



Sustainability Internship Program Poster Presentation

Wednesday, April 29, 2015

The Spring 2015 Sustainability Internship Program (SIP) is primarily supported through gifts from individual donors and the time the students contribute either voluntarily or for academic credit. The Smart Grid Internship is supported by the Illinois Science and Energy Innovation Foundation. The upcoming Summer 2015 SIP will be supported by the Office of Sustainability, the Office of Capital Programs, and the Energy Initiative.

If you or your organization are interested in supporting or participating in the SIP, please contact Cynthia Klein-Banai, Associate Chancellor for Sustainability, at 312-996-3968 or cindy@uic.edu.

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SUSTAINABILITY**



**Basit Yakubu, Mechanical Engineering
Sustainability Internship Program**

Basit carried out his internship with the Office for Capital Programs (OCP). The OCP oversees all construction projects at UIC. During his internship, he learned about the design and build of some of the heating and cooling systems that most buildings use. The systems include air handling units, HVAC (heating, ventilating, and air conditioning) control systems and equipment, high-performance fume hoods, lighting, weatherization, and energy recovery. Also, Basit got to see some of the theories he learned in his heat transfer class and applied and at work in the real world.

**Isabelle Carmona, Biochemistry
Building Up To a Sustainable Campus**

Isabelle's internship was completed at the Office for Capital Programs (OCP). There she was able to explore how UIC's Climate Action Plan is applied in the design of new buildings on campus. Isabelle worked towards a sustainable campus by maintaining the efforts in new buildings and renovations being LEED Certified. Having sustainable buildings does not mean that "complete" sustainability has been reached on campus. Awareness should be continuously promoted throughout the student body of UIC.

**Min Wu, Public Administration
Smart Grid**

A Smart Grid is a modernized electrical grid that uses digital information and communication technology to gather and act on information in an automated fashion to improve the efficiency, reliability, economics, and sustainability of the production and distribution of electricity. At the Chinese American Service League (CASL), Min prepared presentations to help educate the Chinese community about the Smart Grid and Smart Meter rollout. Min also has a role at UIC working with the Smart Grid cohort to educate students on Smart Meters, energy saving practices, and sustainable behaviors.

**Jaden Cruz, Earth and Environmental Science
Educating Children on Sustainability**

The UIC Children's Center is located on UIC's West Campus. It has three classrooms with two full-time teachers. Over the semester Jaden educated three to five year olds on climate change and native plant species. To accomplish this, he created activities to engage the minds and bodies of the children that impart the ideas of sustainability. He hopes that these lessons taught at a young age will influence how these children think about ecology and the systems we live in. Currently, Jaden and the Children's Center are constructing a Butterfly Waystation which will be ready for butterflies this summer!



Jaden Cruz at the UIC Children's Center

**Jose Hernandez and Ghazal Baniasad, Electrical Engineering
Sustainability in Bronzeville**

Jose and Ghazal are carrying out their internship with the Center for New Horizons (CNH) in Bronzeville. They are working to establish relationships in the community to educate the population on the Smart Grid, Smart Meters, and how to live more sustainably. The first phase of their internship was to identify the resources and relationships that will allow for a greater audience of individuals. In the next phase they are developing a plan that best suits these resources in order to effectively engage audiences in different environments, sizes, and age levels. In the final phase, they will implement the developed plan in the Bronzeville community in order to educate the public on the pre-mentioned material.

Lexus Washington, Psychology African-American Cultural Center

As a Sustainability Aide in the African-American Cultural Center (AACC), Lexus' main goal is research and student engagement in cultural diversity plus environmental sustainability issues. Her major project was a Coat Drive facilitated for two underserved community shelters on Chicago's south side. She organized three different drop off sites on campus and publicized the AACC's efforts through their partners on campus. Lexus' coat drive was able to collect approximately 30 coats for women, children, and men in need during this harsh winter and donate them to A Little Bit of Heaven homeless shelter. Lexus also assists the AACC in creating, coordinating, and running sustainability related events.

Marisol Lay, English and Public Health Great Cities Institute: The Uses of Food, Water, and Energy

As an intern for the Great Cities Institute (GCI), Marisol conducted weekly research on the various foods (coffee, catered goods, snacks, etc.) being consumed in the office and their origins. She also studied water usage and the uses of electricity/energy in the building. Following her research she collected department data through observation and online surveys. The sample data collected showed use of both water and electricity in the department. The sample data provided Marisol the opportunity to look at how the GCI is doing in their departmental sustainability goals and more broadly, how it impacts the campus as UIC continues to work toward the goals set forth in the Climate Action Plan.

Qi Lu, Urban Planning and Public Affairs Bike Planning



As an urban bicyclist, Qi had the opportunity to intern at the Office of Sustainability and worked on the 2014 bike Lane Pilot Project Study. This study contained four components: focus groups, online survey, bicycle counts, and a temporary bike lane. Qi conducted research on bike plans at other university and college campuses plus UIC's land use to come up with suitable bike signage design and policies for UIC. In the spring 2015, the bike planning project focused on getting feedback from different UIC campus organizations including students and leadership in order to inform decision making and the future trajectory of this project.

Nicolas Buitrago, Civil Engineering Great Cities Institute Sustainability Plan

The Great Cities Institute (GCI) is currently working on its own Sustainability Plan adapted for a corporate office setting. This plan will promote healthy changes while discouraging existing harmful practices, as much for the earth as for the health and happiness of its employees. The CGI Sustainability Plan compiles weeks of research into simple and clear cut steps to reduce waste, energy, usage, and consumption, while increasing awareness and meaningful action. Nicolas used his internship to advance progress toward the completion of the GCI Sustainability Plan. Nicolas documented his research and progress in a blog. The proposed initiatives in the plan will be evaluated based on cost, convenience, and how much it helps the earth and the GCI employees prior to the plan's approval this year.

Nicole Callan, Economics

Economic Impact of the Chicago Technology Park

Economic sustainability is the ability of an economy to indefinitely support a certain level of production definitively identified using GDP growth rate per person, the key word here being *indefinitely*. Nicole's role in this consisted of surveying and writing a report outlining the economic impact of research funding going into the Chicago Technology Park (located within the Illinois Medical District) on both the region and the country. Our daily lives are defined by the state of the economy and so our capacity to, at minimum, continue operating at current economic levels is absolutely vital to not only our own future, but also that of generations to come.

Zahra Ahsan, Bioengineering

Building a Smarter Community through Smart Grid

Zahra is currently interning at the Institute of Cultural Affairs (ICA) as a member of the Smart Grid cohort. The purpose of many upcoming ICA initiatives is to allow members of the community to learn about the Smart Grid and sustainability in order to positively impact their lives and future generations. In the first semester of this one year internship, Zahra has compiled information for the ICA about the Smart Grid, e-waste, and energy providers as well as designing a poster template for future events. Zahra will continue to work towards finding creative ways to reach out to diverse populations to educate them on the Smart Grid and sustainability.

Alysha Mancha, Biochemistry

Student Visibility in Sustainable Practices in Classroom Labs (SEL)

Alysha used her internship to explore the visibility of sustainable practices to students in SEL classroom wet labs. The first step was conducting a literature review to explore sustainability topics. Green Labs was consulted and used as background information for the creation of the survey for students to answer. The survey was then distributed to students and faculty department heads to complete. Additionally, Alysha created a social media template/plan for the Summer Institute on Sustainability and Energy (and other programs related to the UIC Energy Initiative) utilizing Twitter, Facebook, and the Energy Initiative website and blogs.

Jacob Obal, Earth and Environmental Science

Reducing UIC's Food Waste



Jacob Obal recovering food

Each day, dozens of pounds of edible food are disposed of from the cafeterias on campus. Whatever is not eaten at the end of the day is bagged and tossed into the trash where it will later be taken to a landfill or incinerator. Both of these outcomes result in the emission of greenhouse gases, contributing to global climate change. Jacob's major focus was to help establish a Food Recovery Network (FRN): a system in which the leftover food on campus is not thrown to waste, instead it is donated to those who need it most. With an established Food Recovery Network Chapter at UIC, we will ultimately see the complete eradication of wasted food in the cafeterias.



Please join our cohort of on-campus Smart Grid interns **Amanda Carlson, Gianna Carrozza, Paula Debkowska, Samuel Strader, and Lee Zimmerman** for a round of Eco-Pong, a game invented to educate and activate awareness about the Smart Grid, energy reduction, and sustainability.