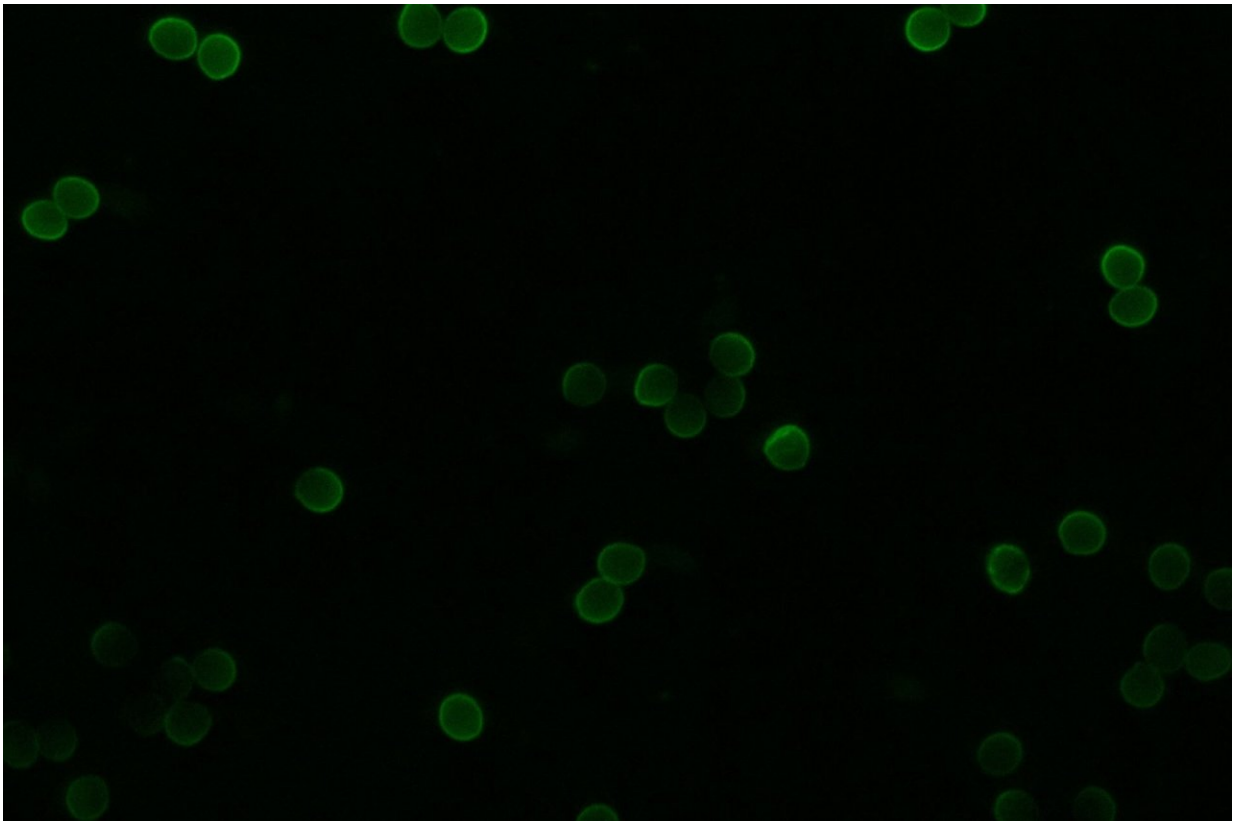


Scientists find new cultivation system to battle parasite causing diarrhoea

December 4 2017, by Sandy Fleming



Cryptosporidium parasite. Credit: University of Kent

A research team at the University has established the first long-term cultivation system at a laboratory scale for the parasite *Cryptosporidium*, one of the world's worst and most common causes of diarrhoea and

death from diarrhoea.

Cryptosporidium causes the diarrhoeal disease Cryptosporidiosis, which is usually spread by contaminated water supplies. The important role of Cryptosporidium as a cause of diarrhoea has been established in recent years, and outbreaks feature regularly in news headlines.

Cryptosporidium-caused diarrhoea is the second major cause of death from childhood [diarrhoea](#). In addition, individuals with an impaired immune system are at great risk.

There are no treatments for Cryptosporidium and so far, research on it has been limited, because the parasite could not be cultivated at a laboratory scale. Research led by Dr Anastasios Tsaousis and Professor Martin Michaelis of the School of Biosciences has now established the first long-term [cultivation](#) system for Cryptosporidium [parasites](#) at a laboratory scale.

This new cultivation system will transform research on Cryptosporidium:

- It will enable large-scale screening for anti-Cryptosporidium drugs
- It will enable many laboratories all over the world to investigate the parasite.
- It will enable the studying of the parasite biology in unprecedented detail.
- It enables for the first time the long-term storage of the parasite.
- It will dramatically reduce the number of animals needed for the investigation and production of the parasite.

The team has already gained important new insights into the life cycle of the parasite.

More information: Christopher N. Miller et al. A cell culture platform

for *Cryptosporidium* that enables long-term cultivation and new tools for the systematic investigation of its biology, *International Journal for Parasitology* (2017). [DOI: 10.1016/j.ijpara.2017.10.001](https://doi.org/10.1016/j.ijpara.2017.10.001)

Provided by University of Kent

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