SCIF 2022-2023 Annual Report

During the 2022-2023 academic year, the Sustainable Campus Initiative Fund (SCIF) provided about \$111,000 to 20 projects designed by University of Utah community members. The projects covered a range of issues, including climate change grief, indoor air quality, seed education and recreation among Black youth. All project funding was approved by an allocation committee composed of students, staff and faculty.

In addition, the SCIF program built and approved its first-ever stipend opportunity to be enacted for the 2023-2024 academic year. This initiative offers stipends to students who are not able to pursue an independent project due to financial or personal barriers. Historically, students have undertaken SCIF projects as an extracurricular activity, rather than a paid experience. Students with more financial constraints are therefore deterred from applying to the program, decreasing SCIF's overall accessibility.

In light of this important oversight, the SCIF team will now offer applicants compensation ranging from \$150 to \$500 for the time spent on their projects. For students who require funding, this can act as an opportunity to receive payment while executing creative ideas and engaging in professional development prospects. The stipend form will be added to the existing SCIF applications.

All projects awarded funding in the 2022-2023 academic year:

SMALL

Sunlight Mapping for the Nuh Eevaat Garden Beds: \$293.00 Project Executive: Nikki Blandford I Project Advisor: Gabrielle James

This project received funding to purchase a Solar Pathfinder, a sunlight mapping device, for the Nuh Eevaat Edible Campus Garden. This device maps potential planting areas according to solar needs. The garden staff used the Pathfinder to collect data about how they can more effectively plant crops in the seasons to come.

Misinformation, Humor & Climate Change: \$990.00 Project Executive: Gareth Sanders I Project Advisor: Sara Yeo

This project funded a student team that quantitatively coded data from TikTok posts about climate change to better understand how social media disseminates sustainability information to student populations. They focused on what type of content gains the most interest and the scientific accuracy of the content. Using PykTok, a web-scraper Python package that collects publicly available TikTok data, students identified characteristics of popular posts by collecting the top 16 posts from the tag. The results were presented at the Wilkes Climate Summit, a climate change conference at the University of Utah.

Project Clean Air Surveys: \$264.00

Project Executive: Anna Johnson I Project Advisor: Jennifer Follstad Shah

This project received funding to compensate Eccles Health Sciences Library patrons with Starbucks gift cards for completing an indoor air quality survey. This survey is part of the Clean Air Spaces project, which is an ongoing effort to provide ultra-pure indoor air in the library. In addition, funding for this project was used to print an informational poster educating patrons about the sources of indoor air pollutants and their effects on human health.

U Care About the Gondola: \$689.50

Project Executive: Jes Venegas, Katie Jordan, Hunter Zink, Catherine Best, Joey Wadge I Project Advisor: Wendy Wischer

Students in the 4473: Art, Action, and the Environment class received funding to create a final project to protest the proposed gondola construction in Little Cottonwood Canyon. The project consists of a booth in front of the Marriott Library with educational activities, food and a live performance. The goal of the event is to educate the campus community about the gondola's potential negative impacts on the environment and use of tax dollars while promoting electric buses as an alternative solution.

Dining Hall Scales: \$527.92

Project Executive: Dahlia Krauss I Project Advisor: Ken Ohlinger

This grant funds five large weighing scales to be provided to four on-campus dining service locations to improve operations and sustainability. The scales will be used to

conduct food waste audits and weigh leftover food to be donated to shelters by the Food Recovery Network.

Coping with Climate Change Grief and Anxiety Workshop: \$1,000

Project Executive: Nataunya Kay, Andrea Brunelle I Project Advisor: Nataunya Kay

This project received funding to create an experiential workshop to help students, faculty and staff cope more effectively with their grief, anxiety and dread related to the climate crisis. Specifically, funding will be used for food and supplies costs. The workshop will be a full-day session held on a Friday afternoon for three hours and continued the following Saturday for 12-15 individuals.

MEDIUM

Living Plant Wall: \$10,000.00

Project Executive: Peter Vawdrey I Project Advisor: Jorg Rugemer

This project received funding to install and maintain an interior green wall within the College of Architecture and Planning. The wall is intended to purify indoor air, serve as temperature control, and reduce stress and fatigue for building occupants. In addition, it will help remove carcinogenic compounds (VOCs) from the air, which originate from glues and solvents used for architectural models. Lastly, a research study will be conducted measuring airborne VOCs, particulate matter, CO2 levels and humidity in the building after installation of the wall.

Green Chemistry Glove Recycling: \$4,945.35 Project Executive: Arnel Besic I Project Advisor: Kaci Kuntz

Students in the Green Chemistry Committee received funding to continue operations with their gloves recycling program. The program exists in multiple chemistry, undergraduate and research labs and recycles approximately 1,400 pounds of gloves per semester. Funding will be used to pay for packaging and shipping costs for the gloves to be transported to a recycling agency.

Continuation of On-Campus Air Quality Monitoring: \$6,350.00

Project Executives: Nicholas Hofmann, Haley Scott, Megan Ostlie I Project Advisor: John Lin

This project received funding to continue maintenance for monitoring instrumentation at the top of the William Browning Building. The instrumentation measures criteria pollutants, such as O3, CO, NOx, and PM2.5, at the University of Utah. The data collected from the monitors helps determine health impacts, air quality standards and trends in the environment to allow policy makers to create informed decisions about sustainability measures.

Indoor Air Purification System: \$3,221.46

Project Executive: **Bretton Kruger, Dimitri Blot, Amy Harvey, Piper Christian, Olivia Kavapalu I Project Advisor: Jennifer Follstad Shah**

Students received funding to install two air purifiers in the upper level of the Eccles Health Sciences Library. The systems will help reduce PM2.5 and other air particulates in the space. In addition, funding will be used to create informational posters about the importance of indoor air purification. Lastly, a digital survey will be made accessible by QR codes so that success metrics can be obtained.

Clean Air Spaces: \$1,150.00

Project Executive: Sarah Pillman, Trevor Wells, Jules Kaufman, Crystal Eldredge I Project Advisor: Daniel Mendoza

This grant will fund a research study pertaining to indoor air quality in the Eccles Health Science Library. Specifically, funding will be used to maintain and replace parts on previously installed air purifiers that reduce PM2.5 and other air particulates in the space.

Garden Boxes: \$3,500.00

Project Executive: Ella Wood I Project Advisor: Gabrielle James

This project received funding to purchase vegetable plants and species that will contribute to pollinators in the garden boxes located in front of the University of Utah Sustainability Office. In addition, a water drip irrigation system will be installed to maintain the area.

Indoor Air Quality: \$8,645.00

Project Executive: Tristalee Mangin I Project Advisor: Kerry Kelly

This project received funding to maintain the Seed2Soil air quality sensor network at the University of Utah for an additional year. This will allow the current team to obtain measurements during a wildfire season, dust periods and one additional inversion season. In addition, the funding will be used to pay for a graduate student position on the team.

Seed Library: \$2,000.00

Project Executive: Elizabeth Stickley I Project Advisor: Gabrielle James

This project received funding to create a seed sibrary on the University of Utah campus where amateur growers can grow plants from provided seeds and learn about their connections to health and well-being. The library will be located in the Nuh Eevaat Garden and maintained until 2026. In addition, grown produce will be donated directly to the FeedU Pantry.

University Neighborhood Partners Heartland Center Hydration Station: \$4,300.00

Project Executive: Melissa Calvillo I Project Advisor: Bruce Neumann

This project funds a water fountain and water bottle filling station at the Hartland Partnership Center. This center is a community space for west-side families and contains many health and well-being programs alongside a Youth Center. The hydration station will help reduce the use of plastic water bottles and will foster a culture of sustainability.

Raising Recycling Awareness and Progressing Proper Recycling and Waste Disposal Among the Utah Asian and Pacific Islander (API+) Utah Community: \$5,983.57

Project Executive: Pheng Lor I Project Advisor: Brooke Larsen

This project received funding to increase proper waste sorting and increase recycling at the 46th Annual Utah Asian Festival. The project specifically trains University of Utah API+-identifying students to support in-person waste disposal and recycling education. Estimates of landfill diversion and data from surveys will also assess

general waste knowledge among these communities in Utah.

Stormwater Green Infrastructure Solutions at Edible Campus Garden: \$9,200.00

Project Executive: **Kate Ades, Jasmine Garcia, Eli Schroeder, Julie Williams I Project Advisor: Sarah Hinners**

This project received funding to install a bioswale to mitigate flooding issues at the Edible Campus Gardens. This will allow filtration of runoff and mitigation of sediment, nutrient, metal and bacterial pollution. In addition, the retention of rainwater near the planting rows will reduce irrigation demands for portions of the garden.

Camping In Color: \$7,740.00

Project Executive: Sydney Murray, Hilary Lambert I Project Advisor: Jeff Rose

Camping in Color is a weekend-long camping program at Rock Cliff Recreation Area to increase outdoor recreation and education participation amongst Black youth. Funding will be used to issue pre-trip surveys and utilize undergraduate research assistants to conduct interviews with participants about program design and sustainability.

LARGE

Heliodon: \$20,468.52

Project Executive: Hayden St John I Project Advisor: Timothy Adekunle

This project received funding to purchase and install a sun simulator for students in the College of Architecture and Planning. The device can be used to simulate sun paths and sun shading patterns at various sites and periods on the planet. It will be used to support students to increase understanding of the sun's involvement in architectural design and sustainable communities.

Eco Counter Bicycle and Pedestrian Counting Network: \$20,000.00

Project Executive: Justin Delgado, Taylor Maguire I Project Advisor: Ginger Cannon

This project funded the shipping, components and installation of three permanent and

two mobile counters. These counters will be used to detect pedestrian and bicycle traffic at various pathways at the University of Utah. Data collected from the counters will be used to inform future design guidelines for internal campus pathways.