



OVERVIEW

In this activity, students find a scientist with whom they can relate in some way — in terms of the work the scientist is doing, some aspect of their identity, the environment in which the scientist works, etc. Students then explore and reflect upon the impact of that scientist's work through a short piece of writing. This activity can be used with BioInteractive's Scientists at Work videos.

Two versions of the "Student Handout" are available for this activity. The short handout limits the selection of scientists and focuses on notetaking and writing short paragraphs. The extended handout has students read a piece of primary literature from the scientist and then write a 400- to 500-word essay.

Additional information related to pedagogy and implementation can be found on [this resource's webpage](#), including suggested audience, estimated time, and curriculum connections.

KEY CONCEPTS

- Scientists and their work are incredibly diverse, and their research appeals to a variety of interests.
- Scientific research has many impacts, which may affect both daily life and societal decisions.

STUDENT LEARNING TARGETS

- Collect and synthesize information about a scientist and their research using multiple sources.
- Explain how a scientist's research relates to your life and/or society in general.
- (extended handout only) Read and interpret sections of a scientific paper.

PRIOR KNOWLEDGE

Students should be familiar with:

- writing and revising based on a rubric
- (extended handout only) reading and interpreting scientific articles

MATERIALS

- either version of the "Student Handout"
- "Scientist Profiles" document
- Internet access for watching videos and doing research

TEACHING TIPS

- The "Scientist Profiles" document presents a variety of scientists featured in BioInteractive's [Scientists at Work](#) videos. Scientists are listed with their affiliations at the time of the video, which may have since changed.
- The **short handout** focuses on notetaking and writing short paragraphs. Students explore the "Scientist Profiles" document, watch a BioInteractive video featuring the scientist they pick, take notes about the scientist's research, and then write two detailed paragraphs about the scientist's work and how it is relevant to them.
 - This handout can be completed in one 50-minute class period. All or part of the activity could be assigned as homework.

- The **extended handout** has students choose a scientist, research that scientist using BioInteractive and other resources, find and read a primary research article, and then write a 400- to 500-word essay.
 - This handout can be completed in two 50-minute class periods. All or part of the activity could be assigned as homework.
- Both student handouts were designed to promote transparent teaching strategies, based on findings from the [Transparency in Learning and Teaching \(TILT\)](#) project.
 - Put simply, the goal of transparency is to better explain to students *why* they are doing an activity and to clearly articulate *what they need to do* to be successful. Being more transparent improves student motivation and performance, and it ultimately makes an assignment more equitable. To this end, both handouts describe why students are doing the activity, what they will get out of it, and how they will know if they did the activity successfully (including a specific rubric).
- For higher level courses, you may require that students select scientists doing research connected to the course's content.
- Consider asking students to submit a draft of their writing (two paragraphs for the short handout, essay for the extended handout) to be reviewed by you or a small team of other students through a peer-review process. Give students a chance to make revisions before they receive a final grade.
 - Rubrics for the writing assignments are provided at the end of both "Student Handout" documents.

CREDITS

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