2020 Host Businesses Project Descriptions

**NOTE: Due to the evolving COVID-19 situation, all projects are subject to change or cancellation without notice. More projects may be posted in the next few weeks. Please check back frequently at https://seagrant.oregonstate.edu/OASE/ for the latest updates**

1. Bora Architects; Portland, OR
2. Oregon Soap Company; Portland, OR
3. Pacific Seafood; Newport, OR
4. Port Orford Sustainable Seafood; Port Orford, OR
5. Tofurky; Hood River, OR
6. Good Clean Love; Eugene, OR
7. Providence Medical Center; Portland, OR
8. Defunkify; Eugene, OR
9. ThermoFisher Scientific; Bend, OR
1) **Bora Architects; Portland, OR**

**How this project supports the industry mission and goals:**
Bora has spent roughly a decade deeply engaged in material transparency and optimization efforts to drive the building industry towards safer chemistry in product design. Although the industry has come a long way in that time, there is still quite a lot of missing data, and not a lot of comprehension - especially within the architectural community - about how to use the data that is available to make good product decisions. This project will explore some of the most important health and environmental impacts of buildings by focusing on commonly used products.

**Project Goals and Outcomes:**
The purpose of this project is to identify improvements that can be made in the building products we specify to reduce their human and environmental health impacts. We will identify where better product choices by us, or collective investments in assessment and optimization by material assessors and manufacturers, can make a big difference in the overall health and environmental impact of the buildings we design.

Since many of the products we regularly specify for buildings are also used by our peers, the insights we gain and share through this research will have exponential effects across the industry. Our work will build on and compliment research currently being done by the Health Product Declaration Collaborative (HPDC) and related work being done by the Healthy Building Network (HBN). We will share what we learn locally through the Portland Materials Transparency Collaborative (PMTC), and more broadly through conferences and papers.

Ultimately, we hope to provide simple guidelines to help designers make smarter product choices while also identifying the key areas of scientific research and analysis that would fill in the most critical gaps in our collective understanding.

**Potential OASE Research Project will:**
- Analyze our internal specifications to set the scope of the project.
- Identify the most important products we specify with respect to human health, considering factors like prevalence and adjacency to areas of occupancy.
- Compare product compositions across similar product types.
- Use data being gathered by HPDC, HBN, and other similar organizations to identify the most prevalent chemicals of concern used by these products.
- Identify data gaps regarding these chemicals where additional assessments are needed.
- Summarize recommendations by product type and identify manufacturers that are working towards transparency and optimization of their products.

**Degree / Skills Identified by Host:**
Degree: Environmental Science/Sustainability, Physical Science, Architecture, Interior Design

Skills needed for this internship are as follows:
Minimum qualifications:
- Working knowledge of MS Excel
- Good organizational skills
- Attention to detail
- Basic understanding of chemistry
- Basic understanding of building materials
- Fast learner

Other optional qualifications:
- Knowledge of LEED and other green building rating systems and programs
- Knowledge of HPDs, Cradle-to-Cradle, and various red lists

Additional Considerations:

Housing not provided.

10 weeks, 40 hours/week, total stipend $5,500
2) **Oregon Soap Company**: Portland, OR

**How this project supports the industry mission and goals:**
The Oregon Soap Company (OSC) is dedicated to fighting climate change with sustainable practices and leaving the earth cleaner than we found it. By selecting the most natural ingredients we protect our customers and the biosphere. We have established a reputation for social and environmental consciousness over 20 years.

The Oregon Soap Company is committed to social and environmental justice. We are not complacent with our efforts and seek an intern to lead several projects to advance our efforts to displace conventional, unsustainably manufactured soap from the market and minimize our unintended impacts. These 3 projects represent the most beneficial progression of our efforts to those ends.

**Project Goals and Outcomes:**
We would like to determine the relative safety of our ingredients as compared to alternatives to ensure the best outcome for our customers and our environment based upon the standards of the Safer Choice program. Success would begin with the certification of at least one liquid soap but we would prefer certification of all soap sold under the Oregon Soap Company brand name.

We would like to achieve a 20% reduction in waste and 3% in energy usage. The intern’s success on these projects would be to complete the audits, submit their findings to management and participate in the discussion of how we can achieve these goals based on the feasibility of implementation.

**Potential OASE Projects:**
Project 1: Intern would pursue certification of Oregon Soap Company’s products as Safer Choice and lead the effort to accomplish the accreditation. This will include a comparison of our formulations against the EPA’s Safer Chemical Ingredients List (SCIL) and potentially the Criteria for Safer Chemical Ingredients, submission of ingredient data through the Safer Choice Community portal, submission of our application for partnership to a qualified 3rd party reviewer and education of OSC staff on the certification program. Through the associated marketing study, the intern will determine how to leverage the certification by identifying the types of companies and institutions most likely to be influenced by Safer Choice certification, their systems for selecting soap to purchase and the ideal messaging to influence their purchasing decisions.

Project 2: Intern initiates waste stream study investigating the packaging of our ingredients, and materials and methods to prevent and reduce that waste and its environmental impact. Present ideas to management; determine metrics for measuring progress and coordinate the launch of these initiatives with OSC staff.

Project 3: Intern assesses energy use at our various sites. The energy audit will examine all forms of energy use at our 4 sites with a goal of reducing our overall energy consumption. Present ideas to management; determine metrics for measuring progress and coordinate the launch of these initiatives with OSC staff.
Degree / Skills Identified by Host:
Degree: Environmental Science/Sustainability; Public Health (with environmental emphasis)

Skills needed for this internship are as follows:

Minimum qualifications:
• high level of motivation
• excellent time management skills
• basic understanding of chemistry
• coursework or experience in marketing
• Capable of collecting and analyzing data
  
Other optional qualifications:
• familiarity with the accreditation process for Safer Choice certification
• knowledge of waste stream analysis and energy auditing

Additional Considerations:

Housing not provided.

10 weeks, 40 hours/week, total stipend $5,500
3) **Pacific Seafood; Newport, OR**

**How this project supports the industry mission and goals:**
Pacific Seafood is focused on sustainability and conservation at all levels of its business operations. Chemical types, quantities, and usage practices vary from site to site within the Pacific Seafood Group and there is not currently a corporate management system in place to track and, ultimately, reduce and/or substitute chemicals. This project will support overall conservation goals by providing the framework to manage chemical usage in a more sustainable, cost-effective, and environmentally responsible manner.

Reducing or eliminating toxic chemicals, or replacing them with less harmful alternatives, is an integral part of meeting environmental regulations, improving the environmental impact of Pacific Seafood facilities, and potentially saving costs/energy.

**Project Goals and Outcomes:**
Create a chemical management inventory system at the Newport seafood processing locations that will provide tracking and usage statistics of all chemicals used at each location. Identify: chemical substitutions that could have a less toxic impact on people and the environment, listed/regulated chemicals for reporting and safe management purposes, and usage and storage for opportunities to reduce spills and leaks. The overall goal is to decrease costs, energy, injuries, and negative environmental impacts, and to create a management system to track chemical usage.

**Potential OASE Projects:**
This will be a three-phase project:

1) Inventory all chemicals - Gather data through observation and data logging. Descriptive information, usage specifics, and storage of each chemical inventoried will be required.
2) Identify opportunities for improvement - Analyze the collected data for opportunities of improvement. Anticipated improvements include: reducing quantities used, reducing costs, substituting for less toxic variants, reducing employee and environmental exposure, improving storage, compliance, managing information (SDSs, etc.)
3) Plan and implement improvements - Propose a management system to house and track chemical usage in Newport.

**Degree / Skills Identified by Host:**
Environmental Science/Sustainability; Physical Science; Business/Economics (with environmental emphasis)

Skills, experience, and knowledge needed for this internship are as follows:

**Minimum qualifications:**
- Data management
- Organization
- Interpersonal skills
• Strategic thinking skills
• Capable of collecting and analyzing data

Additional Considerations:

If needed, dorm-style housing will be available to the intern free of charge at the Hatfield Marine Science Center in Newport, OR.

10 weeks, 40 hours/week, total stipend $5,500
4) **Port Orford Sustainable Seafood;** Port Orford, OR

**How this project supports the industry mission and goals:**

Our Community Supported Fishery (CSF) is an online seafood market. Members pre-pay for credits which are used throughout the year to buy items directly from our yearly catch. We pay fair-trade prices to our local fishermen, who catch & process seafood locally in Port Orford. This allows us to sell Port Orford seafood right here at home, and provide the best quality, sustainable & traceable fish to Oregonians. By catching and processing your seafood ourselves, we knock out the corporate link in the supply chain and tell the complete story of where your seafood comes from.

Currently, our fish waste is either returned to the sea as crab bait, given to local farmers when they want it, or composted unprofessionally by ourselves. As a seafood company that values sustainability, we want to see every pound of biomass that we remove from the ocean turned into net economic or environmental benefit. By capturing the full value of every fish we land, catching less fish becomes more economically sustainable. This is an obvious win-win for both business and the marine environment.

**Project Goals and Outcomes:**

We want to reduce our waste footprint by at least 50%, with some species reaching 70% waste reduction. We need to implement procedures that make us more efficient in dealing with seafood bi-products.

To achieve these goals, our processing facility needs to:

1. Understand the secondary markets that exist and how easy it is to enter them.
2. Implement a processing protocol that supports secondary, value-added seafood products.
3. Market and sell our new products to CSF customers and wholesale clients.
4. Measure success – How much waste is now re-processed and marketed as an asset?
5. Distribute remaining fish waste among local network of farmers.
6. Any fish waste unclaimed by farmers is composted by POSS.

**Potential OASE Projects:**

**Project A:** Quantify total seafood waste in our seafood operation. Waste to be measured in two ways:

1. Total pounds of waste prevented and total pounds turned into compost, and;
2. Percent Recovery across species.

**Project B:** Determine opportunities to reduce waste by finding value-added markets for processing room bi-products, e.g. Bait blocks, Soup Stock, Fish Skin Pet Treats, etc. Implement procedural changes in the processing room to support the creation of these new products.

**Project C:** Measure total pounds of waste that is instead retained and brought to market. Total waste reduction will be measured/expressed in two ways.

1. Total pounds wasted/composted vs. total pounds sold.
2. Increased percent recovery across species. Example: currently rockfish yield (recover) 25-30% marketable product (filet). We would like to increase our recovery for rockfish to 75% by retaining and marketing their 1) heads for bait, 2) skin as pet treats, and 3) selling bones and roe to restaurants.

Measuring increased recovery across species will build a roadmap to minimizing overall waste by targeting specific (less wasteful) species to bring to market.

**Degree / Skills Identified by Host:**
Degree: Environmental Science/Sustainability; Economics and Business with environmental emphasis

Skills, experience and knowledge needed for this internship are as follows:

**Minimum qualifications:**
- Analytical and critical thinker
- Passionate about reducing waste in food systems
- Good at learning from existing market-based solutions to reducing food waste, e.g.
  - HAACP plan/protocols for seafood processing
  - Community Supported Fishery sales models
  - USDA Requirements for marketing pet foods
  - ODA/HAACP guidelines for marketing bait fish
  - Market research for local, regional, national supply chains
- Developing and implementing clear and effective protocols to efficiently produce those products at our facility
- Clear and effective communication – both written and oral
- Capable of collecting and analyzing data

**Other optional qualifications:**
- Comfortable working in an environment where fish and fish carcasses are processed
- Able to lift 50 pounds
- Should like music, enjoy the coast and rural living
- Good sense of humor

**Additional Considerations:**

Local dorm-style housing will be available to the intern in Oregon State University’s Port Orford Field Station student housing. This cost is covered by the business.

This is a 12-week internship, working 33hrs a week with a negotiable timeframe, flexible schedule, total stipend $5,500
5) **Tofurky; Hood River, OR**

*How this project supports the industry mission and goals:*

Tofurky was founded in 1983 on the principle that the current global food system is not sustainable and that nutritious protein alternatives with less inputs were needed to curb the environmental impacts of animal agriculture. Almost 40 years later, the mission remains the same - to reduce the environmental impact of our food system by making delicious plant-based foods. Furthermore, and more recently, Tofurky became a B-Corporation and is fully committed to continuously reducing and preventing our environmental impact and achieve as many of the 17, 2030 Sustainability Development Goals (SDGs) put out by the UN. This project will be an important step along our journey towards our vision of a more sustainable global food system.

As a mission-based, triple bottom line B-Corporation, sustainability is part of our ethos. Our general sustainability goals are to prevent waste (food and packaging) wherever possible, limit our energy use, thus greenhouse gas emissions, and prevent our water usage wherever possible. Finding ways to reduce or change process to prevent hazardous chemicals use needed for food safety and sanitation, is also top of mind.

*Project Goals and Outcomes:*

Our proposed project is to determine our current state of energy, water and hazardous chemical use (in refrigeration) of our process and equipment used to cool and heat our product. Then, to make a set of recommendations to prevent and/or reduce the use of these pollutants and water.

**Background:**

Once our product is cooked, we use cool water and convection to cool it at a specific rate before it enters refrigeration. At some later point, this refrigerated product is then pasteurized with steam before it is packaged. These processes are used for most of our product and are the process steps where the majority of our energy, water and refrigeration is used. Any improvements would dramatically reduce Tofurky’s environmental impact and significantly improve our operating costs. Our consumers also demand these types of efforts and it is also required of our B-Corporation certification.

*Potential OASE Projects:*

1. Determine current energy efficiency of cooling and heating of product with either water, refrigeration or steam at specific manufacturing stages:
   a. Cooling product with water and convection to product quality and FDA compliance following the cook stage
   b. Refrigeration of product as work in process (WIP) inventory prior to pasteurization
   c. Pasteurization of product using steam to SQF, FDA guidelines
2. Baseline energy use/greenhouse gas emissions, water use and refrigerate (hazardous chemicals) used in these processes
3. Design and implementation of phase 1 of an environmental management system (EMS) covering energy usage, water usage, and carbon emissions, with an implementation plan to set and meet target caps over time.
**Degree / Skills Identified by Host:**
Degree: Environmental Science/Sustainability

Skills needed for this internship are as follows:

**Minimum qualifications:**
- Ability to analyze numerical data and use Excel
- Capable of accurate data collection
- Experience conducting research and writing reports
- Excellent interpersonal skills
- Communicate well verbally and in writing
- Self-directed and independent learner
- Have strong interest in sustainability and environmental protection
- Interest in preventing GHG emissions, water usage and hazardous chemical (for sanitation) use
- Understand concepts of preventing waste (pollution prevention/source reduction)

**Other optional qualifications:**
- Knowledge of B Corporation and LEED certification criteria
- Sustainability Development Goals (SDGs) set forth by the UN
- Basic knowledge of food manufacturing process steps (have they read The Goal?)
- Understanding of the EPA Food Recovery Hierarchy
- Understanding of SQF and FDA food production guidelines for plant-based food

**Additional Considerations:**

10 weeks, 40 hours/week, total stipend $5,500

The B Corporation Certification is a third-party certification administered by the non-profit B Lab, based in part on a company's verified performance on the B Impact Assessment. The benefit corporation is a legal structure for a business, like an LLC or a corporation. Benefit corporations are legally empowered to pursue positive stakeholder impact alongside profit.
6) **Good Clean Love: Eugene, OR**

**How this project supports the industry mission and goals:**

Good Clean Love's mission is to increase the awareness and experience of love in the world. Our business offers all-natural, organic feminine hygiene, vaginal wellness and premium intimacy products to enhance your ability to enjoy the passionate side of life.

Social responsibility and environmental stewardship are at the forefront of our business practices. We won the PETA Compassionate Company Award for our work in helping change the FDA animal testing requirements for personal lubricants. We are the only feminine hygiene and intimacy product company using green plastics made of biodegradable sugar cane. And, we are a registered B-corporation, meaning we align our people and our planet with our business practices.

**Project Goals and Outcomes:**

Good Clean Love is committed to sustainable business practices and aims to certify all our products as carbon neutral and EPA Safer Choice certified. At this time, our flagship product Almost Naked organic personal lubricant is certified carbon neutral but none of our products are Safer Choice certified. Projects for the summer include:

1. Identify agencies that can assist Good Clean Love transition its full product line to carbon neutrality
2. Explore the Safer Choice certification for Good Clean Love manufacturing processes

**Potential OASE Projects:**

1. Research and vet carbon neutral certifying bodies including process, cost, time to completion, etc. Can carbon life-cycle assessments be done in-house? What carbon offset options make sense for our business?
2. Apply for EPA Safer Choice Certifications for all products using a 3rd party certifier.

**Degree / Skills Identified by Host:**

Degree: Bachelor’s degree in environmental science, Sustainability or other related field

Skills, experience and knowledge needed for this internship are as follows:

**Minimum qualifications:**

- Data analysis
- Problem solving
- Systems thinking
- Detail oriented
- Strategic thinker
- Ability to conduct research

**Other optional qualifications:**

- Familiarity with carbon accounting and climate policy
Life cycle assessment
Strong quantitative skills
Skilled written and verbal communicator, including the ability to present complex information so that it is understandable to a non-technical audience
Strong computer skills relevant for data manipulation and analysis as well as experience with, Excel, Word, and PowerPoint
Knowledge of personal care product ingredients

Additional Considerations:
Housing not provided.

350 hours of work can be spread over negotiable timeframe, flexible schedule, total stipend $5,000

The B Corporation Certification is a third-party certification administered by the non-profit B Lab, based in part on a company's verified performance on the B Impact Assessment. The benefit corporation is a legal structure for a business, like an LLC or a corporation. Benefit corporations are legally empowered to pursue positive stakeholder impact alongside profit.
7) Providence Medical Center; Portland, OR

How this project supports the industry mission and goals:
This project aligns with several of Providence's Core Values - Justice: we strive to care wisely for our people, our resources and our earth. Excellence: we set the highest standards for ourselves and our ministries. Through transformation and innovation, we strive to improve the health and quality of life in our communities. Integrity: we hold ourselves accountable to do the right things for the right reasons.

The project will develop and roll out our Linen Utilization Program in an effort to greatly reduce the resources used to process linen. This project represents a win-win for both Providence Portland Medical Center and Providence St. Vincent Medical Center in reducing the environmental impacts and reducing costs for something that is so widely used in our hospitals (linen) within a very short period of time. We will also be able to roll out this project to the other 6 hospitals throughout Oregon for even more savings.

Project Goals and Outcomes:
Calculate environmental impacts (energy and water usage, transportation, chemicals of concern, etc.) used during current process. Improve operational work flow efficiency of linen management to reduce impacts- environmental and financial.

Reduction in environmental impact (energy and water usage, transportation, chemicals, etc.) and cost savings by improving operational efficiency to reduce the amount of linens used.

Potential OASE Projects:
See if research has already been done on linen life cycle, if not:
- Collect and assess environmental data re life cycle of linen usage on site.
- Evaluate detergent and offer environmentally-preferred alternatives if they are not already being use (phosphate free).
- Communicate with other Providence hospitals (in other regions) who have developed similar projects with great success.
- Develop and present project proposal to Core Leaders/Nurse Managers.
- Understand the goal for the “work flow process” and help with presentations to educate staff on the “rollout” in conjunction with managers.
- Reworking and improving the work-flow process across all departments.
- Informing staff of the data and changes.
- Share and transfer results to the 6 other Providence hospitals in the Pacific Northwest.

Degree / Skills Identified by Host:
Degree: Environmental Science/Sustainability

Skills, experience and knowledge needed for this internship are as follows:
Minimum qualifications:
• Strong written and oral communication skills
• Engaged listener
• Self-starter
• Empathetic
• Capable of collecting and analyzing data
• Interested in working at the intersection of sustainability and health care

Other optional qualifications:
• Knowledge of Life cycle assessment

Additional Considerations:

Housing not provided.

10 weeks, 40 hours/week, total stipend $5,500
How this project supports the industry mission and goals:
Defunkify is on a mission to get the funk out of your laundry and your home as well as the funk out of your cleaning products themselves. Modern textiles are great for wicking away moisture and keeping the wearer cool when it’s hot or warm when it’s cold. Unfortunately, many of these same textiles trap sweat and grime, causing build-up of funk that doesn’t seem to go away. Leading detergents that address this need often mask the problem and leave behind residue that further contributes to this problem. Moreover, many ingredients still used in these products are toxic to the environment and/or to you.

Defunkify’s ProvenSafe™ approach to product development allows us to commercialize superior cleaning products that not only match or exceed the performance of today’s best products, but also have the lowest environmental and health impact. Rooted in our rich history of green chemistry from the University of Oregon, Defunkify has commercialized a line of laundry products including laundry detergents, odor removing products, and stain removers. These products are all made with plant-based ingredients and synthetic materials on the Environmental Protection Agency’s “Safer Choice” list, and are proven to work. But, we are not done yet. Our ProvenSafe approach can and will be used to reinvent the entire cleaning aisle from surface sprays and disinfectants to fabric softeners to even pet products. In the challenging environment of the current Covid-19 pandemic, the need for cleaning products that will reduce the risk of transmission has never been higher. We can deliver these products without compromising environmental or human health.

Defunkify is getting great traction among environmentally conscious retailers and consumers. The OASE projects described below will not only further support our mission to bring better and safer products to these customers, but will also help to solidify our brand value.

Project Goals and Outcomes:
One of the key objectives we have for these products is to implement solutions that will reduce the carbon footprint and environmental impact associated with the production, packaging, and transportation of these products. A part of this solution will be to reduce our reliance on and consumption of petroleum derived ingredients in Defunkify’s products and packaging. Similarly, we believe that we can contribute to the reduction of the proliferation of microplastic fibers in our air and water.

Potential OASE Projects:
The potential projects listed below are examples of the type of projects we anticipate the intern will work on. The actual work time will include a combination of on-line subject matter research, hands-on laboratory testing and formulation, and project reporting.

1. Develop and test a formula for a new bio-based cleaning product using Dune Sciences ProvenSafe™ design process. Use principles of Green Chemistry to guide ingredient selection and product design. Test formulations using nematode ecotoxicity assays and...
major performance metrics. Prepare a product for market that is competitive with leading brands but has a significantly reduced carbon footprint and ecotoxicity profile. Apply for EPA Safer Choice Certification and USDA Biopreferred Program Certification.

2. Study and refine the formula of an existing bio-based cleaning product using Dune Sciences ProvenSafe™ design process. Use principles of Green Chemistry to guide ingredient selection and product design. Test formulations using nematode ecotoxicity assays and major performance metrics. Prepare a product for market that is competitive with leading brands but has a significantly reduced carbon footprint and ecotoxicity profile. Apply for EPA Safer Choice Certification and USDA Biopreferred Program Certification.

3. Research, design and/or source a new packaging material for existing products that reduces the consumption of petroleum/ use of plastic to help our company move closer to our goal of achieving plastic free packaging.

Degree / Skills Identified by Host:
Degree: Chemistry, Physical Science (environmental emphasis), Environmental Science, Environmental Chemistry, Green Chemistry

Skills needed for this internship are as follows:

Minimum qualifications:
• Ability to work and think independently
• Creativity
• Flexibility to adapt to ever changing needs of a fast paced start-up company
• Motivation to make a difference
• Good attention to detail
• Knowledge of lab procedures (read MSDSs, weigh and measure, pipette, etc.)
• Capable of collecting and analyzing data

Other optional qualifications:
• Previous experience working with nematodes (toxicity testing, husbandry)
• Environmental impact research
• Ingredient selection, procurement and testing
• Stain, soil removal testing, as well as other performance testing such as using GC/MS to measure odor removal
• Materials compatibility testing
• Waste management
• Knowledge of green chemistry concepts

Additional Considerations:
Housing not provided.

350 hours of work can be spread over negotiable timeframe, flexible schedule, and total stipend $5,000
9) **ThermoFisher Scientific; Bend, OR**

**How this project supports the industry mission and goals:**
As a company we have made several environmental goals for 2020 and long-term goals for 2030. These include improving solvent waste management, reducing the waste of fresh water in cooling systems, transitioning pneumatic motors from water to air, reducing HVAC exchange during off-peak hours, and finding a green alternative to methylene chloride used in dissolving pharmaceuticals.

**Project Goals and Outcomes:**
Finding any reasonable savings and reuse/recycle alternative to current waste management practices for solvents would be considered a success. Finding any alternative to flushing 80% of our site water consumption (i.e. 27,200 gallons of clean water per month) down the drain would be considered a success. The cost of compressing our own air would be less than purchasing nitrogen, and it would be much safer. Reducing HVAC exchange during off-peak hours would save money and reduce our carbon footprint. Finding viable alternatives to methylene chloride would save money and be greener.

**Potential OASE Projects:**
Project 1: This facility uses several solvents in the manufacture of pharmaceutical products. The facility currently disposes approximately several thousand pounds of solvent waste per year at several cost variations. There are local green companies that specialize in solvent waste repurposing for paint thinner.
This project would include either requesting analytical testing in-house or sending solvent waste out for analysis to verify purity. Networking with Oregon businesses to find solvent waste alternatives (i.e. paint thinner). Calculating waste savings which would include total annual solvent waste vs cost each constituent cost that can be used as an alternative such as paint thinner.

Project 2: We currently have two fresh water cooling systems for two separate spray dryers. We currently flush all of this coolant water (i.e. 27,200 gallons of clean water per month) down the drain. This project could include retrofitting the current system to use recyclable coolant, enhancing the system to handle both spray dryers, or something not yet considered.

Project 3: Find a green alternative to Methylene Chloride. There are several projects we have encountered that we need to use Methylene Chloride to dissolve pharmaceutical actives. Finding viable alternatives to Methylene Chloride would not only save money it would most likely be a greener alternative.

**Degree / Skills Identified by Host:**
Degree: Environmental Science/Sustainability, Green Chemistry, other?

Skills, experience and knowledge needed for this internship are as follows:

**Minimum qualifications:**
• Data analysis
• Problem solving
• Strategic thinker
• Ability to conduct research
• Capable of collecting and analyzing data

Other optional qualifications:

**Additional Considerations:**

Housing not provided.

10 weeks, 40 hours/week, total stipend $5,500