurposed elements. Chioma Achonu, Amy Coyle, Lois Demps, Caitlyn Eddy, Annmarie Fioravante, Paige Frantz, Elmahdi Henry, Justin Hrcka, Ashley Jones, Selena Ledesma, Rosemary Miller, Allison Ramos, Ricky Shields, Matthew Stehlik, Victoria Vaccaro

Poster Presentations will be displayed throughout Wednesday and Thursday. Authors will be at their posters intermittently and at times indicated in the program. Please see the "**Poster**" section of this program.

Presentations

Wednesday April 22, 10 am – 5 PM

The Gannon Commons

10 AM-5 PM

Posters: Authors will be at their posters intermittently and at times indicated in the program. Please see the "**Poster**" section of this program.

10-11 AM

Bryan Smith, Michelle Hyzwer, Cantesha Johnson, Barbara Flannery, Dakota Compo, Monarch Program: Monarch Program provides transitional support strategies to improve successful reintegration from incarceration to community.

11 AM -1 PM

ESOL Classes, Taste the World, Meet & Eat: A group of ESOL students are putting together a cookbook that will be distributed on April 23 from 5:00-7:00, and

possibly also on April 22. Students are also planning on cooking some of the food whose recipes are included.

1-2 PM

Megan Bassette, Stories from the Streets: In my Honors writing class we are working on a project with the Volunteers of America to help homeless individuals write their stories. (reading)

Cierra Grimes, My Reflection: This was my literary Ireland final project. I reflected on another poets work, while writing my own poem about the same location that is referenced to by the famous Irish poet W.B. Yeats. I include some photos I have taken to show the location being referenced.

Sarah Killen, An anthropological look at nutrition: I have recently done some work at Donley Elementary mentoring a kindergarten student. I used the experience to take an anthropological look at nutrition; what the children are being served, what they are eating, what they are tossing out. I then explored what is being eaten around the world and how it compares to our lunches in public schools. I propose realistic solutions. (Poster & Presentation)

3-4 PM

Justice Wilson, Education for Inclusion: This describes a comprehensive training and policy model to better educate those involved in schools about sexual orientation and gender differences.

Matthew Poirier, Alisha Sandoval, Amanda Ritzler, Matthew Poirier, Travis Wiiliams, Sonata Form Performance: The performance is based on a composition written in likeness of the forms used in the classical period. The goal of the project is to show understanding of the harmonies, melodies, and form used in the 18th century while including my own interpretation of the principles involved. I also wanted to include my peers in a collaborative interpretation of the work.

6 PM

Washington Square Review Please join the Washington Square student editors and contributing writers in celebrating the return of LCC's literary journal in The Gannon Commons in association with the StarScapes event. We will have a reading featuring the work of the contributors and editors, and the new issue of the journal will be available. This is the first issue since 2012, and we're excited to have it back. Hope to see you there!

Thursday April 23, 10 am – 5 PM
The Gannon Commons

10 AM-5 PM

Posters: Authors will be at their posters intermittently and at times indicated in the program. Please see the "**Poster**" section of this program.

12-1 PM

Derek Gonyon, MATLAB GUI: RLC Series Circuit: Demonstration of a MATLAB graphical user interface which lets users input properties of an RLC circuit and outputs results in text or graphs. (Digital Poster)

3-4 PM

Matt Beatty, MATLAB project.

4-5 PM

Hannah Haugsby, John-Paul Rafael Cherniawski, Composing 101 (EME Style): In LCC's Experimental Music Ensemble, the class got into small groups to compose

and perform a song for our concert that is coming up. We would like to take the time to not only present a recording of our song (since some of the members of our small group cannot make it to this event to perform it live), but to explain how our group composed the song. We could even perform some of our parts from our piece. If there is enough time after our presentation, we could answer questions that people may have about the class.

Doug Wiora, Mike Houser, John-Paul Cherniawski, Hannah Haugsby, Jessica Brancheau, Tim Westbrook, Alfred LaBrecque, Amy Playne, Spontineity: Original experimental music composition performed with LCC students and composed by Doug Wiora.

5-7 PM

ESOL Classes, Taste the World, Meet & Eat: A group of ESOL students are putting together a cookbook that will be distributed on April 23 from 5:00-7:00, and possibly also on April 22. Students are also planning on cooking some of the food whose recipes are included.

Posters

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David Kurbanov, Amy Stillman, Sasha Perkins, Da'Ryl Harju, Louis Brown, Devin Wood, Creative Recycling at LCC: A presentation of our story, what's going on, best practices current and future, what our vision could be and everything in between regarding recycling. *Wednesday April 22, 11 AM-12 PM; Thursday April 23, 1 PM -3 PM*

Erika Christian, DNA Barcoding Analysis of Tea Ingredients:What's in that Cup?: DNA barcoding analysis of tea ingredients. *Wednesday April 22, 10-11 AM*

Kacie Henrys, Molly Pouch, George VanNorman, A DNA Barcoding Analysis of Meats: What's for Dinner?: Most families in the United States rely on the meat industry as a major food source. Several investigations have uncovered evidence concerning the mislabeling of meats and poultry in the food industry. As a result, some meat suppliers have been faced with felony charges and paid hefty fines. The purpose of our research was to determine if a variety of meats and poultry from a local store were labeled accurately, including the less common seasonal meats. We gathered 12 samples from a local meat distributor and PCR amplified DNA isolated from the samples using primers specific for the mammalian Cytochrome Oxidase 1 gene. DNA was then sequenced by GENEWIZ, Inc. and bioinformatic analysis was performed on the sequence data using the DNA Subway computational tools of the iPlant Collaborative. We found that 7 out of 12 samples showed a close match to database DNA sequences indicating that they were correctly labeled. However, 5 samples matched database entries that were inconsistent with labeling. Interestingly, both Cornish game hen (a genetic hybrid) and domestic chicken showed 100% match to Gallus gallus. In addition, two meat samples labeled as Elk showed a close match to Red Deer. *Wednesday April 22, 10-11 AM*

Kayla Martin, Alana Beamish, Erika Christian, Kacie Henrys, Sean Justice, Molly Pouch, George VanNorman, Cloning/Sequencing Project: A poster with the description, data, and conclusion of a human (and banana) cloning and sequencing experiment our class performed in Molecular Biology this year. *Wednesday April 22, 10-11 AM*

Sean Justice and Alana Beamish, DNA Barcoding analysis of Mahi-Mahi: A Fish by any other name?: Many news sources, such as the NY Times, have reported that 25 to 70 percent of seafood examined in Europe and North America are mislabeled. For instance, it has been reported that Yellow Tail (Caranx heberi) and Tilapia are common substitutions for Mahi-Mahi (Coryphaena hippurus), although the percentage of mislabeling is not well documented. To investigate the local supply of Mahi-Mahi, we obtained samples from various grocery stores and

restaurants in and around the Lansing area. We PCR amplified DNA isolated from the samples using primers specific for the fish Cytochrome Oxidase 1 gene. DNA was then sequenced by GENEWIZ, Inc. and bioinformatic analysis was performed on the sequence data using the DNA Subway computational tools of the iPlant Collaborative. Our results showed that all samples were closely matched to database DNA sequences of Mahi-Mahi. However, none of the Lansing area Mahi-Mahi samples were a 100% match to DNA sequences in the database. *Wednesday April 22, 10-11 AM*

Cierra Grimes and Joseph Pietron, Spearmint Extraction: My lab partner Joe and I will be presenting our special lab project outline and results, which was the extraction of spearmint via steam distillation and many other components. *Wednesday April 22, 1-2 PM*

Irving Faverman, Daniel Gillespie, Pegah Varghaei, Wiggly String Thing: Our experiment is a demonstration of the effect of frequency aliasing. The effect is demonstrated by illumination of a vibrating string with a strobe light set at a multiple frequency, but might also be visible in video taken through a typical cell phone. *Wednesday April 22, 3-4 PM*

Jonathan Brock, Kyle Keough, Teddy Wilson, Logan Bowling, Come light our bulbs: We will be demonstrating a home-built generator to produce alternating current. This project illustrates how a changing magnetic field inside of a group of conducting wires will induce a current. The display is interactive - come try to power our light bulb! *Wednesday April 22, 3-4 PM*

Matt Garner, Tyler Smith, Observable demonstration of gravitational lensing: Our presentation is an illustration and discussion of the effect massive bodies have on the 'shape' of space-time. The effect is illustrated with a spandex sheet and a wine glass, and used to explain gravitational lensing and planetary motion. *Wednesday April 22, 3-4 PM*

Skylar Watson, Jason Steffes, Devin Martin, Melissa Scenga, Sound Wave Visualization: Through the use of simple household items a visual illustration of two dimensional standing waves, produced by sound, is obtained. A soup can, balloon, mirror, and laser produce an outcome not seen in theaters. Sound waves from a nearby speaker set the balloon in vibration, and a laser reflects off a mirror affixed there to. The result is simply too complex to describe, you will need to stop by the demonstration during Starscapes itself to see it! *Wednesday April 22, 3-4 PM*

Thomas Emede, Ngan Huynh, Chris Hawkey, Wanyue Zhong, Self-Propelled Motor: Using three simple objects - a battery, a set of magnets, and a length of copper wire - we will create and demonstrate a self-propelled motor. The experiment is a simple illustration of the interrelation of electric and magnetic forces that you could build at home. *Wednesday April 22, 3-4 PM*

Derek Gonyon, MATLAB GUI: RLC Series Circuit: Demonstration of a MATLAB graphical user interface which lets users input properties of an RLC circuit and outputs results in text or graphs. (Digital Poster) *Thursday April 23, 12-1 PM*

Erica Piecuch and Katherine Moore, Scandinavian Art in Geometry: We will be providing a poster presentation of Scandinavian Art related to Geometry. Our poster will examine a hands-on way of learning about Geometry in Art. Our focus will be rotation, reflection, and tessellation.

Nichole Tompkins and Katie Vaughn, Chinese Garden: Geometry and Art project from the Chinese culture.

Charla Pollok, Celtic Art: A Study of Geometry-This project will show the geometric properties found in Celtic art. It will be a hands on, visual approach showing how art and math combine in our world.

Sheree Huntley, Discovering the Aztec's: I will present the art works of the Aztec (Native American) culture. I will expose the reflections, translations, rotations that are featured within the cultures art works.

Allison Myers and Jordyn Thelen, Geometry in Religious Art: This poster will display geometric transformations that occur in religious art. It will show artistic symbols from 5 different religions that are examples of either a geometric reflection, translation, or rotations. There will be an explanation provided for each example to help viewers understand the concept of the transformations that are occurring. Also, to help viewers understand even more clearly, the examples will be interactive for viewers to touch and view hands-on how a transformation works.

Olivia Feldpausch, Celtic Artwork: Artwork will be shown that incorporates symmetries and transformations from one of the cultural/religious traditions.

Shea Doran, Kylee Strang, Mark Detlor, Capsaicin Extraction: We will outline the procedure required for the extraction of Capsaicin. The component of peppers that gives them their zing.

Justin Murshak, Informed Consent: A Multi-Disciplinary Research Quandary: Interrogate the idea and principle of informed consent through the novel "The Immortal Life of Henrietta Lacks," the research article "Resisting Commensurability," and the textbook "Culture, Health, and Illness."

Sarah Killen, An anthropological look at nutrition: I have recently done some work at Donley Elementary mentoring a kindergarten student. I used the experience to take an anthropological look at nutrition; what the children are being served, what they are eating, what they are tossing out. I then explored what is being eaten around the world and how it compares to our lunches in public schools. I propose realistic solutions.

Emily Pohl, Irish Literary Revival and Poetry: I wrote this paper for the 2014 Literary Ireland Class. From the beginning of class I felt drawn to the idea of continuing the legacy of a mythical past into the humdrum present. Therefore, I decided to research the origins and impact of Ireland's Literary Revival during the early 20th century and write four poems to carry on Ireland's legacy myself. I drew inspiration for these poems from Ireland's mythology, history, and landscape, and from my Catholic faith and family. My demonstration will include my essay and the scrapbook pages I compiled with my poems after returning from the trip.

FACULTY INNOVATION SPONSORS:

Judy Allen

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Krishnakali Majumdar

Louise Paquette

César Potes

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