1. **Contact info:**
   
   Name: Deborah Steinberg  
   Department: Office of Sustainability  
   School: Knox College  
   Email: desteinberg@knox.edu  
   Phone: 309-341-7357

2. **Focus of Case study**
   
   Repurposing food waste to address food insecurity with the three-fold focus of promoting sustainability, social justice, and health in our community.

3. **Detailed description of campaign component:**
   
   Knox College Food Recovery Network reduces food waste on our campus by recovering excess food never set out for consumption in the dining halls and delivering this food to one of our three community partners, Safe Harbor Family Crisis Center, Moon Towers Subsidized Housing Apartment Complex, and the Galesburg Rescue Mission. We conduct recoveries and deliveries five days a week during the academic term. A general overview of this process is as follows: excess food is set aside by the kitchen staff and stored in accordance with food safety guidelines. Next, five volunteers pack the food into reusable plastic bins, weigh the food and label the bins, then deliver the bins of food to a local organization. This project requires coordination between several key stakeholders on our campus and in our community including the Kleine Center for Community Service, Knox College Dining Services, Knox College Sustainability Office, and our three off campus community partners. Through the coordination of these stakeholders and the commitment of our leadership team, over the past four years Knox College Food Recovery Network has successfully recovered more than 45,700 pounds of food.

4. **Planning steps & timeline to implement:**

   **Daily Food Recovery Procedure Summary:**
   
   - Volunteers gather at 2:50 pm in the kitchen, put on protective shoe covers, hair nets, and gloves.
   - Volunteers pack food set aside from the lunch meal by dining service staff members. We use reusable clear plastic bins labeled with green FRN lettering that we purchased with our club budget. We then label the bins so that it’s easy to identify the dish inside and mark the date recovered.
● After packing the food, we weigh the bins and subtract the weight of the bins to determine the amount of food recovered.
● After weighing, volunteers carry the bins out to our van and we transport it to our partner agency of the day. The agencies unpack the bins at their own pace, and we pick up the clean empties when we deliver to them later that week.
● After delivering the food and picking up the empty bins, we drive back to campus and take the empties to the dish washing room to be sanitized for the next day’s recovery.

This whole process is easily replicated, but we highly recommend starting a chapter of FRN before recovering food. This adds a sense of legitimacy for the volunteers, the receiving organizations, and the donor sites. We’ve listed a couple of first steps to take when starting a new chapter. They include registering the chapter with the national Food Recovery Network, establishing community partnerships, establishing donor relationships, obtaining necessary materials, and volunteer recruitment strategies.

**Setting up a new chapter of Food Recovery Network (FRN):**

A strong FRN chapter requires a group of students, and faculty/staff committed to making a difference on your campus. After this group is identified and organized, we suggest submitting a Food Recovery Network New Chapter Application through the National Food Recovery Network. We also suggest becoming an official club on your campus and apply for a club budget to start your chapter. Below, we included other steps to consider when starting your own FRN chapter.

1. **Establish a Leadership Team:** At Knox, the Leadership Team is responsible for the general operations of the chapter. The Leadership Team consists of six positions: two External Relations Co-Chairs, two Internal Relations Co-Chairs, and two Campus Life Relations Co-Chairs. Their responsibilities are listed below.

   **The External Relations Co-Chairs:**
   1. Coordinate with community partner contacts.
   2. Communicate with the sustainability representative of food service provider.
   3. Ensure the chapter is operating in correspondence with the National Food Recovery Network Organization.
   4. Communicate with the National Food Recovery Network Office
      a. Complete annual chapter agreement.
      b. Participate in required conference calls.
      c. Submit food recovery forms on a daily, weekly or monthly basis, as specified at the beginning of the term with the national representative.
      d. Encourage the chapter to participate in FRN national initiatives.

   **The Internal Relations Co-Chairs:**
   1. Coordinate on campus community partners:
      a. Kleine Center (community service center)
      b. Dining Services
   2. Serve as the primary contact for volunteers and run managers.
   3. Keep record of volunteer hours for each volunteer throughout the term to be submitted to the Kleine Center.
Campus Life Relations Co-Chairs:

1. Serve as a conduit between Food Recovery network and the campus life office:
   a. Prepare and manage budget
   b. Submit requests for purchases
2. Manage public relations materials for the events that the club hosts for the year
3. Manage the club social media accounts

Since we rely on volunteers from our Kleine Center, our volunteer base is comprised of people that are not directly involved in the planning behind the deliveries and are therefore less familiar with the pragmatics behind the delivery. As such, having two people in each co-chair position (six people total) to ensure not only that our operations run smoothly on a pragmatic level, but also to make sure that at least one person on each delivery is directly involved with the chapter and can troubleshoot as necessary.

2. Obtain Necessary Materials:
   - Purchase reusable bins to start your recoveries: [https://www.webstaurantstore.com/cambro-12186cw135-camwear-12-x-18-x-6-clear-polycarbonate-food-storage-box/21412186CWCL.html](https://www.webstaurantstore.com/cambro-12186cw135-camwear-12-x-18-x-6-clear-polycarbonate-food-storage-box/21412186CWCL.html)
     - Mark your bins so they are kept separate from those used in the kitchen.
   - A car will be needed deliver food this could be either a volunteer’s car or a campus owned vehicle.

3. Recruit Volunteers:
   - As the organization expands so should your volunteer base and days of delivery
   - Contact the community service center on your campus about setting up a recurring volunteer opportunity for volunteers to sign up with your organization.
   - Set up a driving schedule for each semester to make sure that you have a least one car (if using volunteer vehicles) and one driver each day you deliver.

4. Establish Community Partners to Receive Food:
   - Find partner agencies in the community able/willing to handle a varied volume of excess food produced each day (example: homeless shelters, low income apartment complexes, family crisis center).
   - Issue partner agreements to each partner agency (templates provided by FRN nationals) outlining the partner agencies’ role and responsibilities.
   - Tell partners what days and times you will be delivering food to their facility.
   - Communicate start and end dates each term.
   - In the instance a run is canceled for any reason contact the partner agency.
   - Clarify the types of food to be donated, this should be done in conjunction with the food donor agencies and in compliance with the Bill Emerson Good Samaritan Food Donation Law.

5. Establish Food Donor Relationships:
   - Identify food donors, common ones include campus dining services and on-campus restaurants.
   - Communicate start and end dates each term.
   - Establish a set location for “food to be donated” to be stored for volunteers to pack. Make sure it’s well labeled so that confusion is minimized.
   - Establish a time and place in the kitchen for volunteers to come in and pack food.
- Clarify the types of food to be donated, this should be done in conjunction with the community partner agencies and in compliance with the Bill Emerson Good Samaritan Food Donation Law.
- Issue partner agreements to each food donor (templates provided by FRN nationals) outlining the donors’ role and responsibilities.
- Establish a location for bins to be stored, a preferable place is in a dining hall kitchen, if they are a donor.
- Establish a routine for cleaning the empty bins that are returned after each delivery.
- Establish a food safety protocol for volunteers to follow that complies with the donors’ standards.
- Set up a location for a scale to weigh the donated food.
- Decide on a loading space for the food to be transported to the vehicle used for donations.

5. Resources and stakeholders involved

**Campus Life Office: (Budget)**

As an official campus club our chapter of Food Recovery Network is able to submit a budget for each academic year. The bare essentials of this budget are outlined below:

**General Operational Expenses**

At the beginning of each year there are a number of resources our chapter needs in order to start recovering food. First and foremost we need to purchase reusable bins to use throughout the year. Over the course of the year these bins start to get worn out and many bins start to crack. As a result of this normal wear and tear, we replenish our supply at the beginning of each year. Additionally, we need to purchase gas for the van we use to make runs and need funds to make posters for advertising our events.

- Reusable Bins: $12.49 x 15 = $187.35
- Reusable Lids: $6.79 x 15 = $101.85
- Gas: $50
- Printing Costs: $30

**Kleine Center for Community Service: (Volunteers)**

Our organization finds it advantageous to work with the community service center on our campus in order to recruit volunteers, the Kleine Center. Volunteering with Food Recovery Network is set up as a long term volunteer opportunity. This means that at the beginning of each term, volunteers commit to work one day a week for the entire term. The number of volunteers that can sign up for each day of the week is capped at five, including one individual who is registered to drive the campus vehicle used to deliver the recovered food each day.

**Dining Services: (Food & Cleaning Bins)**

Our food service provider, Bon Appetit, donates excess food that is never put out for consumption in the dining halls. Additionally, they allow our chapter to put our bins through the industrial washing machine after pick up from our partner agencies.

**Partner Agencies: (Use Food and Wash Bins)**

Our partner Agencies: Safe Harbor Family Crisis Center, Moon Towers Low Income Apartments, and Galesburg Rescue Mission play an integral role in our operation by making sure delivered food is distributed to individuals in need and the bins are wash with soap and water before pick up.

**Sustainability Office: (Campus Vehicle & Advisor)**
The Knox College Sustainability Office played an integral role in the establishment of our chapter. The Director of Sustainability Initiatives serves as the chapter’s primary advisor and is instrumental in helping our organization accomplish its goals. Additionally, the Sustainability Office allows us to use their campus vehicle to deliver food to our partner agencies.

Food Recovery Network National: (Advising and Additional Resources)
The national FRN office offers an in-depth supply of resources for all chapters including “how-to” guides for events to be held on campus, day-to-day procedures, and templates for food donor and community partner agreement contracts. FRN National also hosts an annual conference for chapters to attend and network with other chapter operations as well as learn about external food recovery efforts.

6. Describe the Results of this campaign component

General results:
The campus newspaper, The Knox Student, has done a number of stories on the impact food recovery network has on the Knox College campus and community. These articles include: Increase Knox’s Food Recovery Efforts, 2016; Food Recovery Network Raises Waste Awareness, 2016; Weighing the Food Waste of Our Society at Knox, 2018; Knox Places First in RecycleMania Category, 2018; Club Leaders Share Their Passion for Their Organizations, 2019; Weigh the Waste Raises Waste Awareness, 2019.

Specific measurable impact figures, if applicable:
Over the course of the past 4 years Knox College Food Recovery Network has recovered a total of 45,971.66 pounds of food. In our first year of operation, we recovered 11,046.69 pounds of excess food. During the 2016-2017 and 2017-2018 academic years we recovered 13,781.9 pounds and 9,139.97 pounds of food respectively. This year our chapter donated 12,003.1 pounds of recovered food to our three partner agencies with the help of 40 volunteers.

7. What would you do differently in the future?
When our chapter was first established we used disposable tin trays to recover food. These trays worked to initially get the program started, however, they resulted in frequent spills, recurrent costs, and resulted in another form of waste. To address these issues our chapter now uses reusable bins exclusively. Here is the link to the bins we have found most effective: https://www.webstaurantstore.com/cambro-12186cw135-camwear-12-x-18-x-6-clear-polycarbonate-food-storage-box/21412186CWCL.html.

8. What advice would you give to another college that wanted to do a similar effort?
To anyone interested in repeating this project we suggest the following:
  ● Form strong partnerships with dining services, the campus community service center (if applicable), and several partner agencies in the community. We identified the community agencies based on their work in relation to their work regarding food insecurity. We highly recommend partnering with organizations that focus on populations that have access to at least a microwave, as our food is mostly pre-prepared foods that should be consumed warm.
  ● The National Food Recovery Network organization has great resources. Take advantage of the training resources they provide!
  ● Communication is key with your food donors, make sure that you are all on the same page before the deliveries begin. We found that it is hugely advantageous to set up a protocol before meeting with the donors so they will fully understand what you will need from them, be that space, bins, or anything else.
9. **Photos and Graphics**

Knox College Food Recovery Network’s leadership team paints outside of new bins (left) to be used during food recoveries (right). Photos by: Adi Siddarth (left) & Ali Olejniczak (right).

Volunteer transfers excess food to bins during a recovery. Photo by: Shira Kaufman
Recovered food being weighed on a scale.
Photo by: Ali Olejniczak

Volunteer carries recovered food in bins.
Photo by: Ali Olejniczak
Volunteers place food in campus vehicle for transport to partner agency.
Photo by: Ali Olenjniczak (left) & Shira Kaufman (right)