# University of Illinois at Urbana-Champaign

#### School of Architecture-Building Research Council

One East Saint Mary's Road Champaign, IL 61820 College of Fine and Applied Arts

217 333-1801 217 244-2204 fax

November 24, 2010

Student Sustainability Committee University of Illinois at Urbana-Champaign

Dear Committee:

#### Request

The intent of this letter of inquiry is to respectfully request \$27,442 in sustainable grant funding to continue an educational outreach program using the University of Illinois 2009 Solar Decathlon Gable Home as a hands-on learning tool to promote sustainable development in the built environment.

## **Project Energy and Sustainability Impact**

The Gable Home is a 500 square-foot house designed and built by students after an extensive research on passive house standards and sustainable practices for the Department of Energy 2009 Solar Decathlon. The Solar Decathlon is an international competition designed to educate the public on clean energy technologies, energy efficiency in the built environment, and increased environmental awareness by reducing the carbon footprint with solar powered energy. By winning second place in the competition, the Gable Home was the top US finisher. Now at a visible location the Research Park, just south of the I Hotel at 1900 South First Street, the Gable Home continues to represent the future of net zero-building design and operation.

In March 2010, the Gable Home was opened to the public and has hosted over 2,000 visitors. The house has been featured in several conferences in collaboration with the Office of Continuing Education, the College of Agricultural, Consumer and Environmental Sciences, the College of Engineering, the School of Architecture, the Environmental Change Institute, Governor's University Sustainability Conference, and the Smart Energy Design Assistance Center. The house has also provided hands on learning experience for environmental biology, materials science, and building construction classes. In addition, the house has been a part of major community events such as Illinois Solar Energy Tour, Ecobike Tour, and Green Riders promoting green practices and sustainable environments.

# **Project and Campus Impact**

The university's participation in the Department of Energy's 2009 Solar Decathlon competition engaged many students across several departments and colleges. Since back on campus, the Gable Home continues to draw large student, university, community, and state interest. The funding of this project will help in developing a sustainable campus environment by supporting a graduate research student to provide on-site educational tours and to develop educational/training materials promoting the design and practices of passive home principals,

renewable solar energy ,and net metering. Through support of this project, UIUC will be able to continue to provide leadership in green economy.

### **Proposed Project Budget**

The funding request is for:

- Graduate Research Assistant to conduct tours, educational programs and outreach:
  Research Assistant @ 33% for 11 months plus benefits @ \$14,050
  Tuition and Fees @ \$7,392 for 2 semesters
  Total is \$ 21, 442
- Development of educational and outreach materials: \$6,000
- 3. Total project is \$ 27,442

This funding will be leveraged with 15% funding commitment of an academic professional @ \$ 11,400. The academic professional will supervise and work with the selected student in the development of educational materials, outreach and training efforts, scheduling events, and participating in project activities.

Without this funding, the 2009 Solar Decathlon house will not be available to UIUC students, the campus, or the community at large as an essential educational resource. Buildings use 40% of United State energy, it is very important that the lessons of the Gable Home continue to be at the forefront of campus discussion. This is a unique opportunity to provide a hands-on example of a sustainable home that is grid tied and generates more power than it uses on the university campus.

Thank you in advance for your consider of this letter of intent.

Sincerely,

Kate Brown

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Senior Housing Research Specialist

**Donald Fournier** 

Building Research Council, Chair

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