# Topical Science Updates



## Could viruses be the wonder medicine we're looking for?

**November 2020**




**It's fair to say that viruses are getting a bit of bad press at the moment, and with good reason. But could they actually be the wonder medicine we are looking for to combat the threat of multi resistant bacteria – so called Superbugs!**

**Bacteriophages are viruses that infect, and kill, bacteria. Every know species of bacteria has a collection of viruses that attack it and they are very specific – they only attack one species.**

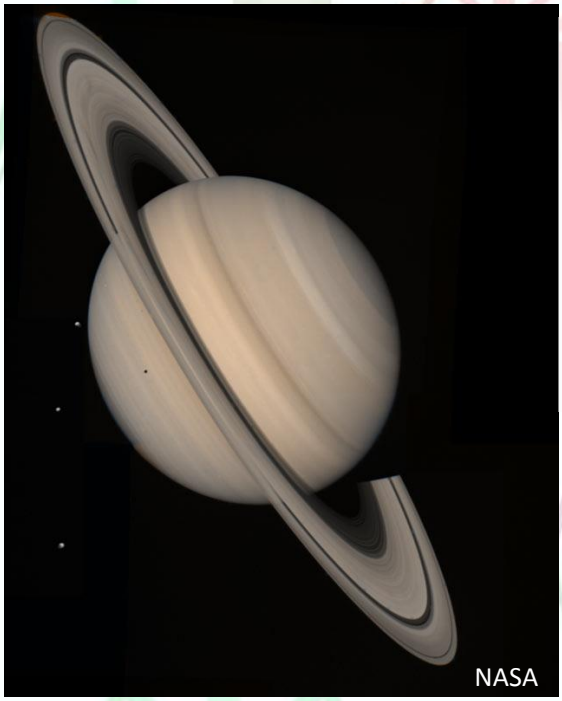
**The idea of using bacteriophages to fight bacterial infection isn't new, it was first described in 1919 before the discovery of antibiotics. When penicillin was discovered by Sir Alexander Fleming Bacteriophage therapy was consigned to the medical waste bin as it was thought we'd never need it.**



**In some countries though antibiotics weren't readily available, and so in Russia, Poland and Georgia bacteriophage therapy continued – and still does.**

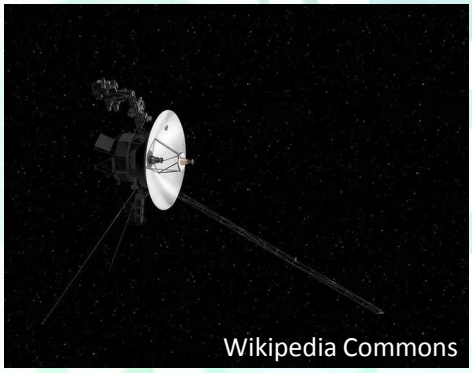
**With the rise of multi resistant bacterial pathogens antibiotics are rapidly becoming ineffective and so scientists across many disciplines are starting the hunt for alternatives and the bacteriophage could just be the virus to save us!**

Bacteriophage Therapy  Bacteriophage lifecycle  Bacteriophages
Antibiotic Resistance  Inside Science




## Voyager 2 back online

**NASA has finally made contact with Voyager 2 again after nearly 8 months of radio silence.**




**The 70m wide radio antennae in Australia, which is the only way of communicating with the satellite has been offline for repairs.**

**On October 29 2020 the repairs were finished and the antennae started sending and receiving messages again. Voyager 2, launched in 1977, is one of only 2 man-made objects to have left our solar system – it's twin Voyager 1 is the other one.**

Voyager 2  Entering Interstellar Space  The Journey

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# STEM Resource Special




The Royal Air Force Youth & STEM Engagement Team and hi-impact Consultancy have joined forces to release an educational cyber intelligence-themed project for learners in upper KS2 and lower KS3.

Check out this brilliant series of lessons here:
https://hi-impact.co.uk/raf-stem-lessons/




Series 2 of Science Fun at Home has now started. Activity sheets are being created to align with special national or world events. Sent out one or two weeks ahead of the event to give time to plan for using them, either in school or for homework or home learning.
https://pstt.org.uk/resources/curriculum-materials/Science-Fun-at-Home