TEACHING RESOURCE: Nanomedicine and the Future

Scientists and researchers claim that nanotechnology will be able cure many serious diseases and illnesses, such as cancer and degenerative brain diseases, that are currently unable to be effectively treated.

Facilitate a class discussion/research activity on what the future would look like if humans do not die of any diseases and what impacts this might have.

- How might this effect population number?
- How might this effect the world's economy?
- How might this effect the healthcare industry?
- Some medicines (such as antibiotics) become ineffective over time if they are used often. Why does this occur and is this something that could happen to nanomedicine?
- In most cases, viruses and diseases mutate, meaning that we can treat an existing strain but new strains are always appearing. This might mean that researchers may constantly be trying to make new medicines to combat the current strain that appears, only for a new strain to appear soon after a treatment or cure for the existing disease has been found. In this case, would it be worth our time constantly trying to treat new diseases?

Discuss how nanotechnology and nanomedicine may make some discoveries that could significantly improve our health and wellbeing but there may be some unforeseen consequences in the future.