

FWD_AMR-RefLabCap Network meeting

Intro to activities supporting the NPHRLs in regional/local capacity building

Tuesday, 30 November 2021
9:30 -15:15 CET - Virtual meeting



Identify strength and weaknesses – capacity gaps and needs for detection of the two pathogens



Min 16 countries incl 8 priority countries will be selected

To design questionnaire, set up survey and conduct analysis



Joint discussion among NPHRLs to improve survey questionnaire

Mapping/ scoring capacity gaps and needs across countries



Final survey to map capacity gaps and needs



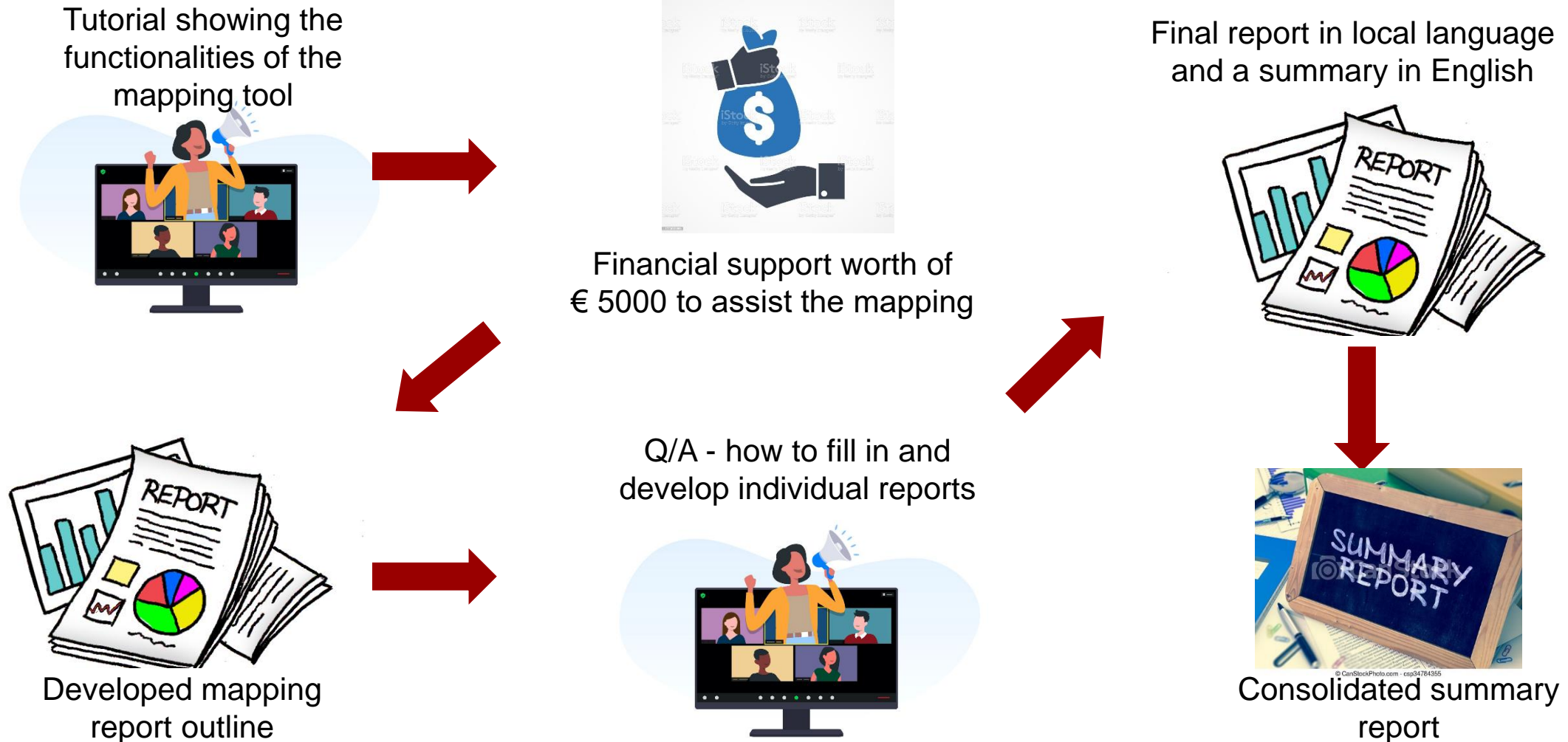
QUESTIONNAIRE
WHAT IS IT & HOW TO DESIGN ONE?

Formulate new questions



Plan to build capacity for detection of the two pathogens

Identify strength and weaknesses – capacity gaps and needs for detection of the two pathogens



Activities supporting the NPHRLs in regional/local capacity building

Develop, provide, and implement tailored capacity activities to support NPHRLs to carry out regional/local capacity building for reliable detection and characterization of the two pathogens among 16 countries

- Technical laboratory assistance
- Address knowledge gaps as to QC and QMS
- Boosting scientific knowledge as the most optimal phenotypic and genotypic detection (WGS) methods for AMR for the two pathogens
- Implement and harmonize the referral procedures and methodologies used for a reliable monitoring system
- Strengthen pedagogic education and training in how to facilitate the use of the monitoring system
- How to develop capacity building action plans
- Improving communication and dissemination of results
- Business cases and writing applications

Financial support to support capacity building activities in priority countries

The financial support between € 5.000 – 10.000 should address needs and cover the following type of needs

- Reference strains for QC
- Standards and SOPs e.g. CLSI, ISO etc.
- Training consumables and simple equipment

The funding will be granted based on applications indicating the purpose and activities



E-learning

Prerequisite for laboratory training for basic learning

Home > Life Sciences > Medicine & Healthcare

Antimicrobial resistance – theory and methods

About this course: The course will cover the topics related to antimicrobial resistance with basic definitions and overview on antimicrobials their use and the emergence and spread of resistance. The course will guide you through the concepts and the impact and how that happens. It will show you how bacteria become resistant to antimicrobials.

Who is this class for: This course is for you if you are interested in antimicrobials and antimicrobial resistance in bacteria. We reach in different sectors. So this course is for you whether you are an undergraduate student, a researcher, medical or veterinary related professional or someone who is interested in the subject!

Created by: Technical University of Denmark (DTU)

Enroll
Started Oct 30

Financial Aid is available for learners who cannot afford the fee. [Learn more and apply.](#)

Home > Life Sciences > Clinical Science

Whole genome sequencing of bacterial genomes – tools and applications

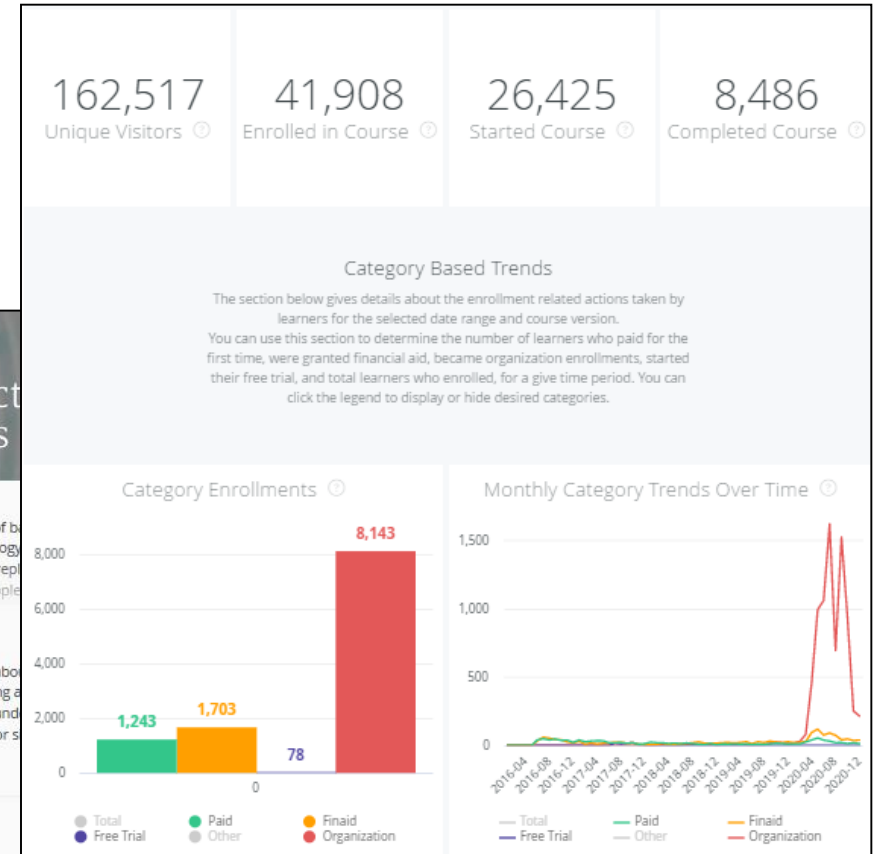
About this course: This course will cover the topic of Whole genome sequencing (WGS) of bacterial genomes which is becoming more and more relevant for the medical sector. WGS technology applications are high on international political agenda, as the classical methods are being replaced by WGS technology and therefore bioinformatic tools are extremely important for allowing the people to use WGS technology.

Who is this class for: This course is for you if you are interested in getting to know more about genome sequencing applied to bacterial characterization and surveillance. We aim at having a high and international reach in different sectors. So this course is for you whether you are an undergraduate student, a researcher, medical or veterinary related professional, technical staff or someone who is interested in the subject!

Created by: Technical University of Denmark (DTU)

Enroll
Starts Nov 13

Financial Aid is available for learners who cannot afford the fee. [Learn more and apply.](#)



Website resources

DTU Food National Food Institute  Search here 

Home WHO Collaborating Centre EQAS Protocols Zoonosis



Explore information about Global Food Safety and Inspection Service (GFSI) [Click here](#)

EU Reference Laboratory - Antimicrobial Resistance

The EURL-AR is responsible for providing scientific advice to the European Commission and to member countries on matters in relation to antimicrobial resistance.

[Read More](#)

AGISAR

Experts that work in Food and Public Health disciplines advising WHO ensuring global containment of foodborne antimicrobial resistance.

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Food safety



- Food safety
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Whole genome sequencing for foodborne disease surveillance Landscape paper


Authors: WHO

 Publication details
 Publication date: 30.04.2018
 Languages: English
 ISBN: 978-92-4-151386-9

Downloads
 - Full text pdf [324 KB]

DTU Food National Food Institute  Search here 

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Check out the latest information on the ongoing EQAS's [Click Here](#)

EU REFERENCE LABORATORY – ANTIMICROBIAL RESISTANCE

Organize and conduct work shops

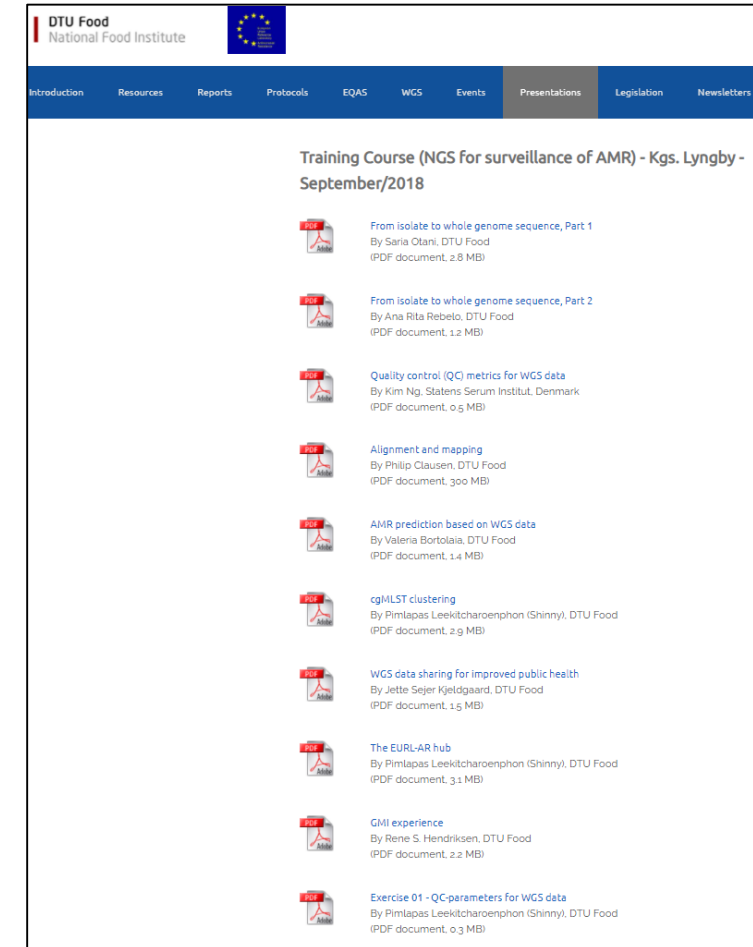
- SSI and DTU, both have great experience in organizing workshops
 - DTU as WHO CC has since 1999 conducted workshops around the world building capacity in AMR and detection of zoonosis such as Salmonella and Campylobacter
 - SSI and DTU organize each year workshops as ECDC EQA provider and EURL AR

And many many more every year ever since

<p>Joint virtual meeting on AMR for the FWD-Network and EURL-AR Network</p> <p>14th EURL-AR Workshop</p> <p>Wednesday, 29th April 2020</p>	
8:45 – 9:00	Log into the virtual system
9:00 – 9:15	Welcome and introduction (Rene Hendriksen, EURL-AR)
9:20 – 9:50	EFSA-ECDC AMR report 2017/2018 (Pierre-Alexandre Beloeil, EFSA)
9:55 – 10:10	Update from the EURL-AR (Rene Hendriksen, EURL-AR)
10:15 – 10:30	Update from the ECDC FWD (Therese Westrell and Erik Alm, ECDC)
10:35 – 11:05	Update from the European Commission: progress report on implementation of the 2017 European AMR Action Plan and AMR monitoring in food-producing animals and food as from 2021 (Martial Plantady and Aurélien Perez, European Commission)
11:10 – 11:25	Update from the EFSA (Pierre-Alexandre Beloeil, EFSA)
11:25 – 11:45	Break. The EURL-AR network continues the meeting - the FWD network is welcome to stay.
11:45 – 12:00	NDM-4 carbapenemase gene harboured by a novel IncFII plasmid in E. coli of pig origin, Italy (Virginia Carfora and Elena Diaconu, IZSLT)
12:05 – 12:20	Overall outcomes of the EURL-AR EQAS 2019 for E. coli, Staph and Enterococcus (Valeria Bortolaia, EURL-AR)
12:25 – 12:40	The EFSA/EURL confirmatory testing for 2018-data (Valeria Bortolaia, EURL-AR)
12:45 – 13:00	Overall outcomes of the EURL-AR EQAS 2019 for Matrix (Jette Sejer Kjeldgaard, EURL-AR)
13:05 – 13:30	AOB and general discussions (Rene Hendriksen, EURL-AR)

Organize and conduct laboratory courses

- SSI and DTU have a long track record for organizing laboratory training courses serving ECDC, WHO, FAO, and EC (EURL)
- Training objectives have covered phenotypic AMR testing, WGS-based methodologies including AMR prediction and OB detection, surveillance and epidemiology
 - Lab hands on exercises, theoretical lectures and computer exercises

DTU Food National Food Institute

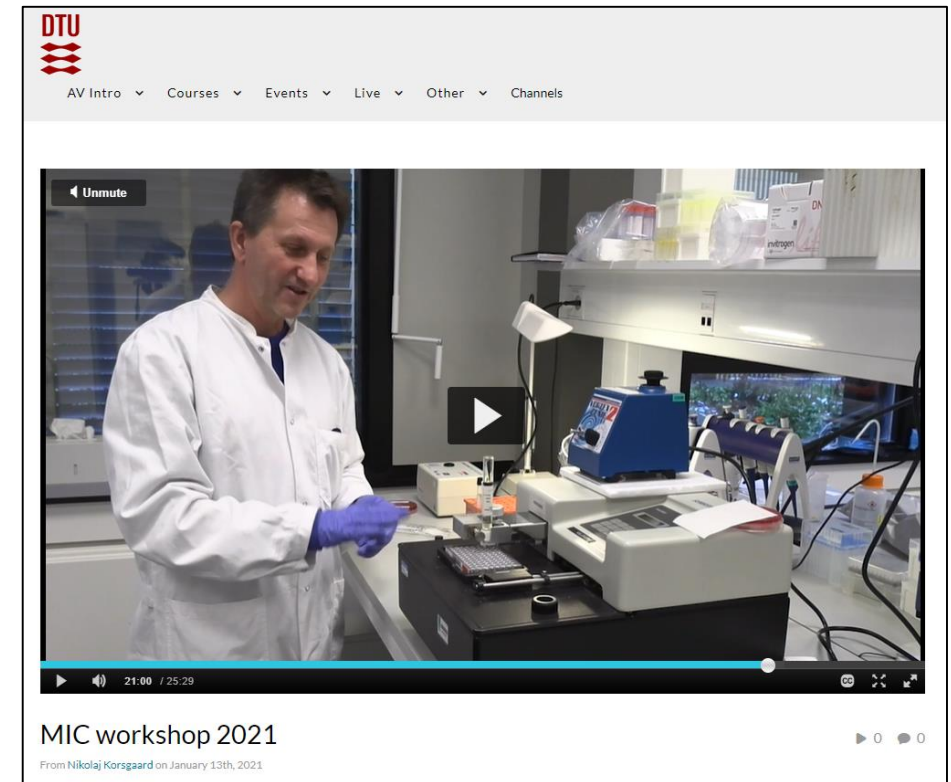
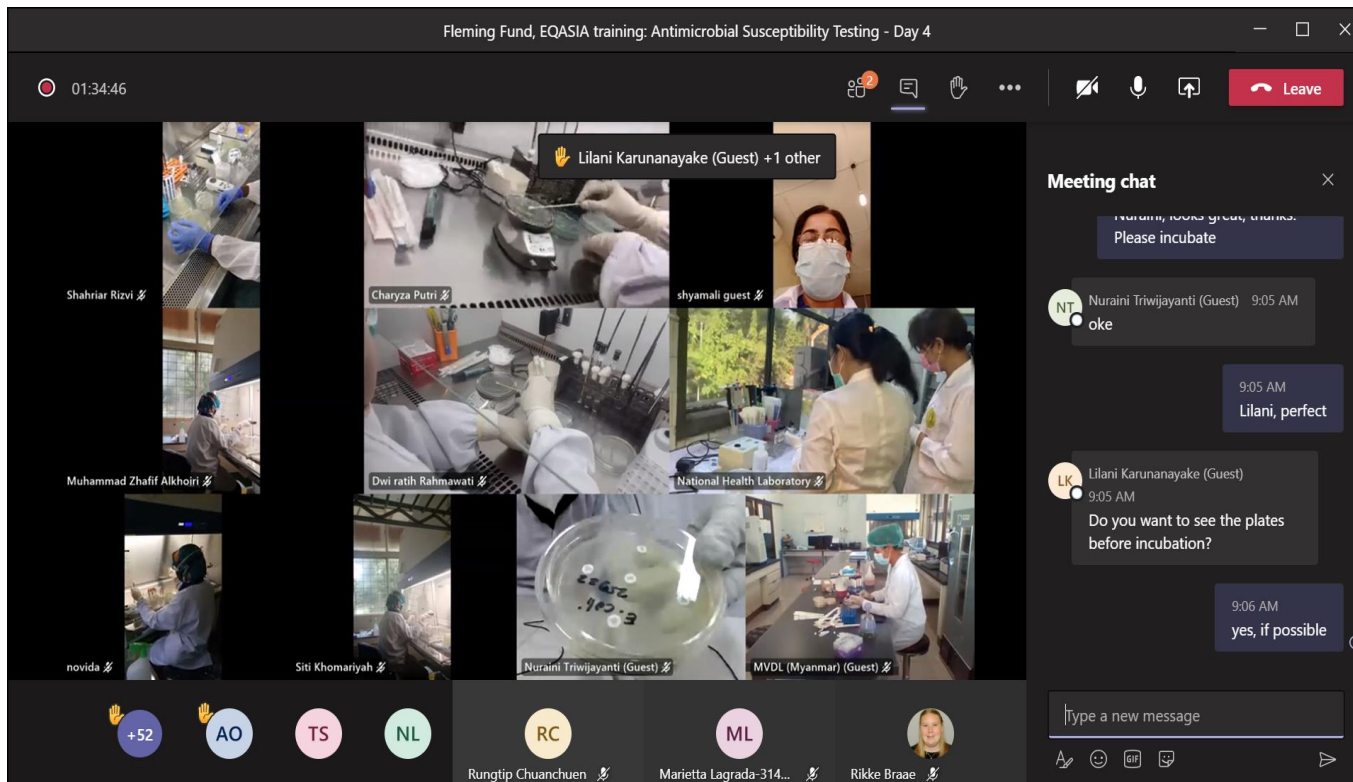
Introduction Resources Reports Protocols EQAS WGS Events Presentations Legislation Newsletters

Training Course (NGS for surveillance of AMR) - Kgs. Lyngby - September/2018

- From isolate to whole genome sequence, Part 1
By Saria Otani, DTU Food
(PDF document, 2.8 MB)
- From isolate to whole genome sequence, Part 2
By Ana Rita Rebelo, DTU Food
(PDF document, 1.2 MB)
- Quality control (QC) metrics for WGS data
By Kim Ng, Statens Serum Institut, Denmark
(PDF document, 0.6 MB)
- Alignment and mapping
By Philip Clausen, DTU Food
(PDF document, 300 MB)
- AMR prediction based on WGS data
By Valeria Bortolaia, DTU Food
(PDF document, 1.4 MB)
- cgMLST clustering
By Pimlapas Leekitcharoenphon (Shinny), DTU Food
(PDF document, 2.9 MB)
- WGS data sharing for improved public health
By Jette Sejer Kjeldgaard, DTU Food
(PDF document, 1.5 MB)
- The EURL-AR hub
By Pimlapas Leekitcharoenphon (Shinny), DTU Food
(PDF document, 3.1 MB)
- GMI experience
By Rene S. Hendriksen, DTU Food
(PDF document, 2.2 MB)
- Exercise 01 - QC-parameters for WGS data
By Pimlapas Leekitcharoenphon (Shinny), DTU Food
(PDF document, 0.3 MB)

Virtual training and site visits

- DTU has within the Fleming Fund regional Grant, EQASIA used virtual training to a vast extend by Teams and pre-recorded VDO's for lab demo's
 - potential to supplement lab training, site visits, individual consultancy services etc.



Multidisciplinary thematic webinars

- Thematic webinars will be organized to present and facilitate discussion of the network activities, e.g., the developments of minimum/optimal requirements for NRLs, the work on methodologies for genotypic AMR prediction, and results of the EQAs on phenotypic AST etc.
- Great experience with webinars using Teams or Zoom
 - intro of new EU Sensititre panels
 - new legislation (2020/1729/EU) going into force on January 2021
 - EURL AR WGS protocol

The screenshot shows a Zoom meeting interface. At the top, there is a navigation bar with the DTU logo and menu items: AV Intro, Courses, Events, Live, Other, and Channels. The main content area displays a slide comparing the ISO 20776-1 reference method and the Sensititre system method. The slide includes a table with the following data:

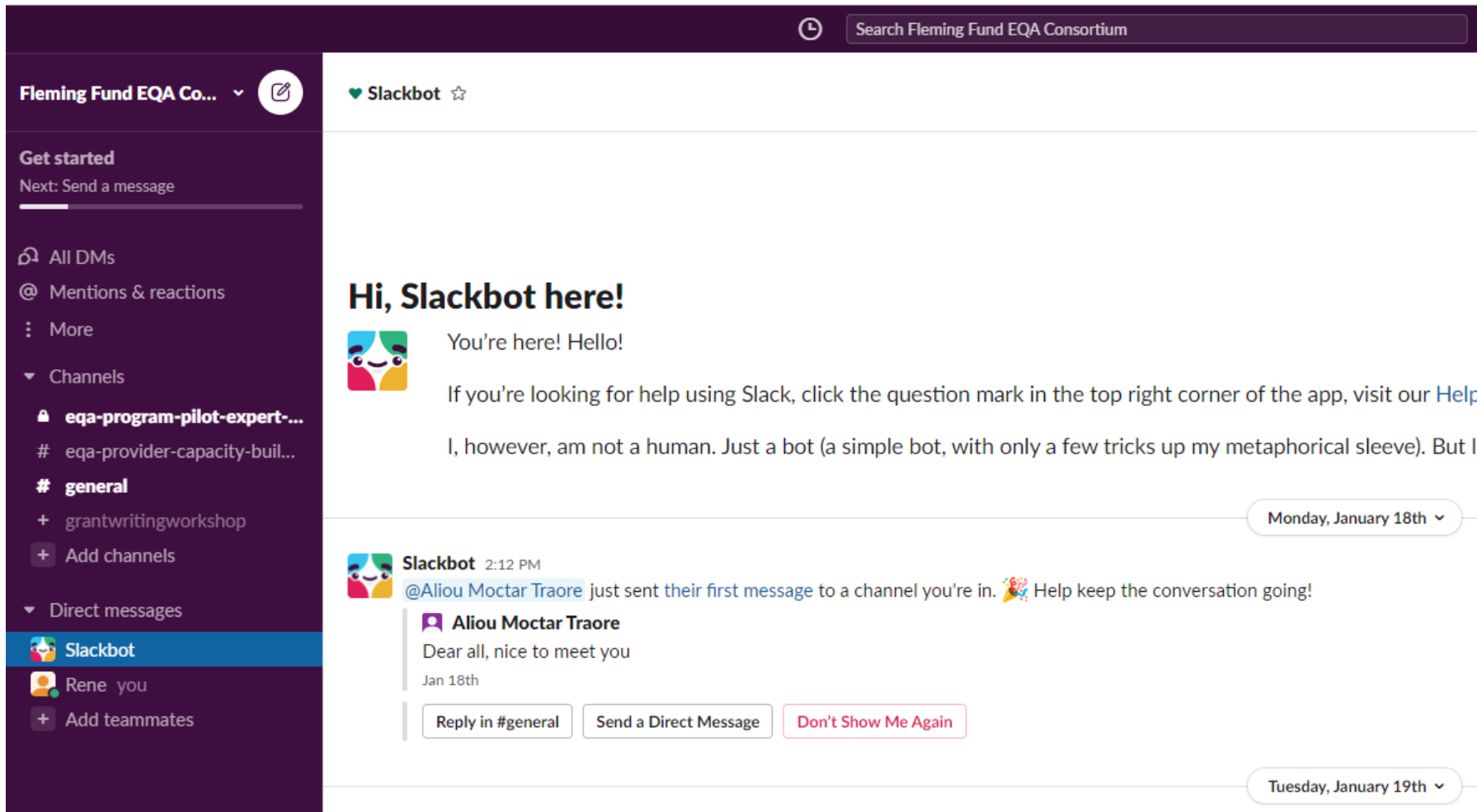
	ISO 20776-1	Sensititre
Plate format	Frozen	Dry
Inoculum	5 x 10 ⁵ cfu/ml	1 x 10 ⁵ cfu/ml*
Fill volume	100 µl per well	50 µl per well*
Incubation	16-20h, 35°C	18-24h, 35°C
Set up	Manual	Modular levels of automation
Read method	Manual	
Data management	Manual	

Below the table, there is a note: "*Non-fastidious gram negative & gram positive organisms". A red bullet point states: "Sensititre system method is validated to show equivalence to the reference method". The slide also features an image of the Sensititre laboratory equipment. At the bottom of the Zoom window, there is a participant list with icons for 11 people and a video feed of a participant.


Sensititre webinar Tuesday 3rd of November 2020

From Jette Sejer Kjeldgaard on November 4th, 2020 Created from Sensititre webinar on Tuesday 3rd of November_uncut

Communication - local and regional



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- # general
- + grantwritingworkshop
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-  Slackbot
-  Rene you
- + Add teammates


♥ Slackbot ☆


Hi, Slackbot here!


 You're here! Hello!

If you're looking for help using Slack, click the question mark in the top right corner of the app, visit our [Help \(truncated\)](#). I, however, am not a human. Just a bot (a simple bot, with only a few tricks up my metaphorical sleeve). But I'r (truncated)

Monday, January 18th ▾

 **Slackbot** 2:12 PM

 @Aliou Moctar Traore just sent their first message to a channel you're in. 🎉 Help keep the conversation going!

 **Aliou Moctar Traore**

Dear all, nice to meet you

Jan 18th

Reply in #general Send a Direct Message Don't Show Me Again

Tuesday, January 19th ▾

Scientific advice and support



Thank you for your attention

Prof. Rene S. Hendriksen, PhD

Head of Research Group Global Capacity Building

WHO Collaborating Centre for Antimicrobial Resistance in Food borne
Pathogens and Genomics

European Union Reference Laboratory for Antimicrobial Resistance

FAO Reference Laboratory for Antimicrobial Resistance

National Food Institute, Technical University of Denmark

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