

# STARSCAPES

INNOVATION  
& CREATIVITY

SHOWCASE



Fall 2019  
Student Innovation  
and Creativity Showcase

## Program and Project Descriptions



## **LCC Student Innovation and Creativity Showcase November 25 and 26, 2019 in the Gannon Conference Center**

**StarScapes** is a student showcase of creative, imaginative, and interesting work. Presentations include projects produced for LCC classes, as well as work developed through students' own independent study and research. StarScapes is an opportunity for students to share research, capstone presentations, honors option projects or other creative, imaginative and interesting work with the LCC community.

For fall of 2019, more than 130 students share their art, music, technology, sociology, anthropology, science and engineering projects in the form of live demonstrations, film, poetry readings, sketches, mini-seminars, and poster presentations.

All students or groups of students who pursued a research or creative project was invited to participate in StarScapes with the support of a faculty sponsor. Where possible, posters will be available for viewing throughout Wednesday and Thursday. Films and other digital projects will be presented on a rotating basis.

To all students and faculty that participated in the Fall 2019 StarScapes Student Showcase at Lansing Community College, we sincerely thank you for your efforts.

### ***The StarScapes Committee:***

*Mindy Wilson and Jeff Janowick- co-directors*

*Joe Esquibel-presenter's workshop and volunteer coordinator*

*Suzanne Bernstein-presenter consultant*

*Patti Ayers-logistics*

*David Shane-technology*

*Kelly Hekler-event coordinator*

*Ed Bryant and Aliza Robison-event day volunteers*

## **Faculty Innovation Sponsors**

We thank the following Faculty Sponsors for supporting students in their creative, imaginative, and interesting journey:

**Alan O'Keefe  
Rodger Irish  
Kali Majumdar  
Kabeer Ahammad sahib  
Edwin Bryant  
Joe Esquibel  
Jeffrey Janowick  
Leslie Johnson  
Patricia McKay  
Lyla Melkerson-Watson**

**Mieko Philips  
Elizabeth Robison  
David Shane  
Charlotte Steiner  
Arthur Wohlwill  
Mindy Wilson  
Timothy Deines  
Jing Wang  
Judith Allen**

## MONDAY

Time

Location

Monitors with I HAVE A NAME photography, and History Film "The Radical" (**Chase Rapin**)

Posters will be on display throughout the day. Presenters will be at their posters at various times. (see detailed Schedule)

Michigan Room

### Morning Oral Presentations 10 to noon

Grand River Room

- I HAVE A NAME Excerpts (A Day in the life of JP-**Quinn Kelly**-monologue w/Hendrickson video, Poem-**Cruz Villareal**. 10:00
- Story of Stuff: Soccer Jersey (**Mark Raab**) 10:30  
American Football: A Commodity of Its Own (**Robert Pease**)
- Toilet paper: flushed away every day (**Samual Hummell**) 10:45
- Story of Stuff: Nike Air Force Ones (**Jacob Nichols**) 11:00
- Commodity Chain analysis (**Emma Johnston**) 11:15

### Musical Interlude

- **Nate Bennett**

12:30-2

Grand River Room  
Grand River Room

### Afternoon Oral Presentations 2-4

- The Most Beautiful Equation in Math (**Emmanuel Bangura**) 3:00
- The Radical - short film (**Chase Rapin**) 4-5 PM

### Physics Demos:

- Hot Plate
- Magnetic influence
- Levers on Steroids
- How Computers Perform Addition: A Demonstration of a 4-Bit Binary Adder
- The Physics of a Catapult

3-5

tbd

## TUESDAY

Time

Location

Monitors with I HAVE A NAME photography, and History Film “The Radical” (**Chase Rapin**)

Posters will be on display throughout the day. Presenters will be at their posters at various times. (see detailed Schedule)

Michigan Room

### Morning Oral Presentations 10 to noon

Grand River Room

- I HAVE A NAME Excerpts (A Day in the life of JP- **Quinn Kelly**-monologue w/Hendrickson video, Poem- **Cruz Villareal**.)

10:00 am

### Musical Interlude

- **Nate Bennett**

11:45 –  
12:45

Grand River Room

### Afternoon Oral Presentations 1-4

Grand River Room

- Caught in the Crossfire: the Damage Caused by the Battle of Antietam (**Maariam Tesfae**)

1:00  
1:30

- Japanese popular culture (**Mieko Philips**)

2:00

# StarScapes Fall 2019 Project Descriptions

Project descriptions are listed in alphabetical order of first author's last name. Poster Presentations will be displayed throughout Monday and Tuesday. Authors will be at their posters intermittently.

First Author		Group members	Title	Description
Erin	Anderson		The History behind Milk	For my class, I am putting together a poster board about the history behind a dairy product, milk. I plan on having little facts and descriptions on the board about milk. Like, maybe "how many people consume milk in a day" or just in general "why do people drink milk". I am hoping to provide small details to the poster with pictures for this presentation.
Robert	Ashley	Maddie Veale	College Affordability: A Students Opinion	Community college students often struggle with money. Food costs present a large factor in that struggle. This presentation will bring to light our research with local surveys and examples.
Kennedy	Baldwin		Women's Fashion: 1880-1920	This project is a timeline displaying women's fashion trends through the decades as well as conveying the historical context which sparked changes in fashion.
Emmanuel	Bangura		The Most Beautiful Equation in Math	Everyone is familiar with the festivities of pi day, but are you aware of the significance of pi? There is so much more to Pi than a math themed holiday. If you are studying anything that involves circles and spheres pi will appear. Let's discuss how pi can explain almost anything in the universe.
Jacob	Bayer		I am LCC	A look into the life of one of LCC's brightest; Genevieve Brown. A student here studying cultural Anthropology. Not only is she a great student, she's a talented musician and thoughtful, caring individual.
Gabriel	Bell		Cystic Fibrosis and Trikafta	A poster that explains cystic fibrosis and a new method of treatment called Trikafta. The poster includes a summary of the causes and symptoms of cystic fibrosis. The poster will also explain Trikafta, how it was developed, how it works, and the effects it will have on CF patients.

Nate	Bennett		Nate Bennett, Songmaker	<p>LCC Computer Support student &amp; songwriter/recording artist Nate Bennett plans to present some of his original tunes.</p> <p>Nate works hard to manage a rare and severe form of epilepsy, which causes him varying levels of memory problems resulting from his seizures.</p> <p>As an LCC IT student, Nate's developed a rig he calls The CrutchBot, which he's assembled from several odd bits of hardware and software to help him present his music with on-screen/synched-up lyrics and live sound fx. Nate makes clear that for him, his setup feels like having a 'karaoke walker' that enables him to have access to his own songs, even when he's recovering from recent episodes, but his presentation is actually designed to feature variety and spontaneity whenever he plays.</p> <p>For the audience, Nate plans to deliver a solid mix of his highly-hybridized RnR along with a screen full of weird words to watch if you wanna.</p>
Hatixhe	Berisha	ANTH 270	I am LCC	I am LCC: Emma Dunbar
Jordan	Bierman	AJ Andring	Levers on Steroids	We will be demonstrating the trebuchet and its clever utilization of physics principles. Our trebuchet will rely on gravitational potential energy, the use levers and acceleration in a circular path to hurl a projectile a proportionally great distance, as we shall build a scale model, rather than the full-time siege machine that many know from film and history.
Kelly	Bradley		The Cassandra Project	The Cassandra project highlights prophetic scientists who were truly ahead of their time. Named for the princess of Troy who had the gift of prophecy, but also a curse so no one would believe her predictions to be true. Some of our greatest scientific discoveries were found long before they could be proven.
Genevieve	Brown		I am LCC	It is important to get to know our fellow classmates as it builds a sense of community. Each of us, who attend LCC profoundly impact each other's college experiences. Through this ethnographic project, I have learned more about one of my classmates as well as how LCC looks through another person's eyes. This experience has challenged me to grow as a student and as an individual.
Kevin	Carlson		McDonalds in the U.S.	My presentation is going to be a poster analyzing the role of McDonalds in the U.S. and how it became one of the largest corporations in the world. I will look into the culture of the U.S. as McDonalds started it rise as well as how it has affected the environment around us. I will also show a little about how the corporation has been affected by the the dominant group and how it might help them maintain power.

Travis	Carpenter		TBD	A Look at the Revision Process: The Relation Between Drafts
Yolanda	Crim		I am lcc	It is but I am LCC project. I talk about my friend Katlyn. It says what she does here on campus.
Robin	Cupples		LCC Outsourcing: Does It Help or Hurt Campus Culture?	LCC outsources to Subway, Einstein Bagels, and Pizza Hut. Then, the school cafeteria sits in the corner for every other student who cannot afford to support outsourcing. Does having major food chains on campus improve student campus culture? Who can afford it compared to how often they eat on campus.
Emma	Dunbar		Hatixhe	This presentation is centered around the life of Hatixhe. How her journey has brought her to LCC and where is is taking her from here forward.
Andrew	Dyjach		Lamp behavior in series and parallel circuits	I constructed several circuits using identical light bulbs and observed current behavior. The brightness of the light bulbs was considered a proxy for current behavior. I here report my results.
Joseph	Esquibel	Microbiology - BIOL203 - 70329, 24 students	Diseases of Microbiology	Professor Joe Esquibel's class will present on their semester long projects on various human diseases, ranging from genetic diseases, types of cancer, infectious diseases, non-infectious diseases, poisons and mental disorders.
Mackenzie	Good		From Farm to Cat Bowl	The Story of Stuff chronicles the journey of how many different ingredients from around the world combine to create a single product. From Farm to Cat Bowl shows the route that NurtiSource Pet Food takes in order to create a quality cat food. A family-owned, family-operated company, NutriSource passes the ethically-sourced test.
Jimmy	Gray-Jones	Jimmy and Caroline	College affordability; The hidden truth	College affordability is growing exponentially higher with every year. But what does that mean? And more importantly, what does that mean for the people who can't afford it?
Kristina	Groenleer		I am LCC	I will be present the "I am LCC" project for culture anthropology.
Joanna	Hensley		Interesting facts about Germany	Interesting facts about Germany from history to language. Learn about how the Christmas tree originated. Learn the history of the song silent night. Learn some phrases that Germans use.
Samuel	Hummel		Toilet paper: flushed away everyday	A look at toilet paper from raw material to where it goes after it is used.

Nawal	Hussein		I AM LCC	It is a poster that has about 100 words and it will be describing about a person's life.
Avianna	Jackson		The Keto Diet: How it as effected different Cultures	This presentation is about how the keto diet has effected different cultures. Within the presentation, we will dive into how the modern diet had caused different health issues and how if a culture takes on the keto diet, how not only their cultures diet has changed but how their health has changed. We will also look at how food networking has affected these cultures as well.
Amie	Jeglic	Tirzah Wimmer, Kelsie Moeller	Measuring the Internal Resistance and Electromotive Force of a Battery	We measured the current in a simple circuit consisting of a lantern battery and a variable resistor. A voltmeter and an ammeter were used to measure the voltage and current through the circuit, and from these measurements the internal resistance of the battery and its electromotive force were calculated.
emma	johnston		Commodity Chain analysis	A presentation on Olive oil which is a basic product that can be found in many things that we use in our everyday lives, even though you may not even realize it. Also the benefits of using the product and what it can help improve in your life.
Malachi	Keener	Tung Nguyen, Kenneth Davis, James karvonen	The Physics of a Catapult	We will be discussing the forces that launch a projectile specifically centripetal and tension forces. We will continue with a brief discussion of predicting projectile motion where we will branch off explaining acceleration, velocity, and deceleration. We will use these formulas to predict position and speed of an object with a calculated mass.
Sam	Lanczynski		Science Experiments with a Second Grade Classroom	As part of my ISCI121 class, I spent several hours with Mrs. Oliver's 2nd grade class at Big Rock Elementary in Chesaning, Michigan. We did several classroom science experiments, and I will report the method and results from one of them.



Biol 275 Class	LCC	Thomas Almy, Michelle Bennett, Teddi Hichman, Danielle Hook, Trinity Smith, Olivia Szilagy, and Melinda Wilson	Using DNA sequencing to Identify Invasive Plant Species in Mid-Michigan	As defined by Michigan.gov, "An invasive species is one that is not native and whose introduction causes harm, or is likely to cause harm to Michigan's economy, environment or human health." The Lansing Community College Molecular Biology 1 class explored areas in mid-Michigan, looking for invasive plant species using phenotypes as defined by the state of Michigan. The sequence data from PCR amplified DNA was analyzed using Bioinformatic methods. Of the 28 samples taken from the Lansing area, that appeared to be invasive, the phenotype of 25% of the samples were correlated with DNA sequencing to be invasive to Michigan. However, according to BLAST, 21% identified as the same genus but not the same species. Interestingly, correlation of DNA sequence data and the phenotypic comparison of images in different databases were found to be dependent on plant life cycles. This study suggests that multiple methods of invasive species plant identification should be used before eradication.
Sarah	LeBlanc		I Am LCC	At LCC we are surrounded by the faces of people every day, some familiar while others are not. We each have had our own pathway that paved the way to us attending LCC. Get to know a friendly face around you and find out what makes them who they are today.
Baine	Linsley	Baine Linsley, Garrett Cooper, Kelly Cooke, Ty Vandesteene	How Computers Perform Addition: A Demonstration of a 4-Bit Binary Adder	The modern era is characterized by its reliance on the efficient manipulation and distribution of data through computing. But how are the most rudimentary operations performed? In this presentation, the principles behind simple addition are explained with a 4-bit binary adder with emphasis on the construction and operation of logic gates.
Brit	Maddrell	Shaquia Ware, Leeann Wilkins, Jenna Hufnagel, Micha Burke	Heart Rate and Exercise	There are many factors that can contribute to a change in heart rate, one of which is exercise. It is hypothesized heart rate will increase after physical activity; males will have higher heart rates than females; and the old will have a higher heart rate than the young after physical activity.
Taylor	Martinez		I Am LCC	I Am LCC
Aaron	McDowell	Zack O'Conner, Ryan Spitzley, Nuru A	Hot Plate	It is a homemade hot plate.
Taminika	Mcphatter		Chicken box	viral/microbe surveillance - Chicken pox

Sam	McQuaid		Environmental Science Capstone	Over the course of my environmental science class I have learned extensively about the environment and our relationship with it. My capstone project is an expression of the knowledge and skills I have gained throughout the semester.
Sam	McQuaid		Biggby Coffee Cultural-Ecological Breakdown	For my semester food project, I have chosen a very common product but from a very specific source. I have chosen to delve into the research of the cultural ecological effects of Biggby coffee. I thought that this would be an interesting topic as Biggby coffee is very different in many different ways from their competitors. One unique thing about Biggby is that they use only the best arabica beans. Arabica beans are a type of coffee cherry that grows in high altitudes (above 800m) with great amounts of rainfall. This type of coffee cherry creates a unique crema that produces the silky bitterness and the smooth aftertaste that Biggby is so known for.
Kennedy	Mebert		Food Anthropology: Potatoes	Using the culturally ecological perspective, this poster will explain the history of potatoes. It will explain the Irish decent and how the potato famine in Ireland affected Irish discrimination and the power relationship. The project will also explain its effect on society today in America and surrounding cultures.
John	Murdoch		Paint Fall	Paint Fall is a text based, arcade game that is in the language of C++. The entirety of Paint Fall's game play and engine was created using Microsoft Visual Studio using various techniques in the C++ language such as functions, switches, loops, i/o streams.
Jacob	Nichols		Story of Stuff Nike Air Force Ones	A commodity chain analysis on Nike. It's a look at where and how Nike shoes are manufactured. Also how it effects the environment and cultures it surrounds.
Bebeto	Nyongobela		Ebola	Note, Pictures, and graph.
Robert	Pease		American Football: A Commodity of Its Own	Presentation will be an ethnographic research project on the commodity that is the American Football. Everything from the very first games, rules, and ball dimensions all the way to the modern "pigskin" we have today. The project will start with a origin and development timeline/synopsis followed why an entire commodity chain analysis of the "Wilson," Football
Hong-Van	Pham	Hong-Van Pham	Internal resistance of a battery	We here report the results of measurements of the internal resistance and emf of a lantern battery.

Mieko	Philips	Japanese classes and Japanese Club	Japanese popular culture	This presentation will display Japanese popular culture, including Anime, manga, J-Pop, video games and cosplay (Costume play).
Mark	Raab		Story of Stuff: Soccer Jersey	A PowerPoint presentation on how a typical soccer jersey is made. The working conditions of the laborers making the commodity. As well as the environmental impact of producing the item.
Chase	Rapin		The Radical	The Radical is a short film analyzing the outspoken abolitionist, John Brown, and his raid on Harpers Ferry. The film takes a closer look at events prior to Brown's insurrection and the reaction to the raid. These events show the significance behind one man's convictions that ultimately sparked the American Civil War.
Caitlyn	Russell		Internal Resistance and EMF of a Lantern Battery	Measurements were made on a simple circuit consisting of a lantern battery and variable resistor. We observed current and voltage with a voltmeter and ammeter to calculate the internal resistance of the battery. We here report our results.
Hailey	Schaendorf		Teaching experiences with a kindergarten class at Bennett Woods Elementary	As part of my ISCI121 class, I spent 12 hours working with a kindergarten class at Bennett Woods Elementary. I here report on some of the science activities I did with the class, including a "five senses" activity and some basic chemical reaction activities.
Aelish	Shay	Physiology Table 6	Relationship between light exercise and it's effect on heart rate and blood pressure	For Physiology class and in an endeavor to promote healthy lifestyles, we investigated the effects of walking on blood pressure.
Ahmed	Shoble	Scott Heeneey, Andrew Nader, Clayton Dierberger	Magnetic influence	A small magnet will be hovering beneath an electromagnet as we pass an Alternating current through.
Sharmanpreet	Singh		The evolution of apples	I would talk about how our interactions with apples have changed it. I would also talk about the impact of Apple farming has on Michigan.
Tommy	Sovereign	Tommy Sovereign, Chloe Western	College Affordability	A detailed presentation about the issues with college affordability. This will particularly focus on financial aid and how it should rely on a student's ability to pay as opposed to students.

Ellie	Stoller		Food Anthropology - Whiskey	My exhibit will be focused on the control that whiskey and alcohol in general have on the population. I will study corn, as a key ingredient in whiskey, and the role it plays in the global economy. I will also delve into the political power that has surrounded whiskey in the past, such as prohibition.
Ivy	Stoller		Food Anthropology - Maple Syrup	Using the cultural ecological perspective, this project will present maple syrup, past and present, and its use and effect on society. It will also include maple syrup's relationship with power globally. Namely, how large syrup producers in the world control its distribution and production.
Lena	Stoller		Food Anthropology - Exploring Sugarcane	This poster shows the cultural-ecological perspective of sugarcane, its users, and its producers. This display shows the power relationships between different sugars on the market and power relations globally of sugar importers and exporters. This anthropological deconstruction of food focuses mainly on sugarcane, but also covers other sugars - beet sugar, maple sugar and corn syrup used in the United States food system. The relationship of sugar and fat in the low-fat diet is also covered.
Maariam	Tesfae		Caught in the Crossfire: the Damage Caused by the Battle of Antietam	The Battle of Antietam lasted roughly twelve hours and caused massive losses for both armies. However, it also heavily damaged the land it took place on as well as the surrounding area. This presentation will be about that damage, with an emphasis on the individual families who suffered as a result.
Katlyn	Tews		I Am LCC	Will be talking about the I Am LCC project on the person that i spent time interviewing and learning about. I will be reading a brief description on the person.
Samual	Wegener	Karri Bouchard, Antoinette Hurt, Robert Vander Voord, Sharon Wells, Samual Wegener	Feel The Burn, Sharpen the Brain.	An experiment and analysis on the effects of exercise on cognition and concentration. Our group tested the hypothesis that moderate exercise measurably increases cognition and concentration on academic tests when compared to the control group. This is an active area of study in physiology. Many researchers are actively trying to understand the exact mechanisms and physiologic processes leading to the improved performance after exercise.
Garrett	Zuver		Sustainable Solutions to Commercial Agriculture	My StarScape program is a focus on sustainable solutions to Commercial Agriculture. I will be presenting solutions focused on the 6 core principles of sustainability. The solutions involve solar energy, biodiversity, chemical cycling, full-cost pricing, win-win solutions, and a responsibility to future generations applied to Commercial Agriculture.

Notes: