

BioEd Summit: Crafting Student-Centric Curricula with NCBI Resources



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with NCBI Resources
An NCBI Training Event
on the NIH Campus in Bethesda, Maryland
August 6-10, 2024

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We are excited to bring together science educators from across the U.S. on the National Institutes of Health (NIH) campus in Bethesda, MD, from August 6-10, 2024.

Do you teach science in a high school, community college, or college/university?

Join us for a week-long in-person event to collaborate with other educators and NCBI experts to create exciting, novel curricula. Leave the event with a lesson you can use in your classrooms/courses to prepare your students for real-world challenges and scientific research opportunities.

You will participate in morning interactive training workshops on NCBI resources and panel discussions on the use of active learning bioinformatics exercises in classes. In the afternoons you will join a codeathon-style curricula-thon, where you will work in a team of educators who teach in your discipline to come up with a project and will be guided to create a full curricular package (including learning objectives, course materials, and assessments) that you can use in your classroom/course. NCBI staff will help your team put your work up on a public GitHub site (no prior experience needed!) for continued access and to share with each other, colleagues, representatives from the NIH, and the public.

After this event, we encourage your team to continue to collaborate as you implement lessons in your classrooms/courses and to co-author manuscripts to publish about your team’s work.

Examples of projects:

- Intrepid Reporter: Gathering key information on a gene or chemical in the news!
- Outbreak Hunter: Identification of a pathogenic “bug”
- Integration of bioinformatics into a biochemistry lab: finding DNA sequence for cloning, designing PCR primers for measuring expression, exploring protein sequence and structure to understand protein function and enzyme kinetics
- Using PubChem in your chemistry lab: exploring the structure of your chemical, finding physical property information, and understanding it’s potential environmental impact
- Analysis of Estrogen Receptor biological activity data for drug discovery
- Zymurgy: Understanding yeast metabolism gene expression during fermentation
- Comparing key genomic regions and genes of common domestic animal breeds to understand your pet’s phenotype
- Creation of an algorithm to predict the potential health impact of a patient’s genetic variant

Qualifications & Requirements

We are looking for US-based science educators at the high-school through college level who:

- Are actively in an academic educator role
- Teach in a discipline relevant to NCBI data and/or tools
- Have some experience with NCBI resources, such as BLAST, the Nucleotide database, or PubChem
- Would be able to implement projects in their classrooms in the near-term
- Can explain how participating in this event will end up benefiting their students

Are you working with a historically underserved population?

- Travel support may be available for you. Please see our application form for more details.

Things you Need to Know!

- Due to the active, hands-on, team-based nature of this event, you will be expected to be on the NIH campus in Bethesda, Maryland in-person from 9 am to 5 pm each day. We cannot provide virtual/hybrid accommodations.
- Unfortunately, we cannot offer continuing education credits for this event.
- If your application is accepted and upon request, our team can provide you with a support letter to share with your supervisor. In addition, if you participate for the entire event, we will provide you with a certificate of participation.

APPLY FOR EVENT

Date And Time

08-06-2024 to
08-10-2024

Registration End Date

05-18-2024

Location

NIH Natcher Conference
Center 45 Center Dr,
Bethesda, MD 20894

Event Types

NCBI @ Conferences

Event Category

NCBI Education Program

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