SCIENCE EDUCATION OUTREACH AT SAINT JOSEPH’S UNIVERSITY
PHILADELPHIA, PA

Caitlin Fritz, Edwin Li, Brian M. Forster – Saint Joseph’s University
Matthew Jurkiewicz – Bishop McDevitt High School
TWO ASBMB OUTREACH GRANTS

• HOPES (Hands-on Opportunities to Promote Engagement in Science) Program
  • Genes, Mutations, and Diseases: Understanding the Origins of Genetic Disorders through Experiential Learning – High School LINKS

• Outreach Seed Grant Program
  • Science on the Hill a science café program
HIGH SCHOOL LINKS

• Collaboration with Bishop McDevitt High School
• Modeled after GeoKids LINKS (Learning Integrating Kids, Nature, and Science)
• Over five weeks students learn the basis for sickle cell anemia using commonly used molecular and cell biology techniques.
HIGH SCHOOL LINKS

• Fall 2013 (ASBMB funded) & Spring 2015
• 63 total High School Freshman/Sophomores
• Lessons taught by Undergraduate Fellows
• Included field trips to SJU
HIGH SCHOOL LINKS

ASBMB funding was used for…

- Instructional supplies
- Faculty and teacher stipends
- Bus Transportation

Outcomes

- Students gained an understanding of how DNA is replicated, how genes are expressed and how mutations arise
- Working with SJU students increase motivation and engagement in the classroom
SCIENCE ON THE HILL

• Science café program that targets the two urban neighborhoods where SJU is located – Wynnefield and Overbrook

• Landmark Americana Tap and Grill

• Five events with average attendance of 29
SCIENCE ON THE HILL

- **Scandal and Deception: Darwin’s Quest to Explain Evolution** – Dr. Scott McRobert SJU Biology

- **A Glimpse into the Future: Climate Change and the Earth’s Ecosystems** – Dr. Clint Springer, SJU Biology

- **Microbes Attack! Nice Body… We’ll Take It!** – Dr. Brian Forster, SJU College of Arts and Sciences

- **Abs of Steel: Arming Patients’ Immune Systems with Personalized Weapons to Counterattack Disease** – Dr. Nicholas Nicolaides, CEO Morphotek, Inc.

- **Urban Wilderness: Promoting Biodiversity in your Neighborhood** – Dr. Karen Snetselaar, SJU Biology
SCIENCE ON THE HILL

Upcoming Events:


• *Blame it on Your Epigenetics! A Closer look at mom and dad’s contributions to brain behavior and development* – Dr. Elizabeth Becker, SJU Psychology
SCIENCE ON THE HILL

ASBMB funding was used for...

• Light appetizers at each event
• Posters/flyers
• Door prizes
• Audio/visual equipment

Feedback:

• Speakers are engaging and interesting
• Significant attendance from target audiences including older youth
FUTURE GROWTH

High School LINKS
• Continue partnership with Bishop McDevitt and expansion to new high schools (Science Leadership Academy)

Science on the Hill
• 5 more events for 2015, 8 in 2016
• Interdisciplinary/community collaboration

Integration into existing science education outreach
• Transformative within Biology Department
• Community of Practice Model