*Please submit this completed application and any relevant supporting documentation by the deadline listed on the SSC website to* *Sustainability-Committee@Illinois.edu**.The Working Group Chairs will be in contact with you regarding any questions about the application. If you have any questions about the application process, please contact the SSC at* *Sustainability-Committee@Illinois.edu**.*

# General Information

**Project Name:** Illinois Sustainable Food Project – Extrusion Coating Expansion

**Total Amount Requested from SSC:** ~$110,000

**Project Topic Area(s):** [ ] Energy [ ] Education [x] Food & Waste

 [ ] Land [ ] Water [ ] Transportation

# Contact Information

Applicant Name: Brian Jacobson

Unit/Department: Food Science & Human Nutrition

Email Address: bjacobs3@illinois.edu

Phone Number: (217) 300-5404

**Project Team**

|  |  |  |
| --- | --- | --- |
| **Name** | **Department** | **Email** |
| Youngsoo Lee | FSHN | Email Address |
| Jedi Brown | FSHN/UIUC Dining Services | Email Address |
| Dawn Aubrey | UIUC Dining Services | Email Address |
| Name | Department/Organization | Email Address |

# Project Information

Please provide a brief background of the project, the goals, and the desired outcomes:

This exciting expansion to the Illinois Sustainable Food Project (ISFP) proposes adding equipment to an existing extrusion production line at the Food Science & Human Nutrition Pilot Processing Plant (FSHN-PPP). The FSHN-PPP has recently received an extrusion line with fluidized bed dryer that is intended for use in classes and research. With some additional ancillary equipment and money for installation, it can be used to create cereals and puffed snacks for use by Dining Services and others across campus.

The complete extrusion line is valued at over $3M and was received through a combination of a large gift by the manufacturer and a partner company, along with a small amount of support from the Food Science department. This large addition to the facility is setup well to teach students the extrusion process and perform critical research for the department. With some additional support from the SSC, this equipment line can be setup to make human consumble puffed cereals and snacks to be served on campus.

Examples of the products that can be made by this equipment include breakfast cereals similar to the common names you see in the grocery store, puffed snacks such as Cheetos or snack sticks, and many other products that require a puffed texture. One of our stretch goals is to develop an “Illinois Block I” breakfast cereal developed in conjuction with our nutrition and product development students and faculty. This could be served across campus as a grab and go product, in the Dining Halls for breakfast, and possibly within the athletics program. The possibilities are endless with this extrusion equipment, this is just one product idea we would like to develop. The raw ingredients for any project would be comprised heavily of items from our other projects (flour, vegetables, pumpkin puree, and more).

Our overall goal is to provide locally-sourced, healthy, and nutritious product for UIUC Dining to serve to the campus population, while providing an educational experience to the student body. For those most interested, there will be opportunities to work with the project producing finished product; and for the rest of the campus (and off-campus) community, presentations, videos, articles, and tours will be made available. Possibly most importantly, this project will reach every student who eats in the Dining Halls or other locations where this could be served.

Please provide a brief summary of how students will be involved in the project:

Student interns will be responsible for the actual operation of the project, from planting, through harvesting and processing. Student employees in Dining will even have the opportunity to create dishes for their peers using our product, while working side by side with trained chefs.

The completed product will be consumed by any student who eats in the campus Dining Halls. This extremely local source of food will be well-documented and advertised with the finished product. Additionally, any student who has a class in the FSHN Pilot Plant, or tours it through events like EOH/ExplorACES will have the opportunity to learn the hands-on process.

Please provide a brief summary of the project timeline:

With funding available Spring 2018, we will immediately purchase the necessary equipment and contract the installation. These items should all be below the bid limit, so should move quickly. I expect the line will be operational by Fall 2018.

Additional comments

The Illinois Sustainable Food Project (ISFP) is a partnership between several groups in the Department of Crop Sciences, the Department of Food Science & Human Nutrition, and University Housing Dining Services that began in 2013. The project processes items grown on campus into finished products for the University Dining Halls. Since inception, over 100,000 lbs of fruit, vegetables, grains, and other items have been processed into finished products for the University Dining Halls. Some of the projects include pizza sauce, several varieties of flour, diced vegetables, hot sauce, juices, pesto, and more.

The project continues to grow, and has received significant recognition for its work. A permanent FT staff person has now been put in place to manage the project, and dozens of students have been employed working on the project and learning the value of local foods. After the capital infusion necessary to buy the processing equipment, the projects are completely self-supporting, all staff and maintenance is paid through redirected dollars from traditional, non-local food vendors. The project has received many mentions in both social and traditional news coverage, along with winning an Innovation Credit to assist UIUC in becoming a “Gold-Ranked” institution from STARS.

In addition, the project has a growing impact external to campus as those affiliated with the project have begun to work with outside agencies in support of our mission. One such example is the Artisan Grain Collaborative, a group working tirelessly to restore local grains to the Chicago area and greater Midwest food economy. Through outside grants, the collaborative and UIUC grad students are now working to use the ISFP model and resources to improve the food economy across the region. It is a first step, but some huge possibilities are just around the corner, dependent on a funding decision from the USDA Local Foods Promotional Program. These projects are separate from the ISFP and any SSC funds, but show the huge impact of the start-up capital provided by the SSC. None of this would have been possible without our ISFP campus model, data that is being gathered, and learning provided to the students.