

# women & philanthropy

## AT THE OHIO STATE UNIVERSITY®

### The Ohio State University Women & Philanthropy Grant Proposal

*Generously Funded By The Members Of The Ohio State University Women & Philanthropy Program*

#### Grant Proposal

**Title:** *Building STEM Bridges to Franklinton*

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#### Program Abstract

Building STEM Bridges to Franklinton seeks to serve an underprivileged and underrepresented group of students by engaging faculty and experts from across campus to deliver hands-on activities as a part of the Gladden Community House after-school program. The program will last for one academic year and serve approximately 70 K-12 students from the Avondale and Starling schools, and hundreds of disadvantage students at other schools around the city. The PI will act as both the coordinator and the representative for the Department of Astronomy during its participation in the program. Working with OSU STEAM Factory members and COSI Science Center, the program will provide a template for long-term community engagement and development.

#### Program Narrative

Currently 56% of Franklinton residents have not completed high school, and almost all K-12 students are eligible for subsidized lunch programs. Despite close proximity to COSI and OSU's STEAM Factory, many children in the neighborhood are underexposed to STEM concepts in the classroom and STEM career opportunities and pathways outside of it. The Gladden Community House - a nonprofit agency providing education programs, assistance, and advocacy for neighborhood families - has long recognized this need, and singled out STEM after-school programs as a principle area for targeting, particularly given their relationship to the Avondale and Starling schools.

The Gladden House hosts approximately 70 K-12 children every year, and this project aims to deliver after-school programs to the entire cohort for one academic year. Students will be exposed to a variety of STEM-related concepts using many hands-on demos, facilitated learning activities, and field trips, all delivered personally by OSU faculty experts in conjunction with COSI's after-school programs.



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The Ohio State University STEAM Factory – a grass-roots network of faculty dedicated to interdisciplinary research and outreach – has an office at 400 W. Rich Street, just a few blocks away from Gladden House. This facility provides an unprecedented opportunity to connect OSU faculty, resources, and expertise to an area of our community that needs it most. COSI Science Center is also in the neighborhood, and offers a variety of learning labs and programs that are a perfect fit for the Gladden House children.

Many STEAM Factory members have already committed to the proposed program, and the overwhelming response has filled an entire academic year with activities. Commitments include: Stephan Frank & Paul Sutter (Astronomy), Anne Co (Chemistry), Manoj Srinivasan (Mech. & Aerospace Engineering), Rob Pyatt (Pathology), Kathryn Campbell-Kibler (Linguistics), Lauren Jones (Human Sciences), Jim Fowler (Mathematics), Theodore Chao (Math Education), Alia Dietsch (Environment & Natural Resources), Jason Cervenec (Byrd Polar Research Center), and Brianna Gwirtz (Agriculture & Environment). In addition, the COSI Planetarium and Tech Studio have made themselves available for this program.

In addition to personal visits by OSU faculty, select experts will work with COSI to develop three new after-school programs featuring station-based facilitated learning modules. These programs will be offered for free to the Gladden House and to other schools, after-school initiatives, and homeless shelters as requested. The faculty expert will record a short video describing their career, which will be played on tablets as a part of a hands-on activity station. Students will be asked to provide feedback at the end of the year, responding to questions such as: Are you more or less interested in STEM careers? and Would you like to know more about STEM careers?. The program can also work with Gladden House staff to track students over the course of 2-3 years, to identify and nurture individuals interested in learning more.

How does this proposal meet the mission and/or objectives of Women & Philanthropy?

One of the most important objectives of Woman & Philanthropy is to be an agent of change, and this program seeks to be a catalyst for change in a community that is desperately seeking revitalization – the children of Franklinton.

Total Requested.....\$41,385

Budget

Project Coordinator (25% time for one year):	\$19,665
COSI Tech Studio (2 two-hour sessions):	\$1,480
COSI Planetarium (2 visits for entire cohort):	\$1050
Develop 3 new COSI after-school programs:	\$4000
Donate COSI after-school programs to Gladden House (2 visits of each program):	\$1170
Donate COSI after-school programs to need-based organizations (12 visits of each program):	\$7020
Faculty expert video production:	\$1000
iPads for faculty expert videos:	\$1000
Evaluation & Feedback:	\$2000
Transportation (OSU Robotics Lab, COSI, faculty-lead field trips, etc.):	\$2000
Materials:	\$1000

No other sources of funding are being sought for this program.