# NCTC news - February 2017



## Technical Enquiry:

Question - Question: How should I open my bacterial ampoule from NCTC?

Scroll to the end of the newsletter for the answer.....

### Type Strains – the most important strains in NCTC?

Approximately one fifth of the bacteria in NCTC are cultures of type strains, which are the strains on which the description of a species is based. A bacterial species invariably includes multiple strains that are of common origin and show more similarity to each other than to any other strain. We could consider the type strains to be the most important strains in NCTC because they are the points of reference that other strains must be compared with when determining which species they belong to.



#### Read more

# NCTC in research: Rapid detection method for Salmonella species in animal feed



WHO estimates that 1 in 10 people fall ill from eating contaminated food every year and 420,000 die as a result. Salmonella infection is a major global cause of foodborne disease and is frequently transmitted as a result of the consumption of contaminated foods of animal origin; contamination in animal feed is known to be a contributing factor. Batches of animal feed are tested for contamination in accordance with the international standard method: ISO 6579:2002 Microbiology of food and animal feeding stuffs -- Horizontal method for the detection of Salmonella spp.

However, rapid methods for identifying Salmonella-free samples are being developed, one of which involves the use of a loop-mediated amplification (LAMP) technique with the potential to reduce the turnaround time for negative results from three to two days.

This method was recently validated by M D'Agostino et al (2016) using various Salmonella serotypes and NCTC strains in LENTICULE® disc format, a microbial preservation technology developed by PHE scientists in the 1990s.



**Read more** 

Do you have any interesting images of our strains?

Send them to us and if you are featured in the newsletter you will receive an NCTC 2GB memory stick.

Send all images to: culturecollections.marketing@phe.gov.uk



# New type strains to the NCTC collection in 2016

NCTC has a proactive programme in place to accession type strains of clinical or veterinary relevance. In 2016, 10 type strains from the Staphylococcus genus were acquired. These represent type strains from new species or subspecies of Staphylococcus that were described between the period of 2009-2015 and they are now available via the website:

Staphylococcus carnosus subsp. carnosus (NCTC 13825)

Staphylococcus carnosus subsp. utilis (NCTC 13826)

Staphylococcus jettensis (NCTC 13830)

Staphylococcus massiliensis (NCTC 13831)

Staphylococcus microti (NCTC 13832)

Staphylococcus petrasii (NCTC 13835)

Staphylococcus rostri (NCTC 13837)

Staphylococcus simiae (NCTC 13838)

Staphylococcus stepanovicii (NCTC 13839)

Staphylococcus aureus subsp. aureus (NCTC 13841)

In addition, the type strain of *Streptococcus peroris* (NCTC 13785), a strain originally sourced from a tooth swab in 1998, but until recently missing from the collection, has now been included within the catalogue.

View all new NCTC bacterial strains

### **Depositing with NCTC**

There are three ways to deposit your strains with NCTC. Click below to see which best suits your needs:

Catalogue deposits: Add your strains to the NCTC collection for researchers to access and build on your work or to make interesting/outbreak strains available

**Safe deposits**: Store your isolates with NCTC as a safe back-up supply **Patent deposits**: NCTC is a recognised International Depository Authority (IDA) under the Budapest Treaty and can register your strains for patent.





### Meet the team: Ana Deheer-Graham

Ana is the NCTC Operations Lead/Scientific Coordinator. She manages the NCTC laboratory in Colindale and is currently studying for a Masters in Business Administration (MBA). Three facts about Ana:

- novelty bakes and decorates cakes in her spare time
- favourite book is The Alchemist by Paulo Coelho
- · goal for this year is to complete her MBA

### **Events**

NCTC will be attending the following events in the next few months - we hope to see you there.

RSPH Keeping healthcare water safe: including updates on guidance and its implementation 15 March, Portland Place, London, UK

27th ECCMID 22-25 April, Vienna, Austria

Microbiology Society Annual Conference 2017 3-6 April, Edinburgh, UK

### Technical Enquiry:

Answer - Ampoules should be opened under appropriate ACDP containment level, and in an exhaust protective cabinet, designed to protect the worker against inhalation of aerosols. Download the **NCTC guide** for the complete process.

Download the NCTC brochure

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