

# **“Science Meets Policy” conference | EU initiatives towards the large-scale use of Next Generation Sequencing (NGS) to tackle foodborne threats**

**Parma (IT) and online | 5<sup>th</sup>-6<sup>th</sup> September 2023**

**A conference co-organized by EFSA and the European Commission’s inter-EURL working group on Whole Genome Sequencing (WGS)**

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**“Science meets Policy” Modern technologies to enable  
response to crises: Next Generation Sequencing to tackle  
food-borne diseases in the EU**

**Rome ISS September 2020 (Online event)**

*Stefano Morabito*

**A conference organized by  
the European Commission’s inter-EURL working group  
on Whole Genome Sequencing (WGS)**

# Geografic coverage of the event

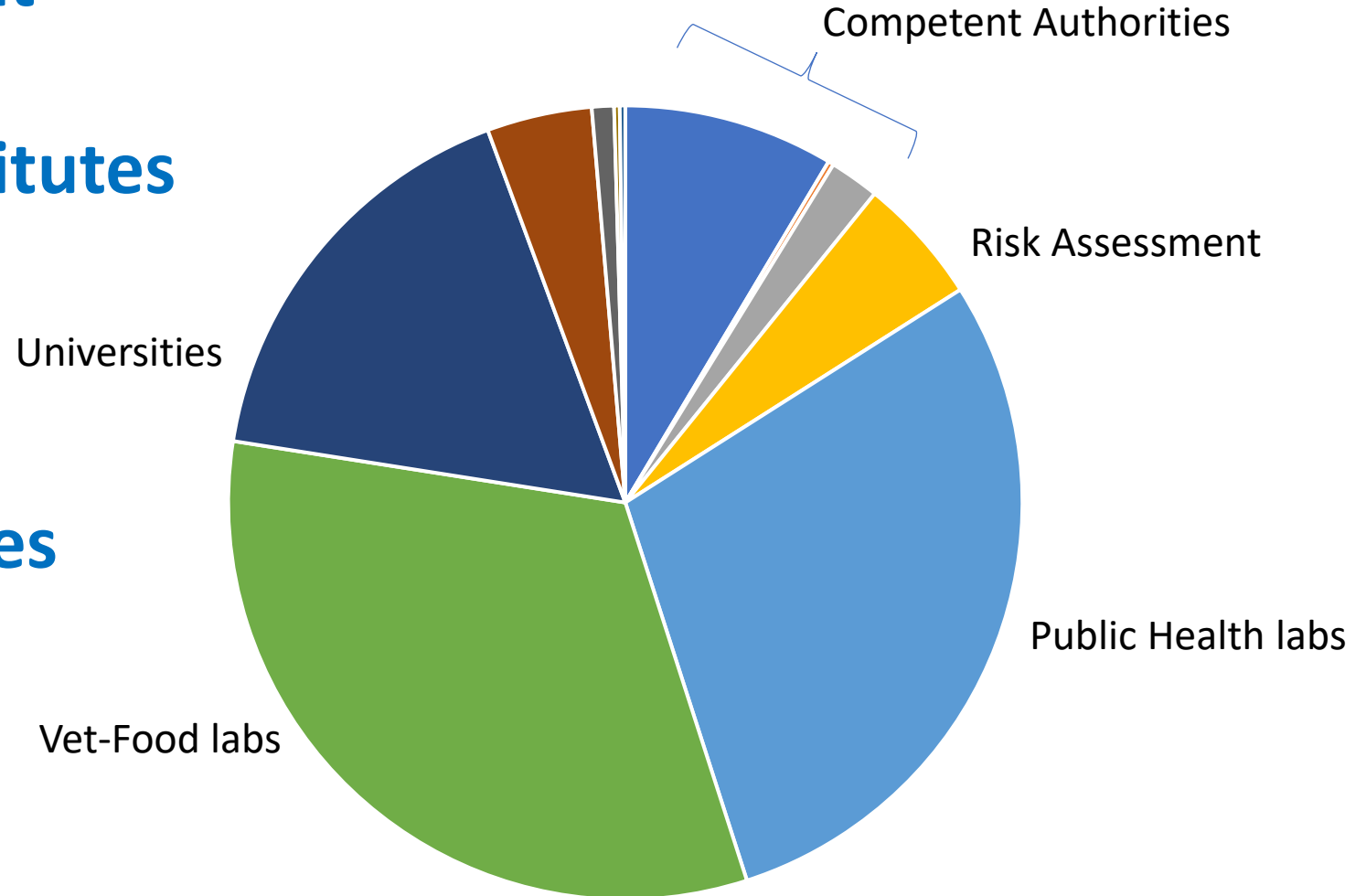
**521 registered participants**



**49 Countries**

# Participants' provenience

38	Ministry of Agriculture
1	Ministry Environment
9	Ministry Health
23	Risk assessment Institutes
129	Public health Labs
144	Vet-Food labs
75	Universities
19	International Agencies
4	Food industry
1	Lawyer
1	Press



## Agenda

### Friday 25 September

09:30	Welcome and Introduction	Silvio Brusaferrò ISS President
09:45	Greetings and event outline	Stefano Morabito Chair of the organization committee, EURL for E. coli, ISS, Rome Italy

### Morning Session: Building the capacity in Europe

10:10	EU food safety policy and NGS	Martial Plantady European Commission G4
10:30	EFSA State of play and future perspectives in the food safety area	Valentina Rizzi European Food Safety Authority
10:50	ECDC State of play and future perspectives in the public health area	Saara Kotila European Centre for Disease Prevention and Control
11:10	Need for a legal framework for NGS data supporting action by the CAs	George Haringhuizen RMM, The Netherlands

11:30 Question time

12:00 End of Morning Session

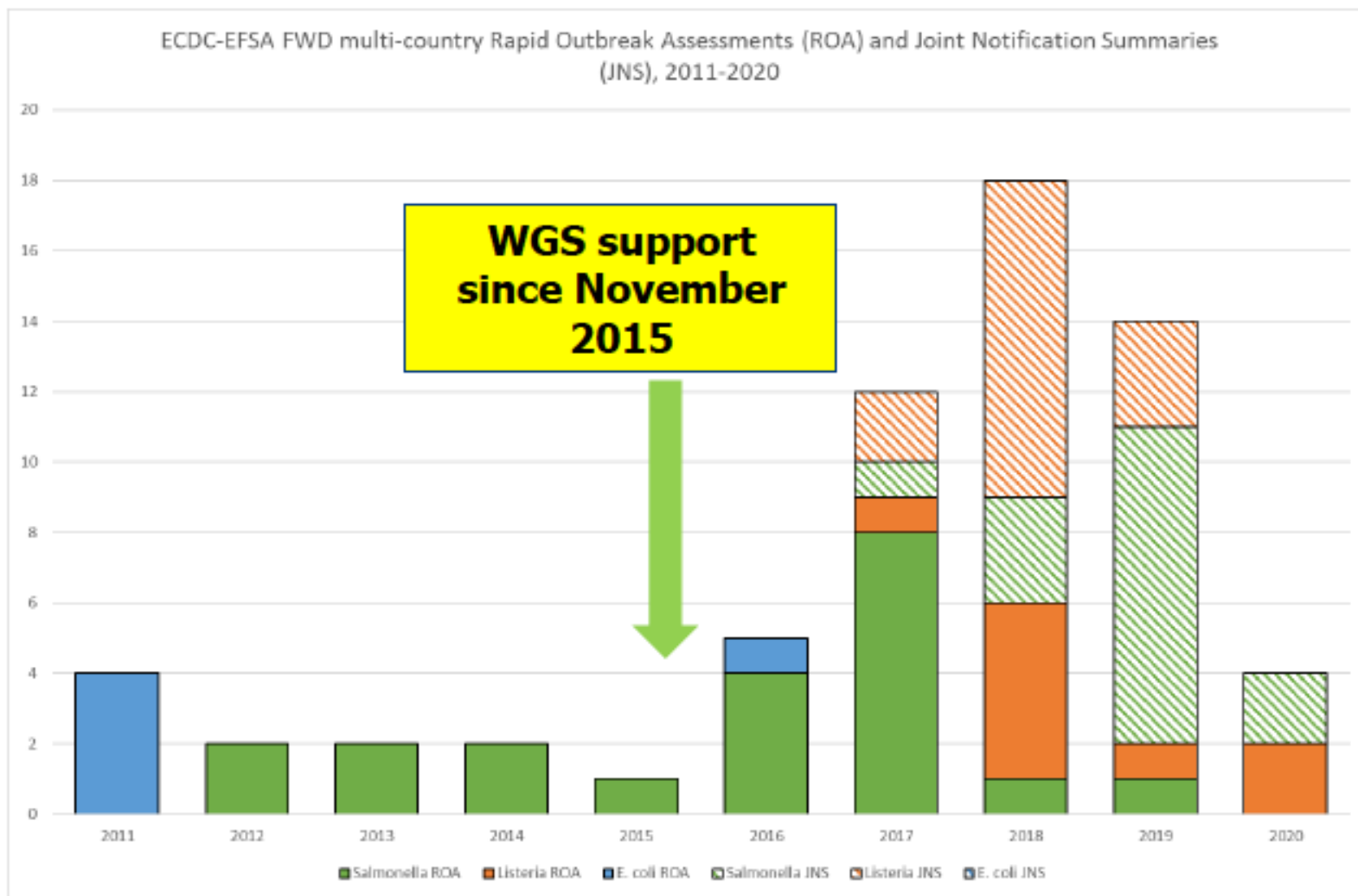
### Afternoon Session: Building the pathway

14:00	The Use of Genomics in One Health AMR Surveillance: The Experience of the US National Antimicrobial Resistance Monitoring System	Patrick McDermott FDA, USA
14:20	Open discussion	Chair: Stefano Morabito Panel: Valentina Rizzi, Saara Kotila, George Haringhuizen, Eelco Franz, Annemarie Kaesbohrer, Martial Plantady
16:30	Concluding remarks and closure	

OH WGS system

# ECDC-EFSA multi-country outbreak assessments and notifications for foodborne diseases, 2011 – 2020

Saara Kotila



\*As of September 2020



## Public Health and Food Health Authorities

- The sharing of data is not explicitly regulated
- Change in traditional roles and tasks (PH-epi -> food production)
- Anyone can jump to incorrect conclusions
- Am I still in charge of the decisions I am responsible for?

## Patients

- Stress their right on information that formerly did not exist
- Can they demand the evidence of their personal contamination?

## Food Producers are in doubt

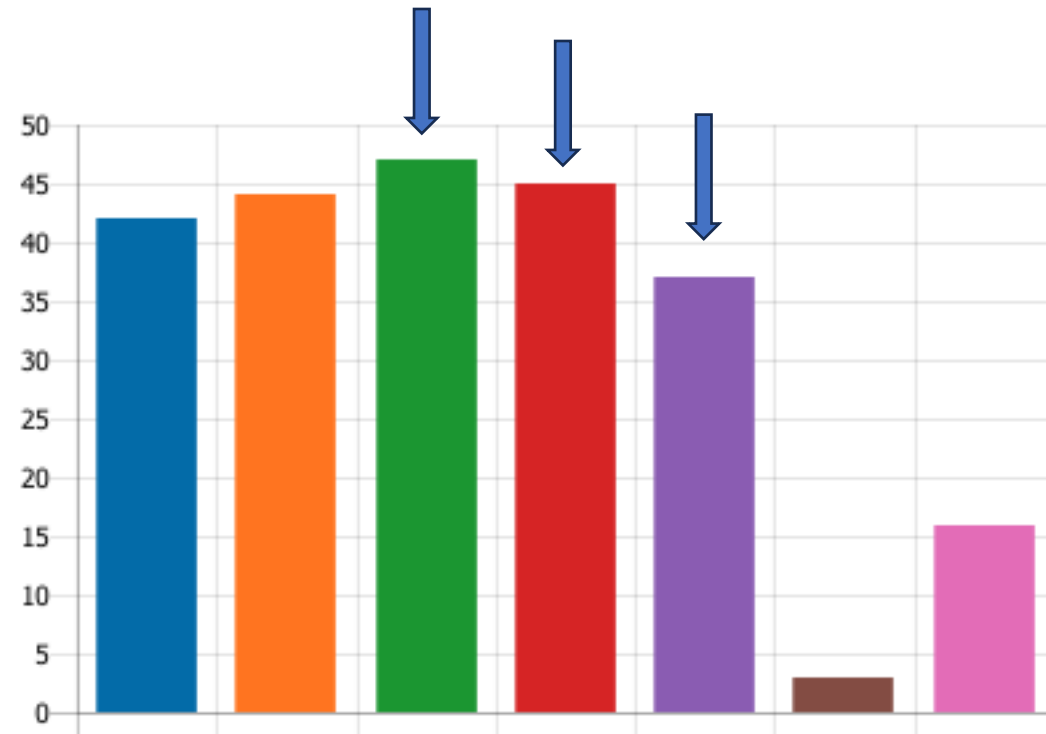
- NGS provides proof beyond doubt. Dataprotection? does this lead to claims?
- NGS proofs also non-contamination, which clears my product from suspicion

# «Poll» Session

## 1. What are the major obstacles of adopting WGS for surveillance and monitoring?

[Altri dettagli](#)

● Lack of funds	42
● Lack of bioinformatics expertise	44
● Absence of a legal framework	47
● Issues with the data confidenti...	45
● Issues with data ownership	37
● Is this really necessary?	3
● Altro	16





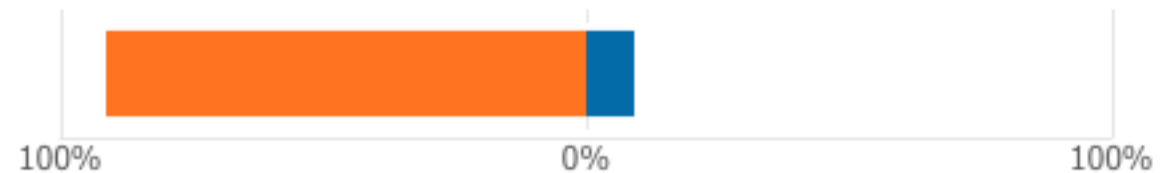
# «Poll» Session

2. Do you think that a NGS-based surveillance/monitoring at the EU level would be beneficial ?

[Altri dettagli](#)

■ YES   ■ NO   ■ It would be more useful if implemented at national level

Tick the appropriate box



3. Select the major cons of posting the data in the public domain

[Altri dettagli](#)

- |                                      |    |                 |
|--------------------------------------|----|-----------------|
| ● Use of the data by other scien...  | 27 |                 |
| ● Disclosure of sensitive informa... | 51 | Economic impact |
| ● Disclosure of sensitive informa... | 55 | Privacy impact  |
| ● Altro                              | 19 |                 |



# Key messages

- The approach is effective!!
  - Capacity is being built
- Resources needed to complete the capacity towards NGS coverage
  - Major obstacles to Kickstart an EU system:
    - Legal framework
    - Data confidentiality
    - Data Ownership

## Need to follow up

# Follow up event: Background

- Resources needed to complete the capacity towards NGS coverage
  - Capacity increased in the Food/Feed sector – Inter EURL WG
- Call for the establishment of EURLs in the Human sector launched
  - Major obstacles to Kickstart the EU system:
    - Legal framework
    - Data confidentiality
    - Data Ownership

## Objective:

- To encourage the dialogue on the methodologies and standards for data sharing,
- to identify specific action points that may compose a roadmap conceived by stakeholders to bridge the gaps identified at the first event.

**Thank you for participating and  
enjoy the event!**