#### Myceliall Solutions (MYSO) Student Lead: Scott Macdonald skmacdon@ucsc.edu



Myceliall Solutions (MYSO) is an undergraduate-led team researching how mycoremediation can be leveraged to create sustainable solutions that relieve inept recycling strategies. They observe how fungi (1) sequester environmental pollutants via biological uptake and (2) enzymes degrade polymers. **RePlay PLA** Student Lead: Marc Van Thillo mvanthil@ucsc.edu



RePlay PLA is determining methods to both enhance and degrade crystalline structures of polymers in post consumer plastics made from poly-lactic acid (PLA) to create cradle-to-cradle solutions for upcycling this material. Currently, they are exploring pre-treatment by ultrasound bath or exposure to ionic liquids to create feedstock filament for 3D printing.

#### MyPantry Student Lead: Kai O'Brien kimobrie@ucsc.edu





MyPantry is developing a mobile application, outreach and marketing plan to network and increase access to food assistance programs. The project addresses social stigmas faced by any individual or family units who would otherwise benefit from frequenting food assistance programs. Site: mypantry.org

Myceliall Solutions (MYSO) Student Lead: Scott Macdonald skmacdon@ucsc.edu

### WAYS TO GET INVOLVED:

Campus outreach/event planning
Design & paint fabulous fungi shed mural

Create logo

Advanced composting

Enzyme DNA sequencing **RePlay PLA** 

Student Lead: Marc Van Thillo mvanthil@ucsc.edu

## WAYS TO GET INVOLVED:

 Chemistry polymer characterization techniques
 3D printing with recovered materials
 Material recovery
 Business strategy **MyPantry** Student Lead: Kai O'Brien kimobrie@ucsc.edu

### WAYS TO GET INVOLVED:

App development
Customer discovery
Graphic design

Marketing
User testing
Networking
Social media coordination

Sacred Sprouts Student Lead: Emily May ecmay@ucsc.edu

SAERED SPROUT KITS

Sacred Sprouts aims to get kids (ages 5-8) outside and engage them to foster a sense of wonder about nature, ultimately inspiring solutionary thinking. These educational kits celebrate sustainability, symbiotic relationships and our sacred connection to Earth. Each unit will integrate outdoor experiences that feature local ecosystems while keeping science, technology, engineering, art and mathematics (STEM) at the forefront. Wonderfil Student Lead: Shiloh Sacks sssacks@ucsc.edu



Wonderfil is building customizable electric dispensers for retailers and organizations to refill personal care products to help eliminate single-use plastics from the personal care industry supply chain. The goal is to provide a cost-saving technology that amounts to circular distribution option for brands, and a more eco-friendly way for customers to shop.

#### *Waste Not, Want Not* Student Lead: George Kazarin ykazarin@ucsc.edu



Waste Not, Want Not is designing and testing a mobile application to expedite data collection for waste audits. The app allows users to create profiles, input data, analyze and view prior audits to understand trends over time , by location or in relation to conspicuous events. Users input location, time, type of material, photos and other material specific parameters.

#### **Sacred Sprouts** Student Lead: Emily May ecmay@ucsc.edu

### WAYS TO GET INVOLVED:

Graphic design, illustration, drawing, cartography, curriculum design, lesson planning, customer discovery, business model, natural wonder, nature connections to sacred geometry, science storytelling, character development, natural history, species identification

#### Wonderfil

Student Lead: Shiloh Sacks sssacks@ucsc.edu

## WAYS TO GET INVOLVED:

Community outreach campaigns, web development and graphic design, materials selection analysis (Granta Design), sustainable supply chain logistics, microcontroller programming including sensor development, product design, 3D printing and fabrication, cnc milling, business start-up strategy *Waste Not, Want Not* Student Lead: George Kazarin ykazarin@ucsc.edu

## WAYS TO GET INVOLVED:

Coding and app development, implementing location QR codes, data visualization, beta test app, community outreach campaigns, event planning, graphic art, interactive datadriven art installations