IBERS Microbiology: The Antibiotic Apocalypse

Introduction

Microbes are all around us. Some are helpful, such as the microbes that keep our guts healthy. Some are harmful and cause disease and we call these pathogens. Some pathogens have become resistant to the drugs we use to treat infections.

To find out more about the microbiology and the antimicrobial apocalypse listen to this lecture by Dr Dave Whitworth, Reader in Biochemistry at Aberystwyth University (the slides he uses are also available in the Subject Snapshots section)

https://aberystwyth.cloud.panopto.eu/Panopto/Pages/Viewer.aspx?id=631a22ce-ad52-48b6-877f-abad00b31c46

In this module, we will focus on exploring pathogens and antimicrobial resistance through our pathogens workshop challenge. We have also provided some resource materials to help you understand some fundamental concepts in microbiology.

Learning outcomes

In this module you will:

- 1. Be able to acknowledge the diversity and characteristics of bacteria.
- 2. Develop an understanding of the potential threats and benefits of microbes to health and industry.
- 3. Be able to appreciate the particular challenge of antimicrobial resistance to human health.
- 4. Optional: Present your research from the Pathogens Workshop Challenge as a table and/or a poster. As a nice optional conclusion to this module you might like to have a go at presenting your research as a table and/or a poster. You could show this to your tutor (if you are going to university) or to your science teacher at school to demonstrate how you have been continuing your learning from home and preparing for the next phase of your studies. If you want to do this, you might like to use the "Pathogens Challenge Template" document as a starting point.