

Open Science for All: Skills & Community

Accelerating the Pipeline: Building Equitable Global Research Pathways in Secondary Education

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When should we open science to the next generation?

Our Context

- Hathaway Brown School
- The Science Research & Engineering Program (SREP)
- ABCs:
 - All-inclusive
 - (sense of) Belonging
 - Confidence
- Shaping the next generation of scientists and engineers to embrace and practice open science

What is happening to research opportunities for my students?

Intentions & Ripples

- “...restoring a gold standard for science to ensure that federally funded research is transparent, rigorous, and impactful, and that Federal decisions are informed by the most credible, reliable, and impartial scientific evidence available” (Executive Order, May 23, 2025).
- “...the 2024 NIH Public Access Policy requires Author Accepted Manuscripts accepted for publication in a journal, on or after July 1, 2025, to be submitted to PubMed Central upon acceptance for publication, for public availability without embargo upon the Official Date of Publication” (NIH Public Access Policy).

The Bigger Picture

- **Non Scholae Sed Vitae Discimus**
- “The goal of education is the advancement of knowledge and the dissemination of truth.”
- *John F. Kennedy*

Pipeline → Estuary

Estuaries are transitional, dynamic zones where freshwater and saltwater mix; where change is constant, and life flourishes *because* of that flux.

High School Research	——	The Estuary
Diverse Representation	——	Biodiversity
Open Science	——	Constant Flow of Nutrients
International Partnerships	——	Mutualism

Secondary research education is often treated as upstream from ‘real science;’ preparatory, not participatory, but this is where ideas adapt, evolve, and move between systems, much like open science itself.

How can international collaboration help?

The Vision: Reciprocity

- Give students a broader, global perspective of research & STEM careers
- Connect secondary students to the international open science community

Thank you!

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