2022 Fall Academic Showcase

A Celebration of Florida Southern College
Student Scholarship and Research

Thursday, December 1, 2022

4:00pm–5:30pm

Christoverson Humanities

Sponsored by the Florida Southern College Chapter of the Honor Society of Phi Kappa Phi

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Welcome!

Florida Southern College fosters an environment where students actively transition from being consumers of knowledge to becoming scholars who create new knowledge, insights, connections, and understanding. For over 20 years, our students have gathered at the end of each semester to present and discuss the scholarly work they have been doing in and beyond their courses.

The goal of the Fall Academic Showcase is twofold: to provide students a platform for their ideas, and to provide the wider community a window into the creative and intellectual energy that pervades our campus. Today's event provides a singular opportunity to publicly share the meaning and joy of scholarly inquiry.

We encourage you to take part in as many sessions as you can! Enjoy the conversation.

Schedule

4:00pm-4:20pm	Welcome	Dr. Roxanne Back
	Preliminary Remarks	Provost Brad Hollingshead
		Christoverson Lobby
4:20pm-5:20pm	Presentations	Christoverson 208 & 209
5:20pm-5:30pm	Closing Remarks	Dr. Carrie Ann Hall
		Christoverson Lobby

2022 Fall Academic Showcase Presenters – By Last Name

Room	Time	First Name	Last Name	Major	Title
208	5:00-5:20	Abigail	**Bennett**	Political Science	My Beef with the Meat Industry
209	5:00-5:20	Jacob	**Knox**	Computer Science	FSC File Share: The Independent Student File Sharing Website
208	4:40-5:00	Erlinda	**Loyola**	Political Science	What will be of the Arctic?
209	4:20-4:40	Andrea	**Migliorato**	Biology	Differential Visual Opsin Expression of a Freshwater Microcrustacean Under Different Light Environments
208	4:20-4:40	Reagan A.	**Orr**	Sport Business Management	Leveled Field: How Narrowing the Gender Pay Gap in NCAA Coach Salaries is Paramount to Creating Equity Among College Athletes, and Why the NCAA Should Issue Relevant Guidance to its Member Schools
209	4:40-5:00	Phillip	**Rodriguez**	History	Who were the Indo-Europeans?

2022 Fall Academic Showcase Presentations – By Room

Room 208

4:20-4:40	Reagan A.	Orr	Sport Business Management	Leveled Field: How Narrowing the Gender Pay Gap in NCAA Coach Salaries is Paramount to Creating Equity Among College Athletes, and Why the NCAA Should Issue Relevant Guidance to its Member Schools
4:40-5:00	Erlinda	Loyola	Political Science	What will be of the Arctic?
5:00-5:20	Abigail	Bennett	Political Science	My Beef with the Meat Industry

Room 209

4:20-4:40	Andrea	Migliorato	Biology	Differential Visual Opsin Expression of a Freshwater Microcrustacean Under Different Light Environments
4:40-5:00	Phillip	Rodriguez	History	Who were the Indo-Europeans?
5:00-5:20	Jacob	Knox	Computer Science	FSC File Share: The Independent Student File Sharing Website

Presentations

In alphabetical order by presenter's last name.

Student: Bennett, Abigail
Major: Political Science
Faculty Mentor(s): Kelly McHugh
Presentation Time: 5:00-5:20
Presentation Type: Honors Proposal
Room: 208

Title: My Beef with the Meat Industry

Abstract: This presentation proposes the question: Why has the demand for beef skyrocketed within the United States? I will first discuss the ways in which the meat industry harms consumers and the environment, specifically through Concentrated Animal Feeding Operations (CAFOs). CAFOs are the drivers of the meat industry and are able to produce massive quantities of meat in short periods of time, harming animals and the surrounding environment. Environmental impacts of CAFOs include deforestation, loss of biodiversity, localized water pollution, and land degradation. CAFOs and ranching in general have been linked to significant increases of methane in the atmosphere, a greenhouse gas more potent than carbon dioxide. This information demonstrates the need for a better understanding of meat consumption in America. Through a comparative analysis, which will be fully conducted in my honors project, I will analyze the different factors behind meat consumption in the United States, Spain, and the Netherlands. Examples of these factors include the political system, advertising campaigns, and agribusiness lobbying. My goal is to identify shared factors that are influential to meat consumption in Switzerland and the United States, which have high rates of average meat consumption, that are not present in the Netherlands, which has low rates of meat consumption. In my final honors project, I hope to not only identify the main reasons behind the skyrocketing demand for meat, but also the true extent of the environmental and societal consequences of this demand.

Student: Knox, Jacob
Major: Computer Science
Faculty Mentor(s): Christian Roberson
Presentation Time: 5:00-5:20
Presentation Type: Honors Proposal
Room: 209

Title: FSC File Share: The Independent Student File Sharing Website

Abstract: FSC File Share is intended to be a website for students of Florida Southern College to post works (essays, PowerPoint presentations, etc.) they're proud of, regardless of whether or not they qualify for publication elsewhere. FSC File Share would fit in with the growing number of file sharing services available (i.e.: Google Drive, OneDrive, and DropBox), but serve a more niche group of users for a more specific purpose. The creation of such a website entails a variety of objectives, which have been classified into three main categories in this paper: technical, planning, and development. Technical objectives relate to technologies that must be known to build the website, planning objectives relate to the pre-development process of determining features and the layout of the website, and development objectives relate to the actual process of developing the website. After laying out the aforementioned objectives, this paper details which objectives have been completed thus far and which objectives are left to be completed.

Student: Loyola, Erlinda
Major: Political Science
Faculty Mentor(s): Kelly McHugh
Presentation Time: 4:40-5:00
Presentation Type: Honors Proposal
Room: 208

Title: What will be of the Arctic?

Abstract: The Arctic is melting at alarming rates because of climate change. For the purposes of this research, the Arctic will be defined as the region encompassed in the Arctic Circle which is "the southernmost latitude in the Northern Hemisphere at which the center of the sun can remain continuously above or below the horizon for 24 hours" (Klimenko, 2019, pp. 2). The Arctic by means of this definition consists of parts of Canada, Greenland, Iceland, Norway, Sweden, Finland, Russia, and the United States. The changes happening in the Arctic because of climate change are bringing forth new questions in the geopolitical arena. These changes are the result of the melting ice. The melting of the ice in the Arctic will allow oil and gas to be extracted much easily, will bring forth new routes for trade, and will uncover a new sea. These outcomes will raise questions regarding sovereignty and international laws. Who will be able to take claim of this new sea and of the new trade routes? Who will be able to take from the oil and gas reserves? How will the world deal with these problems if there are no governing bodies today that address these issues? This study will seek to make sense of these questions and look at the need to establish a governing body specifically for the Arctic Circle. The proposal of a body that can begin working on creating policy and being proactive to these issues that are in the near future will also be addressed.

Student: Migliorato, Andrea
Major: Biology
Faculty Mentor(s): Christopher Brandon
Presentation Time: 4:20-4:40
Presentation Type: Honors Presentation
Room: 209

Title: Differential Visual Opsin Expression of a Freshwater Microcrustacean Under Different Light Environments

Abstract: Vision is a key sensory trait for survival and reproduction in most animals. Many animals are able to discriminate visible light by wavelength. This type of wavelength-specific discrimination (or color vision to be less precise) can be used to gather food, find mates, and other tasks. Color vision is possible because of visual pigments that are composed of a protein called opsins and a light absorbing molecule called a chromophore that are found throughout photoreceptor neural cells. The freshwater crustacean, Daphnia, have long been studied as model organisms of evolution and ecology because of their rapid generational times, asexual reproductive cycle, widespread presence across the world, and their importance in freshwater systems. Daphnia use their visual system for orientation in the water column, navigation, and potential avoidance of predators and finding food. In particular, Daphnia may use color vision for locating algae, a main source of food. Interestingly, Daphnia have the largest set of visual opsins yet discovered despite their relatively simple visual system. To compare, Daphnia have approximately 32 visual opsins whereas humans have four. Previous studies have shown that opsin

expression has been correlated to environmental light conditions in fish and other invertebrates. The expression patterns of opsins related to the light environment can give insight into the functional role of color vision for specific organisms. In this study, we studied the visual opsin gene expression patterns in D. magna. We hypothesized that during a five-day exposure period, D. magna is exposed to majority UV/blue light, the opsins responding to short wavelengths (SWS opsins) would express more than long wavelength sensitive opsins (LWS opsins); likewise, if Daphnia were exposed to a majority red light environment, LWS opsins would be more developed than SWS opsins. To test this hypothesis, we cultured adult D. magna in red, blue, green, and "white" light environments.

Student: Orr, Reagan A.
Major: Sport Business Management
Faculty Mentor(s): Mike Nabors
Presentation Time: 4:20-4:40
Presentation Type: Honors Proposal
Room: 208

Title: Leveled Field: How Narrowing the Gender Pay Gap in NCAA Coach Salaries is Paramount to Creating Equity Among College Athletes, and Why the NCAA Should Issue Relevant Guidance to its Member Schools

Abstract: From the first woman participating in the Olympic games in 1900 to the creation of the Women's National Basketball Association in 1996, sports are slowly becoming more inclusive. However, inclusion in collegiate sports leadership is happening slower than anywhere else. Only 41percent of women's college teams are actually coached by women (Townes, 2019), and only 22 percent of all teams, both male and female, are coached by women (Acosta & Carpenter, 2014). For a team to represent women in its coaching positions demonstrates commitment to evaluating candidates for leadership on the virtues of the capabilities, not on their gender. By including gender equity requirements in coaching salary budgets as part of Title IX guidance, NCAA could help ensure more gender equity in coach hiring practices. Despite Title IX legislation, there remains a large gap between the salaries of male and female coaches, which contributes to the fact that more male coaches are hired than female coaches. In the BIG 10 athletic conference, coaches of men's teams make considerably more than coaches of women's athletic teams. The average salary of a female head coach is $149,250, compared to the men's average of $490,364 (LaVoi, 2013). The number of female head coaches of women's teams have plummeted to an almost all-time low (42.9%) over the last four decades, compared to when Title IX was initially enacted, where nearly 90% of women's teams were coached by a woman.

Student: Rodriguez, Phillip
Major: History
Faculty Mentor(s): Anna Caney
Presentation Time: 4:40-5:00
Presentation Type: Oral Presentation
Room: 209

Title: Who were the Indo-Europeans?

Abstract: Proto-Indo-Europeans are the theoretical ancestral group of the peoples of Eurasia that shared a common language and belief system also dubbed Proto-Indo-European. With the development of modern linguistics, links between languages via etymologies were found regionally across Europe and Indo-Iran and soon between the two regions giving rise to the theory. A common example is the reconstructed PIE word, Dyḗus, being a common etymology across modern Indo-European languages for words meaning daylight, day, sky, god, deity, or heaven, conveying the importance of the day sky and its religious significance in the reconstructed language. Culturally, similar tropes, themes, and overarching mythologies occur across civilizations of ancient history. Some examples of these are the creation myths, flood stories, heroic epics, theomachy, among many, which call to greater times before the era of the civilizations which upheld these myths. This paper aims to support the Proto-Indo-European theory evidenced by ancient PIE descendent civilizations' evolving languages and their expansive mythologies as the populations migrated and cultures diverged.
Keywords: Proto-Indo-European, reconstructed language, mythology

Notes:

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