Sounding the Hudson River: Pedagogical Currents  
**Tuesday, July 9 and Thursday July 11**  
9:00 a.m. to 3:30 p.m.  
This two-day workshop will support deepening teachers’ ability to use the Hudson river as a resource, analyze and interpret data and use maps and models to support students’ engagement and learning. Participants will visit the Hudson River and use the Museum to deepen their ability to incorporate the role of the estuary in shaping its biological diversity, collect and examine water quality data, and learn about the role of activism for protecting the River. Geared for 6-12 teachers; K-5 welcome.

Ancient Civilizations of the Andes: The Inka and their Predecessors  
**Wednesday, July 10**  
9:00 a.m. to 3:30 p.m.  
This one-day workshop provides an overview of the major pre-Columbian civilizations of Peru, including the Inka and their coastal predecessors (Chavin, Moche, Paracas, Chimú). We will explore geography, resources, technology and examine the artistic and cultural achievements of the region. Grade 9-12 teachers.

Global Trends In Biodiversity and their Causes  
**Tuesday, July 16 and Wednesday, July 17**  
9:00 a.m. to 3:30 p.m.  
In this two-day workshop, participants will learn about the causes of environmental changes, why ecosystems, habitats, and species are being lost and how scientists study them. They will also explore potential solutions. Teachers will work with real data sets around deforestation, global climate change, and urbanization that they can use in the classroom to help students understand these challenges. Grades 6-12 teachers.

Global Trends In Biodiversity and their Causes is supported by the National Science Foundation under Grant Number 03.018.466.466.5333.546.

Integrating Protocols into Classroom Practice  
**Tuesday, July 16 and Wednesday, July 17**  
9:00 a.m. to 3:30 p.m.  
In this two-day workshop, teachers will integrate the use of National School Reform Faculty and other protocols into the classroom. Teaching students to use protocols can help manage small and large group discussions, provide supports for groups working on complex tasks, guide students engaging in higher level discourse, and build road maps to deeper community engagement. Building these systems into your classroom can lead to increased opportunities for learning and building of space for all voices to be heard. Grades 4-8 teachers.

Analyzing rock formation data to determine the geologic history of New York  
**Thursday, July 18**  
9:00 a.m. to 3:30 p.m.  
During this one-day workshop participants will visit rock formations in Central Park and museum exhibitions to gather data and make inferences about the geologic history of New York City on time scales of tens of thousands of years to hundreds of millions of years. Grade 6-12 teachers.
T. rex: The Ultimate Predator
Tuesday, July 23
9:00 a.m. to 3:30 p.m.

In this one-day workshop, teachers will use the Museum’s Fossil Halls and the special exhibition *T. rex: The Ultimate Predator* to learn about the amazing story of the most iconic dinosaur in the world. Grade 6-12 teachers.

Major funding for *T. rex: The Ultimate Predator* provided by the Lila Wallace-Reader’s Digest Endowment Fund.

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Dana and Virginia Randt
Chase Private Client
Virtual reality experience created in collaboration with HTC VIVE.

Teaching about Cultural Representation with the Old New York Diorama
Wednesday, July 24
9:00 a.m.-3:30 p.m.

This session will explore how interpretation affects the understanding of history and historical events. Focusing on the 1939 diorama "Old New York," which portrays an encounter between Dutch settlers and Lenape leaders, participants will explore how biases and stereotypes contribute to damaging misrepresentations of Native people by observing the original diorama along with new labels that were added in 2018. Teachers will be introduced to Museum resources that encourage students to think critically about the importance of cultural representation. Grades 3-8 teachers.

Supporting elementary students in making sense of graphical representations of data
Thursday, July 25
9:00 a.m.-3:30 p.m.

The I Strategy (Identify and Interpret) can support students in learning to make sense of how data is represented. In this session we will explore climate and climate change data, including some displayed in the Gottesman Hall of Planet Earth, and we will look at several types of data representations to determine what the data says, what it does not say and how students can become critical thinkers of data representations. Grade 3-5 teachers.

Global Trends In Biodiversity and their Causes
Wednesday, August 14 and Thursday, August 15
9:00 a.m.-3:30 p.m.

In this two-day workshop, participants will learn about the causes of environmental changes, why ecosystems, habitats, and species are being lost and how scientists study them. They will also explore potential solutions. Teachers will work with real data sets around deforestation, global climate change, and urbanization that they can use in the classroom to help students understand these challenges. Grade 6-12 teachers.

*Global Trends In Biodiversity and their Causes* is supported by the National Science Foundation under Grant Number 03.018.466.4665.3333.546.

Science Practices in Darwin’s Garden
Wednesday and Thursday, August 21 and 22
9:00 a.m. to 3:30 p.m.

Participants will explore science practices and the nature of science as described in the NGSS appendixes F and H, through investigations paralleling those conducted by Charles Darwin. We will utilize the outdoors, primary source documents from the Museum's Darwin Manuscripts Project and others, and live plant observations. We will explore areas including insectivory in plants, and plant movement. Our focus science concepts will be Adaptation and Natural Selection. Grade 6-12 teachers.

Visit individual event pages on amnh.org/learn-teach to apply