



# Cell Universe: Partnering in a SEPA Project

## Partners:

- Maryland Science Center
- University of Maryland
- Johns Hopkins University
- Morgan State University

*Lead Funding: NCRR, NIH*





Medicine

Pharmacy

Nursing

Dentistry

Law

Social Work

Graduate School  
of Life Sciences

BioPark



UNIVERSITY OF MARYLAND  
BALTIMORE

umbBioPark

INTERSTATE 95	1 MILE	▶
BWI AIRPORT	10 MILES	▶
INNER HARBOR	1/2 MILE	▲
JOHNS HOPKINS MEDICINE	3 MILES	▲

# University of Maryland, Baltimore

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- Founded in 1807, UMB is the oldest public medical school in the U.S.
- UMB trains the majority of the State's physicians, nurses, dentists, lawyers, social workers, and pharmacists.
- The UMB campus consists of 62 buildings on 61 acres on the west side of Baltimore City.
- UMB has 5,800 students and 6,100 faculty and staff
- The University community gives more than 2 million hours a year in service to the public.

# Partnership Goals

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1. University-based scientists advising on science content
  - Accurate science information
  - Public support and engagement in science
  - Disseminating research to general public

# Partnership Goals

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## 1. Graduate Student Internship Program

- Training for graduate/medical students in educating and communicating with the public
- On-floor science experts at Museum
- Young scientists as models to young visitors to encourage/excite them
- Expose graduate students to alternative career tracks
- Development of new in-depth science programs and exhibit experiences
- Interactions between graduate students in several disciplines and between the different institutions

# Scientific Advisory Team

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- Yearly meetings with scientists, ethicists and museum staff to develop framework for science content
- Content experts give feedback on science ideas
- Individual scientists provide expertise on specific content and help in design
- Voices in exhibit and involved in ancillary programs – long-term input and engagement with visitors

# Internship Program

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- Initiated with ***BodyLink*** SEPA project and expanded with ***Cell Universe***
- Graduate students in life sciences (PhD, MS and medical students)
- Stipends ~\$1500 for semester
- 4-5 students per semester; 15 per year

# Intern Program

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- ~5 hours in wetlab and on floor
- Required to develop individual project related to Cell Universe exhibit
- Defined application process
  - Recruiting process
  - Formal application and review process by MSC and academic center
  - Presentation of project to university advisors, science center staff, fellow interns and interested students

# Examples of Intern Projects

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- Translating wetlab content into Spanish
- Developed human biology component of “SciGirls” Camp and Program
- “Take a Lab to School”
- Research to stem cell content

# Challenges

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- Development of recruitment and evaluation process
- Willingness of faculty mentors to allow graduate students out of the lab
- How to get students interested
- Compromising on MSC and academic timeline differences – communication!
- Morgan State's lack of participation

# Why Does the Partnership Work?

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- Clear Goals
- Process developed between the partners
- **Communication** – frequent and open
- Trust – personal relationship, long-term
- All partners are benefitting from partnership
- Willing to work out differences
- Commitment to ongoing partnership → connection is made and now leading development of new ideas/projects

# American Society of Human Genetics

<http://www.genednet.org/>

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## Geneticist-Educator Network of Alliances (GENA) NSF Math and Science Partnership Grant 2006

- Partnership of ASHG, GSA, National Science Resources Center, NABT
- exploring ways in which a professional society-monitored education outreach effort can play a positive role in career development of both junior (pre-tenure) and senior (post-tenure) faculty.

DNA Day Essay Contest –  
Outreach Education Network