## How can we create conversations between scientists and publics that both groups value and learn from?

Hands-on

The *Building with Biology* project developed and tested two paths that showed promising but different results

Forums

One path used hands on activities designed to stimulate conversations about science and society and facilitated by young scientists who received orientation and training



Both paths involved lots of young scientists at sites across the U.S....

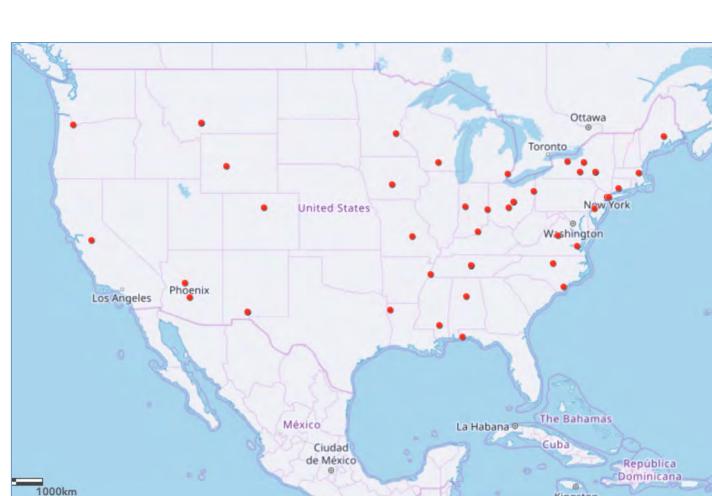








events were held at 132 museums or science centers, 36 universities or colleges, and 31 other types of organizations. All presented hands-on events and 43 held forums.



Forum sites

## Publics participating in hands-on events reported that they:

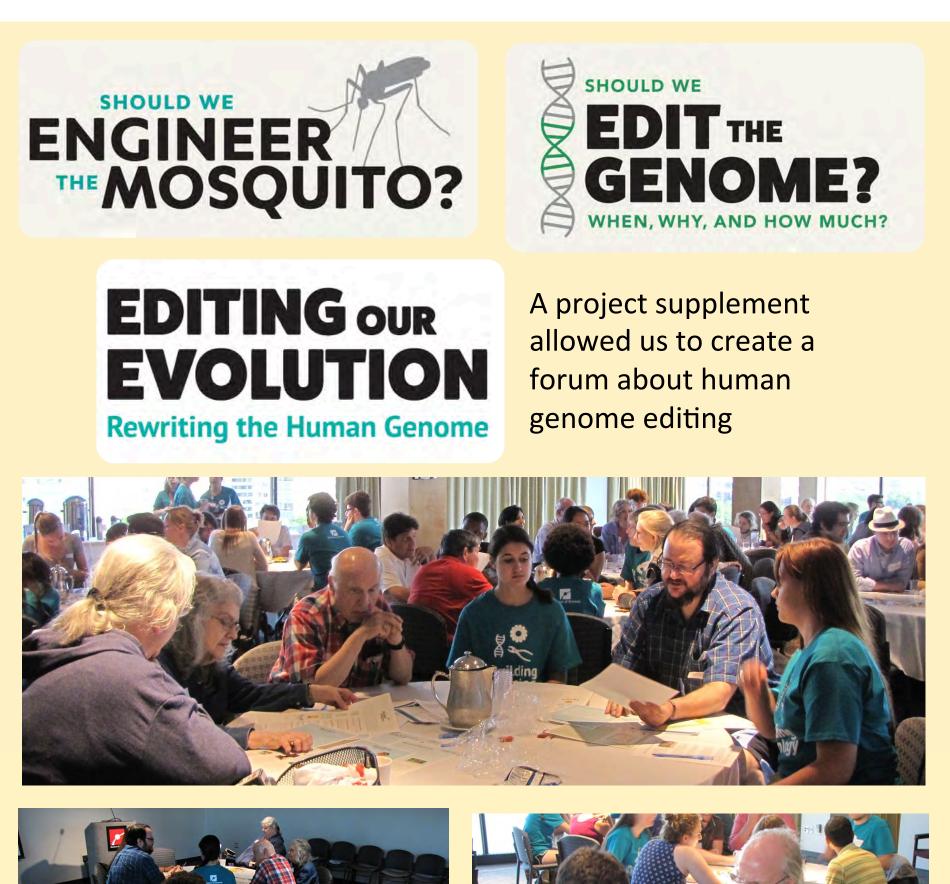
Hands-on activity sites

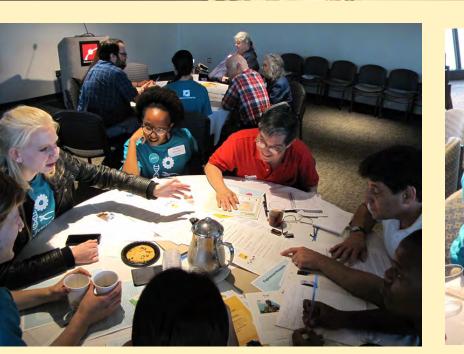
- valued the events' synthetic biology content, access to experts, and overall enjoyment for themselves and their children, and
- gained a greater understanding of the significance of synthetic biology to their lives and the scientific future.

## Publics participating in forum events reported:

- greater gains in interest around future actions related to synthetic biology,
- learning about public involvement with science and the interplay between science and society, and
- valuing the interpersonal communication aspects that are central to dialogue programming.

Another path put the scientists and publics at round tables for structured discussion and deliberation about societal questions about policies related to the use of synthetic biology







Todd, K., Haupt, G., Kollmann, E.K., & Pfeifle, S. (2018). Fostering conversation about synthetic biology between publics and scientists: A comparison of approaches and outcomes. *Journal of Microbiology & Biology Education*, 19(1), 1-8.

Multi-Site Public Engagement
with Science – Synthetic Biology
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VirEx Delivery

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www.publicengagementwithscience.org
www.informalscience.org/building-biology-multi-site-publicengagement-science-synthetic-biology-innovations-development
www.buildingwithbiology.org www.nisenet.org/building-with-biology

Scientist/facilitators reported positive outcomes for themselves from participating in each of the two different kinds of activities though hands-on facilitation was better for some and forums better for others

Increased my confidence in engaging the public about synthetic biology / human genome editing

Increased my skill in engaging the public in science

Increased my understanding of the societal and ethical implications of synthetic biology / human genome editing

I learned from the public

I learned from the public

I learned from the public

