STUDENTS LIVING CARDINAL, GOLD AND GREEN

In welcoming back students to lowa State, focus turns to the cultivation of optimism and opportunity for the year ahead. The Start Something Network, kicking off in 2021, offers a collective embrace and effort toward ensuring this optimistic culture extends across campus throughout the entire academic year - bringing out the innovator in every Cyclone. The network brings together every college, offering its own specialized take on innovation and entrepreneurship, with the result of providing students academic opportunities (including credit courses, capstone projects and internships) tailored specifically to needs and interests.

During the 2022-2023 academic year, Student's Living Cardinal, Gold, and Green will celebrate each college's commitment to optimism and innovation through their Start Something initiatives, and feature some of their many students ensuring innovative solutions toward a sustainable future. This month, the Start Something College of Agriculture and Life Sciences (CALS) Program is celebrated.



Image courtsey of Innovate Iowa State

Start Something CALS

Start Something CALS, formerly known as the Agricultural Entrepreneurship Initiative, prides itself as one of the foremost programs for developing agricultural entrepreneurs in the world. Among its annual points of pride are: 1,200 undergraduate students taking part in at least one program; 30 to 40 interns placed with entrepreneurial agricultural (domestic and international) businesses; and more than 150 entrepreneurs, investors, and agribusiness professionals brought to campus as classroom speakers, student presentation panelists, and industry, market and technology mentors and experts. Marcie Fahn (MF),

Chief Experience Officer of the Start Something CALS Program, offered further insight on their goals and vision for student connection and innovation, and how they are ensuring an optimistic future for sustainability.

Q: What is the mission of the Start Something CALS Program?

MF: Start Something College of Agriculture and Life Sciences develops the innovative and entrepreneurial capacity of CALS students through various programs and opportunities like developing creative thinking skills, exploring business ideas, launching a startup, or connecting with successful entrepreneurs and innovators.

Q: How does Start Something provide an optimistic future for sustainability?

MF: Start Something CALS encourages students to think differently, discover creative solutions to challenges and follow their passions. For some, this means becoming an entrepreneur, thinking critically to make a difference as part of a larger team or organization. For others, pursuing a revolutionary business idea, whether it be to improve food storage options in developing regions of the world, expand the accessibility of regenerative agriculture practices to farmers or build a platform for managing your organic production certifications.



Photo courtsey of Start Something CALS



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Start Something's Collaboration with the America's Cultivation Corridor One program Start Something CALS is offering to students involves a collaboration with the America's Cultivation Corridor. Representing a diverse coalition of private and public stakeholders, the Corridor is among the nation's foremost clusterbased economic development organizations - accomplished through the world's leading agribusinesses joining with Iowa State University, the Greater Des Moines Partnership, Ames Chamber of Commerce and a variety of ag and community groups from across Iowa. A collaborative research project offers eight CALS students the opportunity to take part in a semester-long internship program, specifically focused on how agricultural innovations elevate agricultural sustainability and food system resilience in lowa and around the world - encompassing innovative technologies, programs, research and practices. Two of the program's interns are featured in this

month's newsletter, sharing their personal experiences -Ashley Althaus (AA), a junior in Agricultural Systems Technology and Arilyn Oatman (AO), a junior in Global Resource Systems.

Q: Why did you decide to apply for this internship?

AA: I have the goal in mind to utilize agricultural and biosystems engineering technology to manage complex environmental, mechanical, food production and other agricultural systems. This will, in turn, help us produce, process, and market our food and products in the industry worldwide. I believe we should achieve this sustainably, which has led me to apply for the Americas Cultivation Corridor student internship project.

AO: I applied to this internship because I am passionate about agriculture and sustainability and felt that this project would allow me to continue exploring domestic trends in sustainable innovations.



Photo courtesy of Ashley Althaus

Q: What sector of the agricultural value chain are you researching, as a project intern, and what innovations impacting sustainability have you found so far?

AA: Currently, I am on a team researching the processing chain in agriculture. A few key innovations we have uncovered that impact sustainability (and I encourage readers to keep an eye out for) include: a sustainable algaebased wastewater cleaning solution; renewable diesel fuel that retains the high torque, energy efficiency, and durability; a simple way to decarbonize through innovative fuel solutions; capturing and sequestering billions of tonnes of CO2 into building materials; a fossil fuel alternative for asphalt rejuvenation and, modification, and shingle coating and biodegradable food packaging derived from sugarcane.

AO: I am researching the inputs sector of the agricultural value chain, which has a wide range of areas, including animal production, crop production, fertilizers, equipment and more. So far, my partner and I have found innovations relating to fertilizer sprayers, food waste for animal consumption, and biodegradable packaging for seeds. These innovations are interesting and exciting, and I look forward to learning more about them.













Photo courtesy of Arilyn Tegtmeier-Oatman

Q: What's one thing that makes you optimistic about the future of agriculture while learning about sustainability?

AA: Growing up in the agriculture industry, I have witnessed a "sustainability evolution". In my short lifetime, I have been fortunate to hear how different farms and companies are incorporating sustainable initiatives into their operations through research and development of innovations like those mentioned above, and seeing them hit the mainstream market. The value chains in agriculture are taking effective measures now to ensure that the work we are doing here is done in a way that future generations can enjoy. This makes me optimistic about the future of this industry and our world.

AO: I am the most optimistic about the different ways people are working to battle food waste. As a Global Resource

Systems student, you choose a technical area to focus your studies on. Mine is nutrition and food security. It is inspiring to see how companies, governments and individuals are working to reduce their food waste and maximize production sustainably.

Offering fresh approaches to tomorrow's agriculture (and beyond), Start Something CALS enables the creation of a more sustainable future, and empowers the high-impact entrepreneurs and changemakers who will ensure it. Accomplished through a myriad of experiences, interactions and discoveries (personal and professional), College of Agriculture and Life Sciences students supplement their "Cardinal, Gold and Green" adventures through embarking on creativity development, exploring business ideas, launching startups, learning new skills, connecting with successful entrepreneurs and joining an international collective spearheading the innovations of sustainability and resiliency in feeding the world.



Image courtesy of Innovate Iowa State

For more information about the College of Agriculture and Life Sciences Start Something Program, stop by 0030 Curtiss Hall for more information or visit the Start Something CALS website, Facebook page or Instagram profile. Involvement opportunities range from courses, internships and events to joining the National Agri-Marketing Association, taking part in the Change Maker Academy and applying to the Student Incubator Program. The "somethings" are limitless.