



OneHealth EJP: a European network

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One Health EJP key facts

- European Joint Programme Co-fund (EJP).
- Part of Horizon 2020.
 - Joint Research.
 - Joint Integrative projects.
 - Education and training.
 - Joint PhD studies.
 - Short Term Missions.
 - Workshops and Summer Schools.
 - Continuing Professional Development module.



5 YEARS – 2018-22
PROGRAMME



HORIZON 2020
50% CO-FUNDED
€ 90 MILLION



39 ORGANISATIONS
19 EU COUNTRIES



Key facts about any EJP

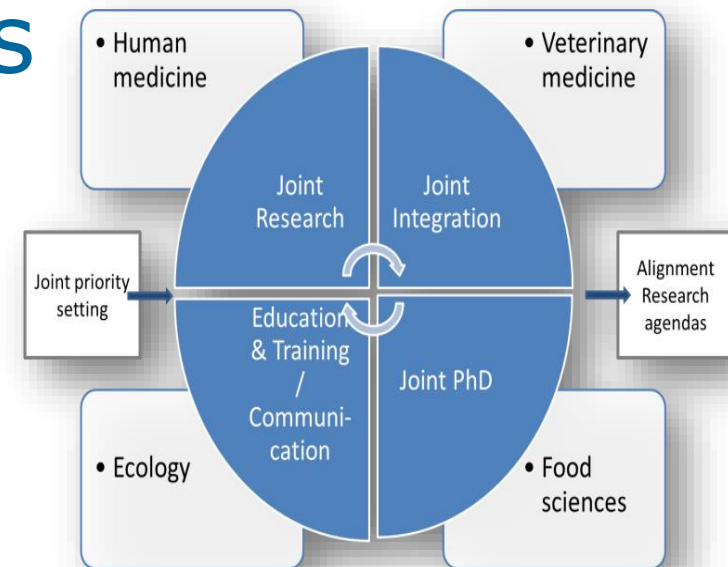
- The aim is to **bring together national public entities with research activities** as part of their mission while research not being necessarily the core function
 - Contribute scientifically to policy implementation
- In contrast to the ERA-NET scheme, main actors are not R&I funding agencies
 - Rather, public entities with **policy-driven R&I**
 - Complement, not duplicate similar research projects
- Therefore, an EJP has a societal responsibility





OneHealth EJP main objectives

- To develop a **European network** of public mission organizations
- Mainly with reference laboratory functions on infectious diseases
- The EJP integrates public health, animal health and food safety scientists in feed and food.
- To improve **prevention, detection and response** in the fields of **foodborne zoonoses, antimicrobial resistance and emerging infectious threats**
- Through integration and alignment of approaches and methodologies of joint priority and through deciding on a joint research agenda
- The final objective is to **improve the quality and compatibility of information for decision making.**





39 organisations



ANSES (FR, Coordinator)

Sciensano (BE, Scientific Coordinator)

Building a consortium with the official mandate from the Ministries of authority, under the co-fund EC policy **€90M, 50% co-fund.**



OneHealth EJP scope and budget

« One Health »				
Zoonoses		Emerging threats	Integrative Activities	Education & Training
Foodborne Zoonoses	Antimicrobial Resistance	Zoonotic potential suspected	Joint data Harmonisation of protocols Common frameworks for surveillance and control	17 PhDs 50+ STMs 5 Workshops 4 Summer Schools 4 continuing professional development
Bacteria, viruses, parasites, prions	Transmission by food or not	Non-foodborne zoonoses Foodborne zoonoses		
11 projects €29,0M	5 projects €12,0M	4 projects €8,5M	5 projects €27,5M	€4,0M



OneHealth EJP Activities



External organizations can join at own expense



Creating a network of research institutes that focuses on food-borne zoonoses, antimicrobial resistance and emerging zoonotic threats



Joint Research Projects (JRPs)



Joint Integrative Projects (JIPs)



Education & Training





OHEJP website: www.OneHealthEJP.eu

One Health EJP + New Events

Howdy, Hein Imberechts

Dashboard My Events Members Groups

ne HEALTHEJP

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One Health European Joint Programme

A landmark partnership between 39 partners, including acclaimed food, veterinary and medical laboratories and institutes across Europe and the Med-Vet-Net Association.

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Ongoing projects (2018-2020)

- **Foodborne zoonoses**

- AIR Sample, A Low-Cost Screening Tool in Biosecured Broiler Production
- ListAdapt, Adaptive traits of *Listeria monocytogenes* to its diverse ecological niches
- MedVetKlebs, *Klebsiella pneumoniae*: from ecology to source attribution and transmission control
- Metastava, Standardisation and validation of metagenomics methods for the detection of foodborne zoonoses, antimicrobial resistance and emerging threats.
- MoMIR-PPC, Monitoring the gut microbiota and immune response to predict, prevent and control zoonoses in humans and livestock in order to minimize the use of antimicrobials
- NOVA, Novel approaches for design and evaluation of cost-effective surveillance across the food chain



A multi-center pilot study of an air sampling method for *Campylobacter* in broiler houses

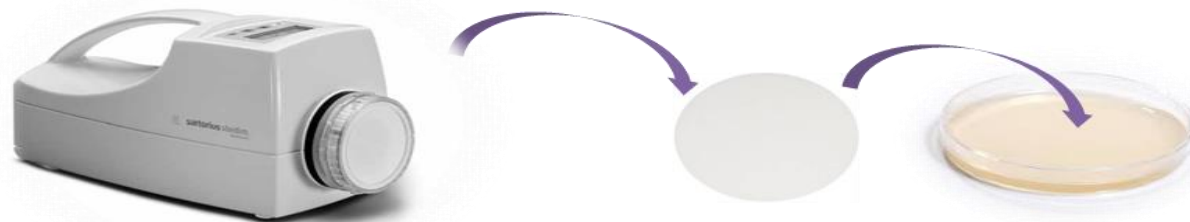
Gro S. Johannessen, Giuliano Garofolo, Ivana
Koláčková, Renáta Karpíšková, Kinga
Wieczorek, Jacek Osek, Julia Christensen, Mona
Torp and Jeffrey Hoorfar (*Manuscript submitted*).

Pre-slaughter sampling for *Campylobacter*

Current method: boot swabs



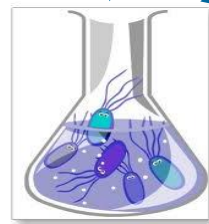
Future method: air sampling



Experimental set-up in chicken farms.



ISO 10272-1:2017,
Enrichment



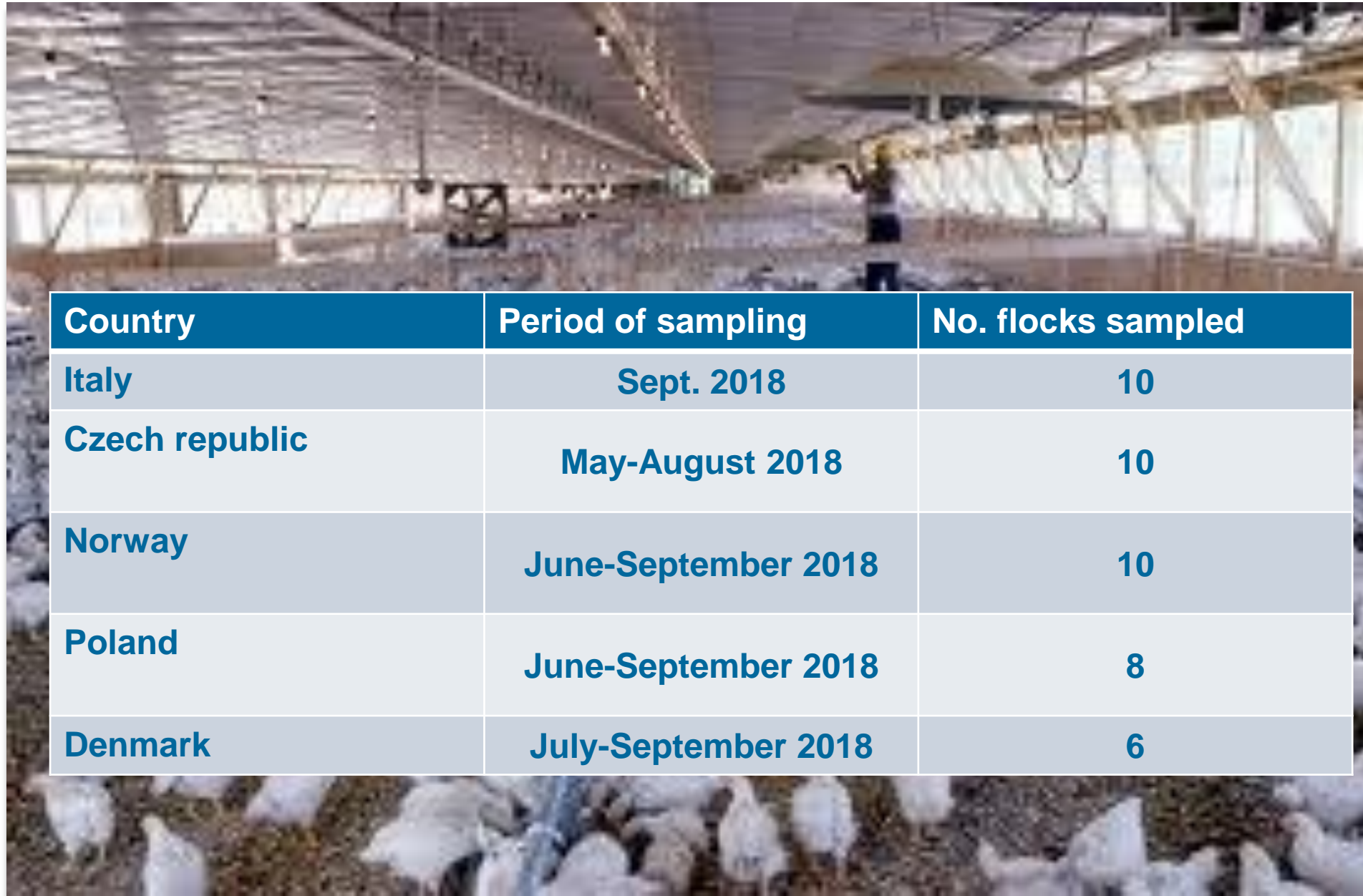
Real-time PCR; direct and enriched

Selective plating



Confirmation of colonies with PCR or Maldi-TOF

Chicken houses sampled in 2018



Country	Period of sampling	No. flocks sampled
Italy	Sept. 2018	10
Czech republic	May-August 2018	10
Norway	June-September 2018	10
Poland	June-September 2018	8
Denmark	July-September 2018	6

Results: Manuscript submitted in June 2019).



Country	Cultivation method				PCR methods			
	Boot socks		Air samples		Boot socks		Air samples	
	Direct	Enrich.	Direct	Enrich.	Direct	Enrich.	Direct	Enrich.
Italy	6/10	0/10	0/10	1/10	7/10	5/5	8/10	5/5
Czech rep.	ND*	0/10	ND	0/10	ND	0/10	2/9	0/10
Norway	ND	3/10	ND	0/10	ND	ND	ND	ND
Poland	ND	3/8	ND	1/8	ND	ND	3/8	ND
Denmark	ND	1/6	ND	1/6	ND	ND	1/6	ND

Not all samples have been tested with all methods.

*ND = Not done

Summary

Combination of air sampling and direct PCR may work, but further optimizations and evaluations are being done in Summer 2019.

Direct metagenomics detection on filter samples?



Thank you for your attention!



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