2011 Campus Sustainability Awards

- **Jimmie Baker and Jon Monserud, Notable Achievement**

Jimmie Baker, UMC Associate Director of Operations and Services, and Jon Monserud, Building Maintenance Supervisor, make up the team that exemplifies sustainability in action. Jimmie and Jon continuously identify and implement energy projects that make a difference not only in lowering utility usage, but also save UMC staff time and energy. This makes the building more user-friendly and comfortable for guests, and enhances overall appearance and atmosphere. Ultimately, the money saved from these projects lowers the amount of student fees needed while quietly and concretely demonstrating it is possible to be both sustainable and economical. Jon and Jimmie have given careful consideration to the projects chosen. They have identified some that will have a very short payback. Other projects are completed with a long-term sustainable goal in mind. Along with identifying projects, for the past two years they have successfully partnered with CUSG funding sources such as ECRF (Energy and Climate Revolving Fund) and EEF (Energy Efficiency Fund) to help the UMC's dollars go farther.

Reduction in energy consumption, sustainable building practices along with zero-waste policies have made the UMC a leader in sustainability on campus and an example for the community. Jimmie and Jon have been the guiding force for the UMC's success in this area.

While the UMC does not have the option to lower the cost of utilities, Jimmie and Jon have found a way to lower overall energy consumption within the UMC. As a result, the UMC has been able to use the savings to offset other increases such as benefits or insurance, and still be able to lower the UMC student fee request.
Jimmie and Jon have spent the last 8 years working together to improve sustainability efforts within the UMC. Replacement of approximately 200 T12 fixtures with T8 fixtures was one of the first projects that had a significant impact. An estimated savings of $30.00 per fixture resulted in approximately $6,000 savings per year.

More recently the replacement of the southwest facing windows of the UMC is predicted to produce a savings of $14,583.00 per year with a payback of 12 years. Jimmie and Jon make sustainability a priority in their job responsibilities. They are self-motivated but also express satisfaction and joy when they see how their projects have made a difference. They have met and in many cases exceeded student's expectations and demands for true sustainability. Their teamwork puts the UMC ahead of the curve on energy issues, has lowered the carbon footprint of the UMC while serving as a working model for others to follow.

Sustainability projects take time to plan and implement. Jon has taken on the challenge, done the homework when necessary and acted as project manager for many of the projects thus reducing the cost of the project itself. Jimmie has then been able to take

Jon's recommendations and secure additional funding to make the projects a reality. Without Jon and Jimmie working as a team, the UMC could not have completed as many projects or made such a significant impact. In two years, the UMC utility consumption decreased by 8.6%.

- **Lori Lander, Notable Achievement**

Lori has worked diligently with the HDS project management staff, the design-build team and members of Residence Life on the Williams Village North (WVN) project. She has played a key role in ensuring that CU's newest residence hall contains as many sustainable features as possible to promote CU's commitment to sustainable living.

Planned sustainability features that are particularly innovative on campus include:

- Grey Water System for Toilets
- Solar Domestic Hot Water
- Energy Recovery Heat Exchanger on MAU's
- Ground Source Heating in Apartments
- Phantom load outlets in Student Rooms
- Metering of Electric per wing per floor with kiosk in Great Room
- Covered Bike Parking and Shower
- Modulating Dryer Vents

Lori was directly responsible for getting two new sustainability-based Resident Academic Programs (RAPs) into WVN. Her direct involvement ensured that WVN will provide a living-learning environment for its residents. Lori also organized promotional events such as pizza parties in order to educate students about the LEED process and to encourage student involvement in the project. Lastly, her vigorous enthusiasm helped keep this large project focused on the goal of LEED platinum certification.

- **Christina Aalto, Student Leadership**

Christina Aalto is a senior environmental studies major who exemplifies a strong commitment to improving the health of her community and the environment around her. Christina was selected by the White House in 2009 to attend a Cabinet discussion on youth and sustainability and represent the views of students across the country. Since 2008, Christina has worked tirelessly to develop the SCORE program as a part of three different organizations (CoPIRG, Sustainability Consulting, Environmental Center). Today the program works to educate students in the Boulder community on how they can save resources and money through basic efficiency retrofits. She has teamed up with another CU student, Scot Woolley, to present the program at national conferences - including AASHE and the Rocky Mountain Sustainability Summit. Christina also worked for the US Park Service in 2010 to help them pilot their own

efficiency and carbon monitoring programs. Her work is successful in all three areas of sustainability - economic, social, and environmental.

Christina's efforts have benefited the campus community by helping students save money and reduce energy/water use through the SCORE program. Her efforts extend far beyond the campus and demonstrate the impacts that CU and its students can have on the rest of the world when it comes to tackling major sustainability problems.

- **Peter Arts, Individual Achievement**

Pete initiated a recycling program within the Housing Facilities Services (HFS) storeroom for used appliance parts.

Appliance parts are a huge drain on resources and our economy, including the appliances that are discarded due to the lack of availability of used parts and cost prohibitive factor of repairing with new parts. Appliance parts recycling could be an important part of contributing to longer appliance life and reducing unnecessary resource waste; it certainly has had this impact at HFS.

Pete joined the HFS team about three years ago and his job duties include purchasing replacement parts for appliances within Housing and Dining Services facilities, but he quickly realized that many of the appliances slated for disposal contained reusable parts for those similar models still in service. These efforts resulted in savings of over $2,000 last year in cost avoidance for purchases of new parts and Pete is on track to save even more this year. He also handles recycling of fluorescent lamps for our area as part of his duties and is always looking for ways to increase the recycling efforts for HFS. Pete also volunteers with Community Food Share and is sincerely committed to making our communities and environment better for us all.

- **Fabian DeGarbo, Outstanding Alumni**

Fabian is currently the Global Sustainability Director for ESPN - a position he helped to create within the organization a few years ago. Fabian has been instrumental in expanding sustainability into the athletic community and is a major supporter of zero waste at NCAA athletic events - helping to extend the efforts of CU throughout the nation. CU students recently worked with Fabian at the ESPN Winter XGames as part of a team dedicated to executing a zero waste event. During the XGames, many ESPN staff in a wide variety of fields (i.e. staging, IT, food, event coordinators, TV crews, etc.) expressed that they were excited for the opportunity to be able to recycle. During take-down, there was an eight-foot-high pile of IT wires (tens-of-thousands of feet) that all of the IT crews had set out to recycle after talking to Fabian - something very uncommon in the industry.

Fabian has helped the ESPN organization and hundreds of independent vendors divert hundreds of tons of material and has been essential to the incorporation of sustainability - or, "environmentality" as it is known at ESPN - into the athletic culture here in the US. Fabian

DeGarbo exemplifies the profound impacts that CU Alumni can make after they graduate with sustainability experience. He is now looking support to the University by hiring CU students to help him with his sustainability efforts and has committed to helping start a green alumni network to make CU the sustainability center in the US.

- **Coby Gould, Outstanding Alumni**

Coby Gould is the Director of Programming at the GrowHaus. He is a food activist, facilitator, environmental educator and permaculturalist based in Denver, Colorado.

The GrowHaus is a non-profit urban farm and market in northeast Denver's Elyria-Swansea neighborhood. Its mission is to lay the groundwork for a community food system in Denver through year-round food production, a local market, and educational programming. The GrowHaus serves an underrepresented community in the Swansea-Elyria neighborhoods in Commerce City. With a population consisting of 87% of Latinos/Hispanics and the area considered a "Food Desert", the GrowHaus seeks to give these communities the opportunity and the choice of healthy, sustainable and affordable food for themselves and their families. The GrowHaus is largely operated by community members which brings the community closer and trains community members in greenhouse practices. Its sustainable focus on training and facilitation promotes the creation of green jobs and opportunities for all of those involved. Overall the GrowHaus and Coby's involvement have proven to be a positive project for the local community and great example to follow for the rest of us.

Coby emphasizes that people in these communities are the true leaders. The people who participate in the GrowHaus project are the ones creating the change.

The GrowHaus has been a project since late 2009. The motivations/concepts behind establishing the GrowHaus were:

- Food Justice – making healthy food choices available to all communities, regardless of location, race, or income; and increasing food security.
- Urban Agriculture – growing food in underutilized urban areas, reducing carbon emissions, improving health and building community through food production.
- Permaculture – using natural systems as a model to create a society that is diverse, resilient, fair, and abundant.
- Green Jobs – expanding the local economy by generating living-wage jobs focused around growing, processing, and distributing food.

Coby has committed himself to the success fo the GrowHaus project because of the niche it fills in the sustainability movement. His work takes into account a crucial component of sustainability which is "People" and makes this his focus- thus bringing a justice component to the sustainability aspect of its operations.

- **Jerry Greene, Individual Achievement**

As the MCDB conservation liason, Jerry has worked with the conservation group to implement various projects (sleep mode and water savers on autoclaves, de-lamping among others). Additionally, Jerry has helped set up pliot projects that will become campus wide if the pilot works (Styrofoam recycling). On his own initiative, Jerry researched the quality and use of DI vs. distilled water. He gained support from the labs which allowed the labs to shut off of six energy inefficient stills. These projects, plus others have allowed MCDB to become much more conservation based and energy efficient.

MCDB, with Jerry's help, has been the pilot for autoclave energy savings as well as polystyrene recycling. This will impact the campus at large if the pilots are deemed successful.

This work is not part of his job description, but it is very important to the department and to Jerry. Jerry works directly with all of the labs in his lab support role. His efforts are respected by the scientists, and he, with Kathy Ramirez-Aguilar, is able to garner attention, interest and collaboration from the scientists on laboratory conservation ideas, projects and implementation.

- **Shannon Horn, Individual Achievement**

Shannon Horn is a Facilities Management mechanical engineer who has worked at the University for approximately eight years. In that time, she has demonstrated a great dedication to energy and water conservation. Some examples include:

- Campus-wide review of laboratory exhaust systems with the goal of right-sizing exhaust flow rates, resulting in exhaust reductions of up to 30%. Since the make-up air for the exhausted air has to be pre-conditioned (heated or cooled) when being brought into the building, any reduction of make-up/exhaust air has a direct effect on energy reduction.
- Conversion of water-wasting cooling and refrigeration (DX) cooling of spaces and laboratory equipment at the Engineering Center to more-efficient chilled-water cooling, with the additional benefit in some cases of reduction of water use.
- Promotion and oversight of design for installation of pressure-independent valves in chilled-water systems, with the effect of improving the delivery of chilled water to the terminal devices, and efficiency improvements to the chilled-water plants of up to 40%.
- She is passionately involved in the design and construction of the Systems Biotechnology Building, where many of her initiatives are being implemented along with those of the design team, with the goal of a LEED Platinum laboratory building!

Shannon has exceeded her duties in that despite a substantial workload, she has committed personal time to make progress in some of this endeavors; in some cases, hiring and training student engineering assistants to perform much of the field work and calculations. The projects are resulting in considerable resource savings.

- **Kathryn Ramirez-Aguilar, Individual Achievement**

Kathy has been the force behind establishing the Green Labs program which aims to help make the research labs at CU Boulder more environmentally aware and to promote activities that make research lab operations more sustainable. Green Labs Program addresses water and energy efficiency as well as recycling, waste reduction, and procurement choices.

Because laboratories are large consumers of resources and thus present huge opportunities for conservation, a special emphasis for conservation has been placed on laboratory operations through the creation of the CU Green Labs Program in the summer of 2009. The program, a collaboration between Facilities Management Office of Resource Conservation, CU Environmental Center and Environmental Health and Safety, supports CU-Boulder's near term goal of achieving 20% energy conservation by 2012 and long term goal of CO2 neutrality. CU has more than 400 laboratories on its Boulder campus which typically consume 5-10 times more energy than classroom or office space.

According to one of the lab eco-leaders, "Despite the fact that many of us working in labs have an environmental conscience, we felt helpless to effect change in that setting. Kathy confronted that "realm" and made changes happen. Coupled with the meetings of eco-leaders, she has given us more hope for continuing changes in laboratories. This is important because we use so much disposable plastic. Finding ways to purchase those supplies more responsibly and to recycle what we can is an extension of her work that interests most of the eco-leaders. Her initiative has gotten us started on work that we want to do, but none of us really pushed hard enough without her program."

Kathy has established a program that has two kinds of benefits. She has reduced energy and water consumption in the research labs - the obvious tangible goals of the program. Secondly, but very importantly, she has recruited and built relationships with representatives from participating labs. The Lab Eco-Leader program gathers individuals from many labs so that the shared knowledge and goals of individuals working in isolation can have a forum for discussion. This allows labs to find better greener products to buy and recently has resulted in our being able to recycle the polystyrene containers that are the shipping containers for many chemicals. Before Kathy's program was established, there were some efforts by individuals in some labs, but now the shared energy is getting more done.

The program has been in place for less than two years. Kathy saw the need for the program and worked to establish it. She is currently paid as a contractor to coordinate the program. She is so enthusiastic. She bakes brownies for meetings and she clearly believes in the goals and has her "heart and soul" in the effort.

- **Unreasonable Institute, Outstanding Alumni**
  Daniel Epstein, Teju Ravilochan, Vladimir Dubovskiy, Nikhil Dandavati, Tyler Hartung

The Unreasonable Institute in Boulder was founded by several young CU alums two years ago. The institute aims to help young, civic-minded entrepreneurs across the globe reach their goals of tackling pressing environmental and social issues. Last summer the institute selected 25 young entrepreneurs from 284 applicants living in such countries as Peru, Australia, India, Venezuela and Liberia, to move to Boulder for a 10-week intensive summer program. The group's sessions were conducted on campus. The institute will host a six-week intensive session this summer in Boulder before hosting the program abroad.

During the program, the 25 entrepreneurs lived in the "Unreasonable Mansion" — an unoccupied fraternity house — and attended campus-based sessions creating business plans, branding, personal and entrepreneurial development. They also worked with mentors ranging from television producers to investment analysts and entrepreneurs on their ideas. At the end, the group decided how to divide up the $225,000 Village Fund among three of their peers. The group also pitched their ideas to potential investors in San Francisco.

Unreasonable Fellows are already making a difference in their countries after returning home after their time on the CU-Boulder campus on a variety of social, environmental and economic fronts. The Unreasonable Fellows' ideas range anywhere from sustainable disaster shelters to viable housing solutions for slums.

Founding president Daniel Epstein (Phil'08), along with Teju Ravilochan (IntlAf'09), Vladimir Dubovskiy (ApMath'10) and Nikhil Dandavati (Fin'10) began meeting as students on the CU-Boulder campus with Tyler Hartung (Fin'06) in 2008 to discuss global issues.

The group decided to take their broad ideas a step further. They wanted to find a way to help entrepreneurs tackling social or environmental problems reach their goals of helping people in need. The Unreasonable Institute was born.

- **Volunteer Resource Center, Departmental Achievement**

In the last year the Volunteer Resource Center has shown their commitment to Environmental Justice in many ways.

In the fall of 2010 they organized student volunteers to do an energy sweep in low-income neighborhoods in Longmont. During these sweeps volunteers went door-to-door distributing CFLs, weather stripping, sink aerators, etc. They also spent time with each tenant to discuss energy and ways they could reduce their energy bills.

The Volunteer Resource Center also took the initiative to expand the Buffalo Can Challenge (BuCC) into the Food and Environmental Justice Week in which students, staff, and faculty will

be able to participate in a variety of activities, such as panel discussions and film screenings, to learn more about environmental injustices that occur in Colorado and around the world. On Saturday following a week of activities, students, staff and faculty can participate in service projects geared toward alleviating environmental injustice.

Several of the Alternative Break projects led by CU students are geared towards addressing environmental injustices, such as disaster relief in New Orleans, working specifically with lower-income and minority communities, Food Justice in Austin, TX, and hunger and homelessness in Cincinnati, OH, as well as more conventional environmental conservation in both Catalina Island, CA and Cascade Head, OR.

VRC's efforts are greatly benefiting the campus community, not only through education, but also by giving students an opportunity to make a positive impact through service. Each of us contributes to environmental injustice daily and we often don't consider the ways we can make a positive impact. The VRC is striving to show students, staff and faculty all they things that they can do to address this difficult topic.

The choice to expand the Buff One Can Challenge came about because VRC recognized that while they were able to collect great amounts of food for Community Food Share, the challenge did little to address the systemic issue of food injustice and the broader problems of access to healthy food in urban areas. They wanted to go deeper to find a better way to address the root of the problem.

In an effort to bring awareness to this topic and offer service opportunities, the VRC decided to expand their efforts to encompass a whole week of panel discussions, films, a sustainable food fair, and a day of service. It would have been easy to abandon the project or keep it the same, but instead they decided to take on more work to reach a greater goal.

VRC has organized 30 volunteer projects for an estimated 250 students. These projects include river clean ups, garden establishments in low-income communities, mural painting in run-down neighborhoods, community garden work, and service with local organic farms that are committed to the equitable production and provision of their food.