# D

### D A A P cares thinks connects works





University of Cincinnati College of Design, Architecture, Art, and Planning 5470 Aronoff Center PO Box 210016 Cincinnati, Ohio 45221-0016 daap.uc.edu



The DAAP Cares Initiative is a collective of faculty, students, alumni and organizations committed to improving the quality of life for individuals and communities in need through the pursuit of theoretical and applied research. This group recognizes the academic design institution as a resource for innovation and development at all scales. The mission is to foster improved quality of life by identifying humanitarian causes and working as interdisciplinary teams that connect design, architecture, art, planning, and other disciplines to conduct research, create new theoretical, frameworks and generate solutions.



DAAP Cares Event 2011



DAAP Cares Event 2012

### **Acknowledgments**

The idea for DAAP Cares was presented to me by two students in the graduate Architecture program at UC in 2010, soon after the earthquake in Haiti - Kelley Romoser and Adam Saltzman. They were proposing a student group that focused on projects that addressed communities in need. This aligned with my own visions of a student, faculty and alumni group that was sharing their experiences working on these projects. With the support of Dean Probst and Associate Dean Vogel, this became a reality in April 2011 at the first annual DAAP Cares event held in the Niehoff Center at the University of Cincinnati.

Many people have been instrumental in the development and ongoing support of DAAP Cares. Special thanks goes to Dean Robert Probst and Associate Dean Craig Vogel, both of whom have been fully involved with this project from its inception. Frank Russell and the Niehoff Center have offered a perfect venue for the event and Miranda Mote and Laura Plaisted worked tirelessly to make the DAAP Cares events a success in 2011 and 2012. Wanting Luo did a great job putting together the graphics for this book and Blake Lane did a great job of coordinating the final product.

The projects presented in this book represent DAAP Cares projects from 2011 and 2012. Thanks to all who have contributed and all who will be part of this initiative in the future.

Michael Zaretsky March 2013



### LOW-COST FIRE SUPPRESSION FOR COMMUNITIES WORLD-WIDE

In a slum fire, hundreds of lives can be lost in moments. These people are typically left to an under-equipped municipal fire department or to wait for international humanitarian aid. What can be done to make local fire fighting possible, humanitarian aid more affordable, and save lives?

With 106 billion spent worldwide on aid and development, FireStop's market is limited only by the depth of our concern. Developmental programs, disaster relief, and non-governmental organizations could find FireStop worthwhile protection for their investments.

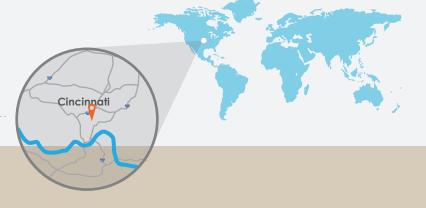
As national, UN, and non-governmental organizations look for ways to manage global humanitarian aid and welfare, each establish their own priorities and focus. While no other product is a direct competitor, it's idea and implementation must come from the budgets of other programs, many with great credibility and proven track records. FireStop looks to compete with those dollars, but in a way that aims to prevent them from being spent over and over due to loss.

### **PARTICIPANTS**

Noel Leon Gauthier, MDes, SOD, 2011

### **LOCATION**

Cincinnati, USA 2010-2011





1. Single graphic gives one option



Pull tab orients
 extinguisher into only fireable
 orientation



3. Tab reveals only button



4. Single graphic describes single button



5. button press breaks sear



All wrapped up in a protective Tyvek shell.



### HIV/AIDS PREVENTION CURRICULUM IN AFRICA

In Summer 2005 a class of 12 fourth year Digital Design students were given, as a class project, the design of an HIV/AIDS prevention curriculum for southern Africa. The aim was to transform world views and attitudes toward sexual practices through education. A team of 8 faculty and students traveled to Swaziland with funding support from UC and the Hope Education Foundation to conduct field research. The resulting curriculum, called iMatter, reaches elementary and middle school children while they are still forming their conceptual and cultural identity, and before they adopt sexual practices. The students engaged in a user-centered, evidence-based design process with a collaborative team of researchers, educational specialists, faculty, and indigenous experts.

As a result of their work, iMatter is currently being deployed throughout the nation of South Africa with support of a 5 year U.S. President's Emergency Plan for AIDS Relief (PEPFAR) grant. In the first nine months of 2009, 198 teachers were trained to use iMatter and 845,828 students received it. Currently approximately 1.5 million students have completed the program with outstanding results.

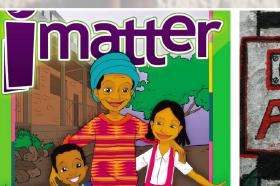
### **PARTICIPANTS**

Mike Zender, MFA, Associate Professor, SOD Sponsored by Hope Education Foundation

Cincinnati-based team: 8 students, 2 faculty

### **LOCATION**

South Africa On-going







### MEDICAL EQUIPMENT REPAIR IN **RWANDA**

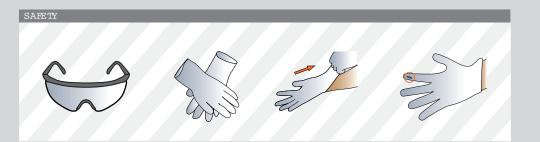
In 2010, SOD began a collaboration with Duke University's biomedical engineering team to design a system of visual instructional materials that depict repair and maintenance processed for medical equipment in Rwanda, Africa. From the content developed at Duke, UC students created and organized imagery, symbology and narrative sequences to explain specific repair procedures with few or no words. The resulting visual narratives were subsequently tested in Rwanda and were found to be as effective as teaching using traditional class demonstrations, using verbal and written instructions.

### **PARTICIPANTS**

Mike Zender, MFA, Associate Professor, SOD

### LOCATION

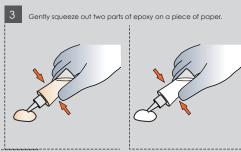
Rwanda, East Africa 2010

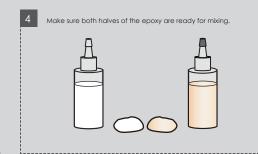








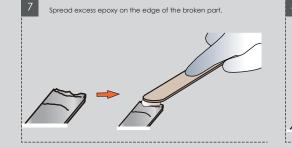


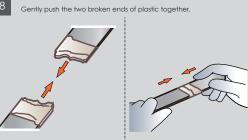


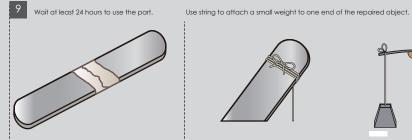




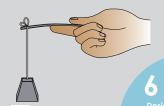
Equipment Repair Diagrams











### A NEW CONCEPT FOR TRANSPORTATION IN CINCINNATI

A play on words between Transportation and Forum, the purpose of TransForum is to start a dialogue about the future of public, multi-modal transportation in Cincinnati, with a main focus of highlighting the advantages of Light Rail in Cincinnati as a means of connecting communities. Cincinnati has a vast wealth to offer its residents and visitors. Unfortunately, this is not well known to those who have never been to the city, and even to some of the people living in the area. To many, the city seems somewhat disjointed and lacking of a meaningful organization to its many parts.

The Live Well Collaborative, in collaboration with the University of Cincinnati, embarked on a process to change this perception and to make the city of Cincinnati a more compelling city to reside in, relocate to, and to visit. The students set out to establish a strong sense of connection between the valuable assets of Cincinnati's unique neighborhoods.

TransForum was created during phase three of the project in the summer quarter of 2010. During this phase, students worked to use the research from phase one and the concepts of phase two to help promote multi-modal transportation in Cincinnati.

### **PARTICIPANTS**

Peter Chamberlain, Assistant Professor, SOD Live Well Collaborative SOD Design Students

### **LOCATION**

Cincinnati, USA 2010



### TransForum

# A COLLAPSIBLE LIGHTWEIGHT BICYCLE HELMET DESIGN FOR THE CASUAL BIKER

The assignment was to design an object for head protection. Students designed a collapsible lightweight bicycle helmet made from knit foam rope for the casual biker. This person uses their bike to get from place to place and would wear a helmet if it were more convenient and appropriately styled.

Head coverings are almost always made from fabric; woven or knit. We wanted to make a helmet that carries with it the idea of these traditional crafts, which would also be worn by the users.

It was important to make this helmet not look fast. We wanted the form to be descriptive of the material and process and not allude to biking as a sport.

There are no adhesives. Everything is either knit, woven or sewn. In addition to the knit foam structure, we added segments of hard shelled EPS to improve protection. These segments help the helmet to retain its shape and give it designated fold lines for stowing. They are attached to the helmet by weaving nylon straps through the knit foam structure. This construction eliminates the need for adhesives or other fasteners.

This was a research and iteration heavy project.

### **PARTICIPANTS**

Steve Doehler, Assistant Professor, SOD SOD Students

### **Head Protection**

# **LOCATION** Cincinnati, USA 2011 Cincinnati



# A DESIGN RESEARCH PROJECT TO IMPROVE THE ROLLATOR FOR AGING PEOPLE

#### Height adjustment

Creating an even height is easy because it's controlled at one point. Previous models had to be adjusted above each wheel or under each arm.

#### Wheel resistance

Wheels move differently on carpet than wood flooring—this is a huge problem. By turning this arthritis-friendly knob, the user controls how quickly the wheels move. It's placed right in front, so the user will remember to use it.

#### No need to squeeze

At an older age, squeezing one's hands is harder to do. If the user put more weight on the arms, the wheels slow down. This got rid of the need to have squeeze dependent brakes. The grip is soft on top and rigid below.

#### Stop & sit

Taller people can enjoy a higher seat because the seat height is adjusted along with the arms. When the seat is down, it automatically engages the wheel brakes.

One less thing to remember = less accidents.

#### Easy folding

The folding technique was inspired by vacuum cleaners. Pushing in the button causes the arms to fall and the axle to release, allowing the rollator to pivot flat. Only one hand necessary!

#### Foot protection

Removing the basket and using a retracting seat moved the user closer to the front wheels. The user now has more leg room to walk, but there is a foot guard to ensure that no feet gets caught by the wheel.

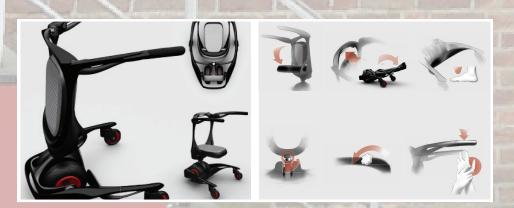
### **PARTICIPANTS**

Steve Doehler, Assistant Professor, SOD SOD Students

### **LOCATION**

Cincinnati, USA 2010





### DESIGN THINKING FOR AT-RISK YOUTH

A group representing students, faculty, alumni, and practicing designers in Cincinnati collaborated with The Innovation Center on Vine, and Dr. Victor Garcia's Core Change Initiative on an experimental program working with three different representatives of under-served communities in the city. Over a five-week period three innovation teams were formed to explore the various ways design thinking could positively impact and develop innovative solutions to challenges faced by Cincinnati communities. Space and support for the project was provided by Frank Russell, the Niehoff Urban Studio, and the Live Well Collaborative. The intention is to develop this into a more fully sustainable project in the future with Dr. Garcia and the University of Cincinnati. This is part of a larger goal to plan and support socially responsible design in Cincinnati.

### **PARTICIPANTS**

Faculty: Reneé Seward, Assistant Professor, SOD

Craig Vogel, Associate Dean, Professor, SOD

Maren Carpenter Fearing, Visiting Assistant Professor, SOD

Dr. Victor Garcia, Cincinnati Chi<mark>ldren's</mark> Hospital Medical Center Innovation Center on Vine

Volunteers/Students: LeAnne Wagner, Kara Koch, Ashley Walton, Matthew Cole, Emily Verba, Matt Anthony, Mahsino Blamoh

### **LOCATION**

Cincinnati, USA 2011-2012





# A DIGITAL, INTERACTIVE TOOL THAT USES VISUAL COMMUNICATION PRINCIPLES TO TEACH READING SKILLS

The See Word Reading Tool is a digital, interactive tool that uses visual communication principles to provide graphic cues so students may concretely visualize the relationship of phonemic sounds to alphabetic letterforms. In this Pilot study, children take part in a 15-week intervention for sound-to-letter correspondence, titled See Word Reading Tool intervention.

For example, when a student is reading on screen and cannot recall the sound for the letter 'p', they can touch the letter on the iPad screen and receive a series of photographic images that begin with the /p/ sound. In particular, clicking on 'p' initiates a sequence of images that appear over time like 'peapod', 'peach', 'peppermint', and 'pie' superimposed on the letter. After the series of images cycles through, the letter returns to the original letter form without any images on it.

### **PARTICIPANTS**

Faculty: Reneé Seward, Assistant Professor, SOD Allison Breit-Smith, CECH Beth O'Brien, CECH Ben Meyer, Assistant Professor, SOD

Organizations/Partners: Verizon Foundation, 21st Century Funding, PASS Program, Mt. Washington Elementary School, Academy of All World Language Elementary School

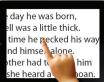
### **LOCATION**

Cincinnati, USA 2012





-Cincinnat





See Word Reading Pilot Study

# HEALTHCARE PRODUCTS AND SERVICES FOR THOSE WHO NEED THEM MOST

The University of Cincinnati is transforming healthcare through an innovative and collaborative design process called Design+Nursing: Innovation in Healthcare. Students and faculty from the School of Design's Industrial Design Program and the College of Nursing are tackling public health concerns, environmental issues in health care settings and product design limitations. This is a Universitysupported design and nursing collaboration focusing on product and services that apply translational research. Translational research is a growing trend and is being heavily endorsed by the National Institutes of Health (NIH). Our area of focus is T2 Translational Research which concerns research aimed at enhancing the adoption of best practices in the community (NIH 2009). Our collaboration focuses on a community-based participatory research approach in which the main goal is to develop healthcare products and services for those who need them most.

### **PARTICIPANTS**

Faculty: Steven Doehler, Assistant Professor, SOD Robin Lee, Assistant Professor, College of Nursing SOD Students

### LOCATION

Cincinnati, USA 2012







# GARMENT DESIGN FOR PEOPLE LIVING WITH EHLERS-DANLOS SYNDROME AND HYPERMOBILITY

Ehlers-Danlos Syndrome is a group of inherited disorders marked by hyperelastic skin and fragile ligaments that tear away from joints. Many people living with EDS experience chronic pain while performing every day activities, such as putting on their clothes, driving, performing household chores, and lifting their children. Currently, there are few garments and supportive devices in the market that are comfortable, effective and attractive.

Our aim is to design a customized range of garments for people who are living with hypermobility, also referred to as Ehlers-Danlos Syndrome, by:

- Supporting and stabilizing body joints and ligaments
- Aid in the comfort, protection and pain relief while performing daily activities
- Use the latest technologically-advanced materials
- Design garments which reflect their sense of style and taste level
- Restore people's self-confidence and dignity

#### Sources

- 1. US National Library of Medicine
- 2. Ehlers-Danlos National Foundation

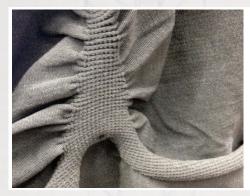
### **PARTICIPANTS**

Brooke Brandewie, Adjunct Instructor, SOD Margaret Voelker-Ferrier, Professor, SOD

### LOCATION

Cincinnati, USA 2012









### A ZERO-ENERGY HEALTH CENTER IN RURAL TANZANIA

Roche Village has no infrastructure for power, sanitation or water and a post-colonial construction technique that is unsafe and unsustainable. Since 2008 we have been working with the Roche community and our consultants to develop a model for seismically-resistant masonry construction that can be replicated by others in the region. Our university has recognized this project as a model for global design that addresses the need for collaboration between academia and practice while addressing global humanitarian issues.

Dozens of UC students from the School of Architecture and Interior Design, the College of Engineering and other disciplines have participated in this project.

The clinic opened on April 1, 2011 and has served thousands of villagers since that time.

### **PARTICIPANTS**

Michael Zaretsky, Associate Professor, SAID RHC Design Director for Village Life Outreach Project

SAID Students

### **LOCATION**

Roche, Tanzania 2011



# THE FOLDED HOUSE THAT CAN BE TRANSFORMED RESPONDING TO EXTERNAL STIMULI

The characteristic of the Folded Bamboo House heavily relies on the umbrella structure's open angle and the spatial relations of each rib. The Folded House is transported to site and modified by the social, economic and culture requirements of the user. With this usercustomized system, the house can react to external stimuli and be transformed with a short time responding to the light, wind or temperature change. More important, as a post-consumer product, all the bamboo materials can be reused after fulfill its temporary housing function. Rather than go to landfill, they will be de-assembled and reused for other building and furniture production.

Finalist, The Earth Award, Jury: Nicky Gavron. (Former Deputy Mayor of London), Peter Head (Director, ARUP), Dr. Kenneth Yeang (Architect, Llewelyn Davies Yeang), Thom Mayne (Architect and Founder, Morphosis Architects), Paola Antonelli (Senior Curator of Architecture and Design, MOMA), Adam Bly (Founder, CEO and Editorin-Chief, Seed Media Group) 2009

Honorable mention, Re: Construct, Sustainable materials and building practices competition, Urban Revision. 2008

The first prize, Self-Sufficient Housing, 2nd Advanced Architecture Contest, Institute for Advanced Architecture of Catalonia (IAAC), Spain, Jury: Yung Ho Chang, Greg Lynn, Neil Gershenfeld 2007

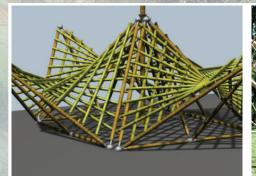
### **PARTICIPANTS**

Ming Tang, Assistant Professor, SAID Dihua Yang, Professor, Savannah College of Art and Design

Construction: Daniel, Engels, Javier, Natalia. Photograph by: Luke Henry.

### LOCATION

Brazil 2009





# REPOSITION ARCHITECTS BY EVALUATION AND REARRANGE-MENT OF THE DESIGN PROCESS

In the years since the disappearance of the master builder, architects and their design processes have become increasingly estranged from the physical act of building. This detachment from the tangible realization of design disallows architects an understanding of the implications of their design decisions: availability of materials, complexity of connections, and financial feasibility.

Consequently, this separation creates a second rift between contemporary architects and humanitarian design projects, as the priorities of the design process, non-profit organizations, and the under-served poor rarely intersect.

This thesis proposes that evaluation and rearrangement of the design process could reposition architects to be considered essential contributors in future humanitarian building efforts. More specifically, by beginning the design process with a study of local culture, particularly methods of making, the architect becomes equipped to produce designs that reestablish the link between design and physical realization, are culturally rich and responsible, and are suited to the needs of non-profit sponsors.

Based on my experience constructing the Roche Health Center in rural Tanzania, this project will result in a proposed framework for a design process tailored to contemporary humanitarian projects. Following this framework, an Entrepreneurial Center will be designed for the village of Roche, Tanzania. Local skills and existing technologies will be analyzed to develop a building that provides examples and inspiration for the advancement of quality of construction, and life in general, without imposing the architect's own cultural values, nor disrupting traditional ideas of making.

### **PARTICIPANTS**

Emily Roush Elliott, MArch, SAID, 2011

### LOCATION

Roche, Tanzania 2012



### PUBLIC ART FOR A PREVIOUS UTOPIA

**PARTICIPANTS** 

Clermont College

DAAP

Mark Harris, Matt Lynch, Ryan Mulligan,

Kelly Frigard, Gary Knepp and Kim Taylor

Menelaos Triantafillou and Michael Zaretsky

Due to its removal from the people whose behavior is being quantitatively evaluated, there is an increasingly pressing need to find empathetic alternatives to quantitative methods of research. Of particular importance are qualitative alternatives that empower their subjects and allow a dynamic value system that returns information and vision to both the researchers and the community being investigated.

In response to this need, our principal research question is: "How is it possible to engage the inhabitants of small towns in understanding and expressing their concerns and needs through the use of innovative participatory approaches that build consensus through the celebration of shared values and beliefs, and that are open and inviting to all."

Our first objective is to design a participatory art event that will attract from the region being investigated a large number of participants whose enthusiasm will allow them to more openly communicate their concerns.

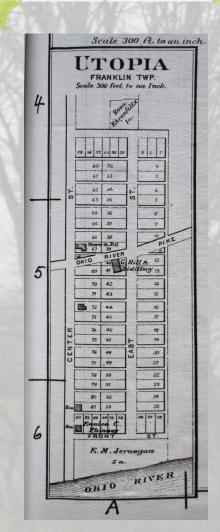
Our second objective is to raise the profile of the historical features of one particular settlement so that the region's communities can apply the ownership of their past to improving their future prosperity.

With its rich history of nineteenth-century communal societies, the focus of this proposal is on Utopia, Ohio, a small settlement on the Ohio River to the south east of Cincinnati. Rural towns close to major metro areas have unique physical, socio-economic, and cultural characteristics that reflect their historical evolution, their geographic locale, and a sense of independence. The inhabitants of these towns have a strong sense of place and pride for their hometown, and live there primarily out of choice. The lack of their integration into the economic and political fabric of the region gives them a disadvantage in being able to articulate their needs and request available assistance to improve the local quality of life, and to alleviate economic and social problems.

### Fair at Utopia

### **LOCATION**

Utopia, OH, USA



# RE-DESIGNING TRANSITIONAL SHELTERS FOR POST DISASTER HOUSING

On January 12th, 2010 a 7.0 magnitude earthquake struck just off the coast of Port-au-Prince, Haiti claiming over 200,000 lives and leaving more than 2 million people homeless. In the ongoing humanitarian effort millions of tarps and tents over 200,000 transitional shelters are projected to have been distributed to provide temporary shelter. Unlike temporary shelters, transitional shelters have a lifespan of up to 5 years and are constructed using more durable materials. However, most transitional shelters still have tarp walls and many lack floors. Disaster management guidelines suggest that transitional shelters are a medium-term housing solution that are intended to be replaced with permanent houses within the lifespan of the transitional shelter. However, in practice, due to lack of resources, transitional shelters often become permanent homes for disaster victims. This project set out to document the various transitional shelter types that are being distributed by the organizations that are working in Haiti, and to develop a strategy for the conversion of these shelters into permanent houses by addressing the problems that the residents are experiencing with their shelters. A series of site visits and interviews with residents were conducted documenting the t-shelter types, problems experienced, and any feedback or suggestions that they had to improve the design. We also discussed with the residents if they had plans to rebuild a permanent house and how long they anticipated having to live in the t-shelters. Based on this information we began to design kits, which could be distributed to the residents of the t-shelters, including the necessary materials and tools allowing them to make permanent their shelter while addressing the problems that they have had.

### **PARTICIPANTS**

Adam Saltzman, MArch, SAID, 2011 (Employee of Mass Design Group)

beyond the tents

### LOCATION

Port-au-Prince, Haiti 2012







# CLOTHING FOR THE TRAUMATIZED BODY

Due to environmental disasters, human rights violations, or civil unrest, refugees are plucked from their homes, shipped around, stripped of value or identity, and reduced to their physical bodies. How can clothing, as the most intimate form of shelter, respond psychologically and physically to these traumatized bodies by:

- 1. offering a feeling of safety,
- 2. reconstructing the trauma story,
- 3. connecting the individual to the community.

Clothing-making techniques of weaving, wrapping, stitching, fastening, and folding extend into architectural methods of space-making while providing solutions to typological issues of refugee shelters like: multifunction, portability, space-saving, adaptability and conceptual issues of: "body as site like", identity, rehabilitation, and fusing "skin and bones". The specific design exercise develops wearable environments for refugees in the Horn of Africa suffering from the recent drought.

### **PARTICIPANTS**

Azmara Asefa, MArch, SAID, 2012

### **LOCATION**

Horn of Africa 2012



# THE POWER OF DESIGN THINKING THROUGH ARCHITECTURE FOR HIGH SCHOOL STUDENTS

Project: SPARCH (pronounced 'spark') is a high school design studio that teaches 25 inner-city high school students in Cincinnati, Ohio about the power of design thinking through architecture.

By following a process that focuses on breaking down the creative barrier and opening student's minds to new ways of thinking, students will be taught how creative problem solving, critical thinking, and out-of-the-box approaches can extend beyond the classroom and apply to situations in their own lives.

With a series of guest mentors from professional firms around the Greater Cincinnati Area as well as local organizations heads and faculty members from the University of Cincinnati, students obtained guidance, inspiration, and first hand knowledge about how the skills taught in this course can be applied beyond the typical "walls" of design and the classroom.

### **PARTICIPANTS**

David Mierke (Director & Instructor), MArch '12 Tyler Gentry (Instructor & Partner), BArch '13 Joseph Russell (Instructor & Partner), BArch '13 Emmy Jensen (Instructor & Partner), BArch '14 Jenna Hudson (Partner), Keep Cincinnati Beautiful

#### Organizations:

Hughes STEM High School, Niehoff Urban Studio, Findlay Market, BHDP Architecture, FRCH Design Worldwide, GBBN Architects, College of Mount St. Joseph, Keep Cincinnati Beautiful

### **LOCATION**

Cincinnati, USA 2011-2012

-Cincinnat





### MULTIPLE DAAP HORTICULTURE PROJECTS

#### **Green Roofs**

The following green roof projects have been done with teaching, research, and service components in a seminar or studio format: UC Hospitals, DAAP, Rothenberg, research/projects/case studies, Koi Pond, Cincinnati Main Library Funding Sources document

#### Infrastructure Reserves

This inquiry explores the use of vacant lots to serve as urban infrastructure: stormwater management and sewage treatment, urban agriculture, energy generation, and recreation. The concept has been explored by V Russell, entered into a competition with a graduate student, and exhibited as a graduate forum poster.

#### **Greening OTR**

This project began with the Hamilton County Regional Planning Commission's Subcommittee on Green Building of which V Russell is the chair. The project evolved to become an ARCH/ID studio (V Russell with J Tilman) and a graduate seminar (V Russell) and it received a grant from Duke Energy.

#### Peace Park Charrette

Russell was asked by a steering committee and Banks Project Manager John Deatrick to develop a process for the design of a Peace Park for the highly visible "front yard" of the Freedom Center. V Russell worked with the group to consider alternatives for generating design ideas, inclusiveness and community participation, and funding. The process chosen was a charrette led by V Russell with UC graduate and undergraduate students. The steering committee has continued to pursue the implementation of this park and will be issuing RFPs soon.

### **PARTICIPANTS**

Virginia Russell, Associate Professor, SAID

SAID Students

### **LOCATION**

Cincinnati, USA 2012



-Cincinnat



DAAP Landscape Projects SCHMIDT BROTH
BREWERY 36
125 E. MCN Architecture

# RESEARCHING AND VISIONING A NEW 21ST CENTURY ELEMENTARY SCHOOL FOR A LOCAL SUBURBAN DISTRICT

This submission chronicles the activities and outcomes of graduate architecture students researching and visioning a new 21st century elementary school for a local suburban district. As a critical practice and problem-framing activity, we partnered with a local suburban school district of 45,000 inhabitants; a local architectural firm working in the K-12 market; several school principals from an adjacent urban district, along with colleagues from the school of education. The resulting work reflects planning and design informed by new education paradigms, including new place-making strides, sociability, sustainability and connections to the surrounding community context.

As a process of inquiry rooted in the research of school building precedent studies and topic literature, we also engaged consultants in developing a set of learning principles and programmatic narratives that guided students in the design phase. Conventional research, planning workshops and interviews considered organizational patterns, activity and use to construct frameworks of learning and human agency that define the school environment. Emerging themes provoked the architectural conditions of interior/exterior, public/private, architectural/landscape, and campus/neighborhood through rich and varied programmatic narratives. Patterns of classroom arrangement and building configuration explored pod configurations, social systems, circulation systems, building typologies, and sustainable systems. Design proposals are for a 500-student elementary school on a 21-acre site.

This is project-based learning at the University level. It is uniquely structured with both academic research and the engagement of community members, professionals and experts. The resulting design work embraces a range of contemporary issues including social health concerns such as childhood obesity.

### **PARTICIPANTS**

Patricia Kucker, Associate Dean for Faculty and Academic Affairs and Professor, SAID 4 MArch Students

### LOCATION

Cincinnati, USA Winter, 2011







# DIGITAL FABRICATION OF A GREEN WALL

Cardboard is mainly used for making boxes, which are usually recycled after the product is extracted out of them. Taking advantage of cardboard as an excellent material, this project designed a unique interior wall by laser cutting and layering cardboards. It is lightweight and 100% recycled. One can easily create different wall patterns or table stands by simply turning the block units and compile them with different orientation. Each one of the pieces is 40" tall x 20" wide x 20" deep. They are made up of 164 layers of cardboard. This project took a total time of 9 hours to cut and glue together.

### **PARTICIPANTS**

Ming Tang, Assistant Professor, SAID Jonathon Anderson

### LOCATION

Greensboro, North Carolina, USA 2012



# A JAPANESE COMMUNITY PAVILION FOR LOCAL CITIZENS TO PLAY, LEARN AND INTERACT

As humans, our culture, tradition and collective memory are preserved in the built environment which surrounds us. This thesis investigates the facets of identity and place in Japan - a nation in which themes of impermanence, destruction and renewal are ingrained in the national psyche. Finding precedence in modern regional and phenomenological theory, the design encourages the continuity of traditional aesthetics and emphasizes their importance in our sense of self and belonging.

Set against the backdrop of coastal Tohoku, the eastern coast of Japan decimated by the 2011 tsunami, the Minamisanriku Community Pavilion offers a place for local citizens to play, learn and interact. The building recognizes the community's rich culture, manifesting itself in multiple design drivers. Exemplified by spiritual aesthetics of transience, decay and natural simplicity, the material palette includes bamboo, hardwood and thatch. Joinery evoking traditional construction alludes to local crafts; a bamboo mesh references the local fishing industry for example, while open spatial organization reflects the distinctly Japanese concept of emptiness as object. Reuse of desiccated trees from the town temple imbues the structure with a purpose and theme of renewal. Overall, the Community Pavilion underscores a legacy unique to Minamisanriku and supports the townspeople's efforts to preserve sentimental remnants vital to their individual and collective identities.

### **PARTICIPANTS**

Noah Bergman, MArch, SAID, 2012

### LOCATION

Minamisanriku, Japan 2011-2012



# A CLINIC PROVIDING HEALTH AND EDUCATION IN KENYA

Lao Tzu, a Chinese philosopher once said, "Give a Man a Fish, Feed Him For a Day. Teach a Man to Fish, Feed Him For a Lifetime." Hearts for Kenya is focused on "teaching for a lifetime" in one rural community - Oyugis, Kenya. By sharing modern agricultural practices with the citizens of Oyugis, the people are learning to be self-sufficient while raising their standard of living. Hearts for Kenya firmly believes that not only do the people of Oyugis become self-sufficient and are able to survive without being provided for, but they have a sense of achievement and fulfillment.

The new clinic needs to provide HIV testing, HIV/AIDS treatment, counseling, check-ups and HIV/AIDS awareness education. The clinic will include a pharmacy, a laboratory and exam rooms. There will be a staff doctor who is at the clinic occasionally and a nurse who is available three days a week with a conservative estimate of 60 patients seen each day the clinic is open. The community has agreed to contribute what they can to the initial fundraising efforts and to institute a sliding payment scale where patients who cannot pay their fees may offer a trade such as eggs, a chicken or an ablebodied member of their family can trade work on the compound.

### **PARTICIPANTS**

Emily Neyman, BS ID, SAID, 2012

www.heartsforkenya.org

### LOCATION

Oyugis, Kenya 2012



**Amani Center Clinic** 

### **HEALTHCARE DESIGN IN HAITI**

MASS Design Group work to demonstrates the ability to improve people's lives through design and to be an example for how designers can rethink their role in the world.

The GHESKIO Tuberculosis Hospital - to break ground in June 2011 – demonstrates our focus on embedding social, economic and environmental value within local communities through a holistic approach to development. Our intent is twofold: to set a standard for healthcare design in Haiti, and ensure the project's long-term sustainability. Replacing a facility destroyed in the earthquake, the new hospital will accommodate 32 patient isolation suites, exam and x-ray rooms, offices, nurse stations and two pharmacies. Reducing the risk of airborne disease transmission was also a primary driver. By coiling a narrow, two-story structure around a series of courtyards, our scheme maximizes natural ventilation while accommodating the hospital's complex programmatic needs. Open lobbies on both floors extend views across the site, while operable window openings and screens capture prevailing breezes to diffuse and exhaust contaminated air.

The hospital features renewable technologies for energy and water provision. Simple but effective systems for solar electrical generation, rainwater catchment and filtration, and ecological wastewater treatment, will maximize the use of available resources, decrease operating costs, increase sustainability, and offset long-term environmental impacts. Such mechanisms are an appropriate and necessary alternative to high-tech solutions in limited-resource settings such as Haiti.

### **PARTICIPANTS**

Adam Saltzman, MArch, SAID, 2010 (Employee of Mass Design Group)

MASS Design www.massdesigngroup.org

### **LOCATION**

Port-au-Prince, Haiti 2011





Gheskio Tuberculosis Hospital

# THE POTENTIAL OF SOCIAL MEDIA AS A TOOL TO ENGAGE COMMUNITIES WITH DESIGN AND URBAN ISSUES

The buildingcommunity WORKSHOP is a Dallas based non-profit community design center seeking to improve the livability and viability of communities through the practice of thoughtful design and making. The primary purpose of my position with bcW was to explore the potential of social media as a tool to engage communities with design and urban issues.

#### Commissary

Design-build project to convert a 20-foot shipping container into a commissary for food service. Once completed, the Commissary could be collapsed back into its original dimensions for easy shipping for use in community events, as a farmer's market stand, or display area.

#### Living Plaza

In partnership with other local organizations, we worked to activate the plaza in front of Dallas City Hall through temporary transformation of the space through the introduction of food trucks, the bcW Commissary (used for food service during the event), movable furniture, games, local artisan booths, and live music.

#### Earth Day

Utilizing the 45-foot shipping container bcW previously converted into a mobile gallery space, we created a "living infographic" aimed at engaging visitors to Earth Day Dallas in a discussion about the impact of behavioral choices on carbon footprint.

#### PARK(ing) Day

Acting as project manager, I was involved with PARK(ing) Day (an international event to reclaim and transform parking spaces into temporary parks) throughout the process of organizing, designing, construction, and event day.

### **PARTICIPANTS**

Kelly Romoser, MArch. SAID, 2010

### **LOCATION**

Dallas, Texas, USA 2011





# INCLUSIVE DESIGN IN SOUTH AFRICA

In summer 2011, Nathan worked with two different organizations: Architecture for Humanity and Design-SpaceAfrica. With Architecture for Humanity he helped with the design and development of four Football for Hope centers in Cameroon, Tanzania, South Africa, and Mozambique. With DesignSpaceAfrica he completed a design competition for Design Indaba to re-envision a blighted street in Cape Town as an environment that would be more accommodating to concerns of security, community, and local economy. It was an eye-opening experience to spend a co-op working overseas with two esteemed architectural design firms doing two very different projects that both had a strong social impact on their respective local communities through the power of considerate and inclusive design.

### **PARTICIPANTS**

Nathan Hammitt, BS Arch, SAID, 2012

Organizations: Architecture for Humanity, DesignSpaceAfrica, Design Indaba

### **LOCATION**

Cameroon
Tanzania
Mozambique
Cape Town, South Africa

### Football for Hope & Cape Town Street

# NEOLIBERALISM AND CLIMATE CHANGE POLITICS

Adrian Parr visited the Dharavi slum in Mumbai India in 2011 to conduct research on the informal economy and study the local technologies developed and used by residents and workers living in the slum. She visited plastic recycling facilities, sari making and design workshops, spice centers, bakeries, leatherworks factories, the markets, and spoke with Montessori teachers who live and work in the slum. She then went on to the city of Hyderabad and visited the rural region on the outskirts of the city visiting milk collection facilities, she spoke with women's collectives that are involved in government sponsored micro-credit initiatives, and she met with farmers to discuss their indigenous knowledge of seed saving and natural pesticides. This research features in her book 'The Wrath of Capital: Neoliberalism and Climate Change Politics' that will be published later this year by Columbia University Press.

### **PARTICIPANTS**

Adrian Parr, PhD, Associate Professor, SAID and Collage of Arts and Sciences

### LOCATION

Mumbai, India 2012





The Wrath of Capital

### DOCUMENTING EVERYDAY LIFE OF RESIDENTS IN TANZANIA

The photos that resulted from this project document the everyday life of residents of Roche, Tanzania. These images bring to light commonalities shared across the globe, between seemingly diverse groups.

Simultaneously, they allow Cincinnatians an otherwise unobtainable view of the challenges faced by rural Tanzanians on a daily basis. The images personalize the humanity that is the root of Village Life Outreach Project's mission to unite communities in Cincinnati and Tanzania to improve quality of life in both locations. One goal of the organization is to increase global awareness at DAAP, UC, and beyond.

Three students, Kathe Pocker, Marie Hopkins, and Jennifer Williamson, completed this project as a part of a Humanitarian Design honors course taught by Michael Zaretsky in the spring of 2011. The students distributed twenty disposable cameras to residents of Roche. The project participants ranged in age from 10 to 26 years and approximately half were male and half female. The students met with participants to explain the goal of the project, and two days later returned to collect the cameras.

Since returning from Tanzania, the students have conducted a similar project in a Cincinnati school and are planning an exhibition that would include photos from both locations.

### **PARTICIPANTS**

Kathe Pocker, Marie Hopkins, and Jennifer Williamson Roche Village residents Village Life Outreach Project

### **LOCATION**

Roche, Tanzania Spring, 2011





### A CONCEPTUAL DESIGN FOR A NEW URBAN MODEL FOR AGING

This project stemmed from a competition prompt from the American Institute of Architects (AIA) to design an intergenerational project that includes housing for frail elders and is an integral part of an urban community. Three undergraduate architecture students from SAID have envisioned such a neighborhood for aging residents. The former site of vacant lots and abandoned buildings are designed in such a way that they both express their age and are made impressionable to the experiences of the residents. They sought to reactivate a neighborhood that we feel embodies a typical condition of the American inner city. They respect the neighborhood's population and strove to provide them with an environment to share their stories.

### **PARTICIPANTS**

Udo Greinacher, Associate Professor, SAID Margaret Grady Benjamin Morris Ingrid Schmidt

### Memory

### **LOCATION**

Cincinnati, USA 2011

Cincinnati



# OFFERING SUMMER OPPORTUNITIES TO AT-RISK YOUTHS TO CREATE AND INSTALL PUBLIC WORKS OF ART

Art in the Market has offered summer opportunities to at-risk youths to work with art students and educators at DAAP in order to conceptualize, develop, create and install public works of art in the Findlay Market area and in the Corryville neighborhood. During the school year, the program has offered after-school art classes to 12-18 year old students. The result has been sculptures, banners, murals and more. The effort has involved DAAP's School of Art, the college's Community Design Center, the Citizen's Committee on Youth and Impact Over-the-Rhine.

### **PARTICIPANTS**

Flávia Bastos, Ph.D., Associate Professor, SOA SOA students UC Community Design Center Citizen's Committee on Youth Impact Over-the-Rhine

### LOCATION

Cincinnati, USA 2011



Cincinnat

# ART INTERVENTION TO ADDRESS ISSUES OF DEFORESTATION AND WASTE

EcoArt project: guerrilla art posters installed in public bathroom stalls, domain name, online petition to raise awareness of serious deforestation rates which are occurring as a result of US marketing/demand/consumption of toilet paper made from 100% virgin-fiber paper pulp. The petition will put pressure on manufacturers and companies to switch to 100% recycled fiber in all disposable tissue products. At present, only 2% of US toilet paper is recycled fiber. There is so little demand for recycled paper in the US that we export what we collect to China. This needs to change.

Burning fossil fuels (carbon) causes them to be changed into vapor and carbon dioxide gas that enters the atmosphere. The more that is extracted from its solid carbon form and burned, the higher the density of CO2 in our atmosphere. Perhaps this would not be such a serious problem if our once-vast forest systems were still intact, but they are not. 95% of our ancient redwood and sequoia forests - forests with trees of up to 3,000 yearsold - were wiped out in the last 150 years. Rain forests are being cut to the ground all over the world and replaced with soy crops due to pressures from US biofuel markets. What we are losing is critical; without this density of flora to sequester carbon dioxide in our atmosphere, the rate of global warming due to a build-up of greenhousegas is sharply accelerated. What I would like to propose is simple: less tree cutting and more tree re-using. I propose that consumers put pressure on toilet paper manufactures to stop cutting down trees. 98% of the toilet paper, tissues and paper towels sold in the US is made from virgin-pulp fiber. This translates into 27,000 trees every day being cut to make toilet paper. 9,855,000 trees every year being literally flushed down the toilet.

I am creating on online petition, at www.wipedout.org, to increase citizen awareness of this issue and to urge manufactures to create 100% recycled paper products and spare the trees.

### **PARTICIPANTS**

Jennifer Rooks Wenker, MFA, SOA, 2012

www.wipedout.org

### LOCATION

-Cincinnat

Cincinnati, USA 2012



### A COMMUNITY RESTAURANT WHERE FAMILIES GATHER, NEIGHBORS MEET, AND CITIZENS FIND A FRESH START

Venice Pizza is a storefront job training program operated by non-profit Power Inspires Progress. This program includes a pizza restaurant, a full scale catering kitchen, and a job readiness classroom and has graduated more than 100 culinary-trained residents of Over-The-Rhine, where it is located.

Initiated by the Niehoff Urban studio, the project was developed through academic work and design-build efforts of students and faculty with the coordination of the UC Community Design Center. The design and construction of Venice Pizza was a collaborative project that involved community leaders, eight individual architects, and more than forty architecture students from two universities, two private architectural firms, and two community based non-profits. The project has been recognized for design excellence by the Cincinnati American Institute of Architects 2006 Design awards.

### **PARTICIPANTS**

Frank Russell, AIA, Project Architect Terry Boling, Associate Professor of Practice Joe Depauw, BArch-March Kingkini Roy, MSArch Leila Loezer, MSArch, MCP

Community Partners: Cincinnati Community Action Agency, LISC, Place Matters - Do Right, Avondale Community Council and the Episcopal Diocese of Southern Ohio

### LOCATION

Cincinnati, USA 2006



### PERMACULTURE GARDENS AT DATER MONTESSORI SCHOOL

The Dater Montessori School in Westwood, Cincinnati, is situated in the middle of an uninspired landscape that does not serve the needs of its students or the greater community. Although several faculty members have made a concerted effort to bring life to the landscape – through the recent planting of a native prairie meadow and an arboretum – the vastness of the property has proved to be too overwhelming and costly for a few teachers to take on alone.

Through a Permaculture Design Course offered by the Cincinnati Permaculture Guild, five volunteers – including three DAAP students – have taken on the school grounds as an ideal project to design and implement an edible and regenerative landscape that is not only aesthetically pleasing, but also low-cost and low-maintenance.

The final design, which will be implemented in three phases – as interest and resources increase – offers a variety of different habitats that range in wildness, scale, and microclimate as well as areas specifically devoted to outdoor classroom space. The resulting landscape provides an opportunity for the students, faculty, and community to engage and interact with their natural environment, leading to a greater awareness of how the food they eat fits into the local ecosystem.

### **PARTICIPANTS**

Wade Johnston, Urban Planning Alexandra Dahlman, Architecture Matthew Gillespie, Industrial Design Cincinnati Permaculture Guild

### LOCATION

Cincinnati, USA 2011

Cincinnati



**Edible Education** 

# ONE OF THE FAST PROJECTS IN PERMAGANICS, A LOCAL NON-PROFIT ORGANIZATION

Inspired by the success of the international Architecture for Humanity Organization, several local architects came together in February 2010 to form a Cincinnati Chapter of Architecture for Humanity. Working in partnership with the University of Cincinnati Community Design Center, the group intends to bring design services to local communities in need and are looking for interested fellow professionals to lend their support and expertise to the effort.

In 2003, Luke Ebner and Angela Stanbery were Fine Art majors at the University of Cincinnati's College of DAAP. They found a common passionate interest in the Eco-Garden, a youth program, then under the umbrella of the charity IMPACT Over The Rhine. The youth program residing at the Eco-Garden site. 1718 Main St. in Over the Rhine, had been started in 1998 by IMPACT OTR, the Civic Garden Center, and Turner Farm with broad-based support in the community (Eric Pawlawski was the original Eco-Garden Coordinator hired by IMPACT).

### **PARTICIPANTS**

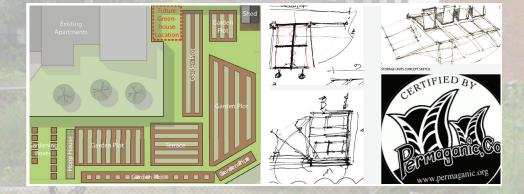
Architecture For Humanity, Cincinnati

Permaganic Co. www.permagainc.org

### **LOCATION**

Cincinnati, USA 2010-2012





# AN INNOVATIVE COMMUNITY DESIGN PROPOSAL IN LOWER PRICE HILL

As public interest design becomes both more prominent and more popular, designers are increasingly seeking to serve communities. These communities, however, have seen many initiatives towards change come and go. Over time, this builds a certain attitude towards change. These attitudes influence how neighborhoods see, hear, and understand design and designers. In order to communicate effectively, designers need to be able to hear attitudes articulated and understand, without judging or feeling judged, what the concerns and needs of the client are. From extensive participatory design research three exaggerated community attitudes emerged.

The first, internally-focused neighborhoods, have seen a history of detrimental, imposed change. The impulse is to promote internally-generated change, and to resist externally-originated plans. Transparency, openness, and direct involvement are all critical when working with these communities. The second, ambient neighborhoods, are loosely-associated communities that are often either mobile or empowered in other ways. They have little experience with change, and generally feel the change that does happen is either beneficial or not of their concern. Direct participation here is often less important, and so more experimental, critical and technocratic work can be pursued. Finally, externally-focused neighborhoods are highly aware of what goes on outside the community and is consciously leveraging those opportunities to make a difference. This is the kind of place where designers dream of working, and can be the outcome of proactive and conscious participatory design processes. Ultimately, the community may or may not lead the design effort in externally-focused communities, but only because the relationship they establish with the design team is between equals. While these caricatures are not fair to any one community, they provide a framework for communication of design intent and content to skeptical and adept communities alike.

#### **PARTICIPANTS**

Student: Bergh, MArch, MA, SAID & SOP, 2012

SAID Faculty:
William Williams, Michael McInturf, Aarati
Kanekar
SOP Faculty:
Mahyar Arefi, Frank Russell, David Varady

### **LOCATION**

Cincinnati, USA 2012

Cincinnati



Impact of Community Attitudes on Participatory Design

# THE US PEACE CORPS AND DAAP OFFER THE MASTER'S INTERNATIONAL AND COVERDELL FELLOWS PROGRAMS

The U.S. Peace Corps and the College of DAAP have a long and fruitful relationship. In 2002, the DAAP School of Planning joined with the US Peace Corps to offer the Master's International Program. The Master's International Program provides students the opportunity to use the knowledge and skills gained from international development and planning courses by completing Peace Corps volunteer service between the first and second years of study. Six students have completed the Master's International program, and two are now enrolled in the program, enhancing the Greater Cincinnati region's global awareness and engagement.

Two years later in 2004, the University of Cincinnati's School of Planning partnered with the US Peace Corps to offer the Coverdell Fellows program, integrating a Master of Community Planning degree with Peace Corps experience. The Coverdell Fellows Program is for returned volunteers who want to apply skills and incorporate experience developed overseas toward earning master's or doctoral degrees. While enrolled, students serve as paid interns in local agencies that assist underserved populations in the Cincinnati area. To date, twenty-six students have provided over 20,500 hours of support.

### **PARTICIPANTS**

Faculty: Johanna W. Looye, PhD, Associate Professor, SOP

Chris Auffrey, PhD, Associate Professor, SOP

#### Students:

Alan Edwards, Kate Esarey, Brandon Hixson, Eastman Johnson, Jeff Kelley, Trent Lobdell, Dan Rankin

### **LOCATION**

Cincinnati, USA

Macedonia 2013





### PROVIDING A SAFE, BEAUTIFUL, AND SPIRITUALLY NOURISHING PLACE FOR THE AVONDALE COMMUNITY TO GATHER

Gabriel's Place is a vertically-integrated food campus located in the food-insecure neighborhood of Avondale. The program, at the site of a former church, includes an urban farm and orchard, aquaponics for fish and plant production, a farmer's market for distribution of food grown on site and from a network of urban farms throughout the neighborhood, a commercial grade kitchen for culinary training and value-added food production. A classroom and offices in the former parish house function as a micro-enterprise development facility for emerging community entrepreneurs and as a place for basic job preparation for neighborhood residents. The former sanctuary houses community meeting space and a weekly supplemental meal center for households struggling with food security.

Program development, design services, and construction management were provided by the UC Community Design Center in collaboration with eight other partners. Construction now complete, the program begins full operation in 2012 and is staffed by Americorps Vista volunteers.

### **PARTICIPANTS**

Frank Russell, Director, Community Design Center and Niehoff Urban Studio CDC, Neihoff Community non-profits

### LOCATION

Cincinnati, USA 2012





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