

# Frugalnovation Hub SANTA CLARA UNIVERSITY SCHOOL OF ENGINEERING



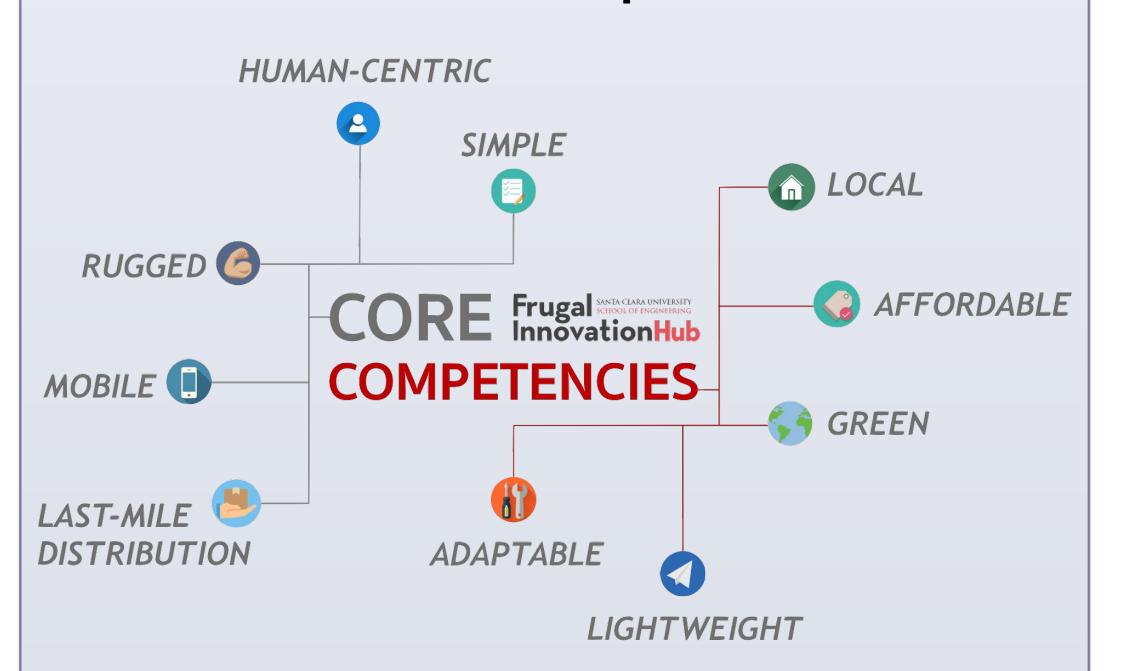
**School of Engineering** 

# **Our Mission:**

FIH's mission is to engage students and faculty in humanitarian and sustainable projects through partnerships and programs.

We act as liaisons between engineering students, faculty, and organizations to solve humanitarian problems and as facilitators between the students and their clients to ensure that deliverables are met.

#### **Our Core Competencies:**



#### **Our Deliverables:**

#### For Partner Organizations:

- A prototype or final product for a community or organization
- Local empowerment

#### For Students:

- A professional experience to understand a need in an emerging market
- Design a product to address a local or international client-based need
- Potential to travel and deploy product in target location

#### For Faculty:

 A partner program to facilitate and support their projects

### FIH Project Avenues:

Empowering the Helpers of the World

### Senior Design **Projects:** Undergraduate **Students**

**Special Projects:** 

**Graduate Students** 

Independent Studies:

**Graduate Students** 

- Result: Proof of Concept/Prototype
- Multidisciplinary
- Duration: 10-12 months
- Team: 2-6 students
- SCU faculty advisor Potential industry partners
  - **Funded Projects**
- Result: Prototype/Product
- Duration: varies

# **Volunteer Projects**

- Result: Proof of Concept
- SCU affiliated class
- Duration: 10-20 weeks
- Team: varies
- SCU faculty advisor
- Potential industry partner

# **Projects Facilitated:**



Groundwater Irrigation System for Sustainable **Agriculture (2018-2019)** 

Students: Ciara Murphy, Ricky Matthews, Peter Koros Advisors: Laura Doyle, PhD & Edwin Maurer, PhD PE

October 2018: deployed for beta testing in Uganda

Advisors: Silvia Figueira, PhD & Michele Parker, PhD

**Organization:** Rose Academies

**Location:** Uganda

Hedhi Help: a menstruation health and hygiene application (2017-2019)

Student: Anjali Sharma, Hairong Wange, Kelsey Pasco, Sarah Pagnani, Sarek

Sotelo Jimenez, Brandon Smith, Arbelina Bebla, Mira Diwan, Elizabeth Smith

**Organization:** BRAID Africa Location: Zwedru, Liberia

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Pedal 4 Purification (2018-2019) Students: Colton Rod, Matt LoGrasso, Cory Yamagata, Jonathan Keyes Advisor: Tony Restivo, PhD Organization: MayaPedal

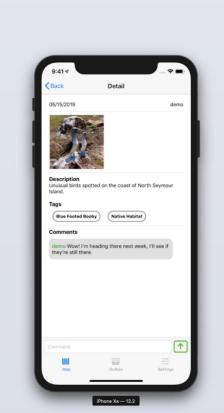
Location: Ixtapa, Guatemala

Identification System (2017-2020) Students: Kira Palazzo, Juliana Trujillo, Lauren Serfas, McNamara, Julia Lanohha, Rosie McDonagh, Mason Seely, David Heil, Nicola Gerbino, Evangelia (Eva) Bouzos, Ivy Fernandes, Marina Predovic, Lea Daran, Christina Kraus, Alyssa Miawotoe Advisors: Pashanth Asuri, PhD, Michele Parker, PhD,

Result: Prototype/Product

- Multidisciplinary
- Duration: varies
- Team: varies
- SCU principle investigator and Industry partner
- Mostly Computer Science and Engineering projects
- Team: 2-4 students
- Industry partnership





GalápaGuide (2018-2019)

Students: Paul Ahrens, Mason Bruce, Stephen Pacwa, Neel Sampemane

Advisor: Silvia Figueira, PhD

Organization: Minister of Tourism Ecuador Location: Galápagos Islands, Ecuador



**CERVIS: Cervical Cancer Early Response Visual** William Nelson, Lauren Cherrey, Claire Hultquist, Hallie Craig Stephens, PhD

## What is Frugal Innovation?

Frugal innovation is the process of problem solving in which the needs and context of the customers are put first. We facilitate the development of appropriate, affordable, adaptable and applicable technologies for emerging markets.

#### **Stats and Facts:**

Since 2011, humanitarian projects in the School of Engineering have included:

**Continents** 

**Countries** 

**California Cities** 

245 **Humanitarian Projects** 

**Faculty Members** 

765 **Undergraduate Students** 

# Have we Sparked your Interest?

# For more information about:

- Current projects facilitated by FIH
- Project proposals
- How to get involved with FIH
- Upcoming event or networking nights
- FIH certification program

Please contact us: fih@scu.edu www.scu.edu/engineering/frugal

> Please connect with us: LinkedIN Facebook

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