

# Classroom Activity

## 10 Big Question: How do we unravel the causes of disease?

### Discussion – Scientific Discovery

The very first recorded scientific discovery is said to have occurred in 2<sup>nd</sup> century BC when Seleucus of Seleucia determined that tides take place because of the influence of the moon. Since then, there have been numerous discoveries that have dramatically changed our world and it is impossible to rank them by their importance. However, we're going to challenge you to try!

As a class, research major scientific discoveries throughout history. Each student (or pair of students) needs to choose a scientist who they think is awesome and find out as much about them as they can, including:

- Where was the person born and/or raised?
- What were his or her parents' careers or trades?
- Did he or she overcome any major personal, academic or professional obstacles?
- Where did he or she attend school?
- What was his or her primary subject of study as a university student?
- Where did he or she work?
- Who were his or her mentors and/or collaborators?
- What were his or her major scientific achievements throughout his or her career?
- At what age did he or she make the scientific discovery?
- At what facility (university or lab) was he or she working at the time of the discovery?
- What existing theory or concept did the new discovery or research build on or debunk?
- Why was it significant?
- How did it alter the field?
- Why was it considered important to science and/or the world in general?
- Did they win a Nobel Prize for their discovery/research?

Each student (or pair) should present the top 3 reasons why they think their scientist and/or their discovery is the greatest. Discuss the scientists and their discoveries as a class and hold a ballot on who takes out top spot (no voting for your own team!).

### Extension Activities

Try putting the discoveries in chronological order on a scientific discovery timeline. Add other discoveries that you find interesting or are considered particularly significant.

For a broader look at scientific research and how it affects humanity, try these discussion questions:

- How has discovery/research affected our everyday lives?
- To what degree is a person's life relevant in understanding his or her public works?
- What ethical issues concerning research have been raised in recent years?
- To whom does a scientist's discovery belong – him or herself, the scientific community, the university or laboratory where it was developed, or to the public domain?
- How and why might a scientist claim intellectual rights to a discovery?