



Applied research and teaching opportunities between the EU and China

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LinkTADs session at EPIZONE: Coordinating veterinary research between EU and China

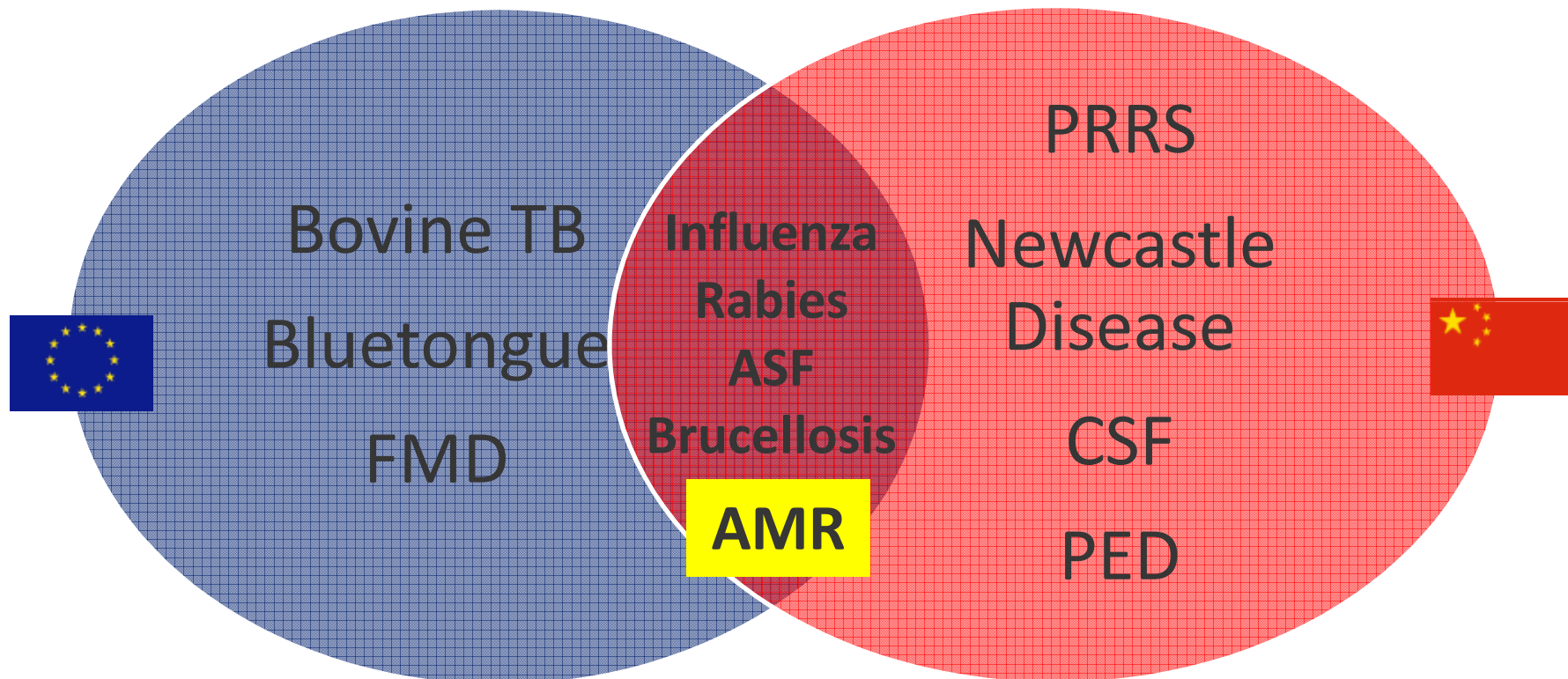
29th September, 2016, Madrid, Spain



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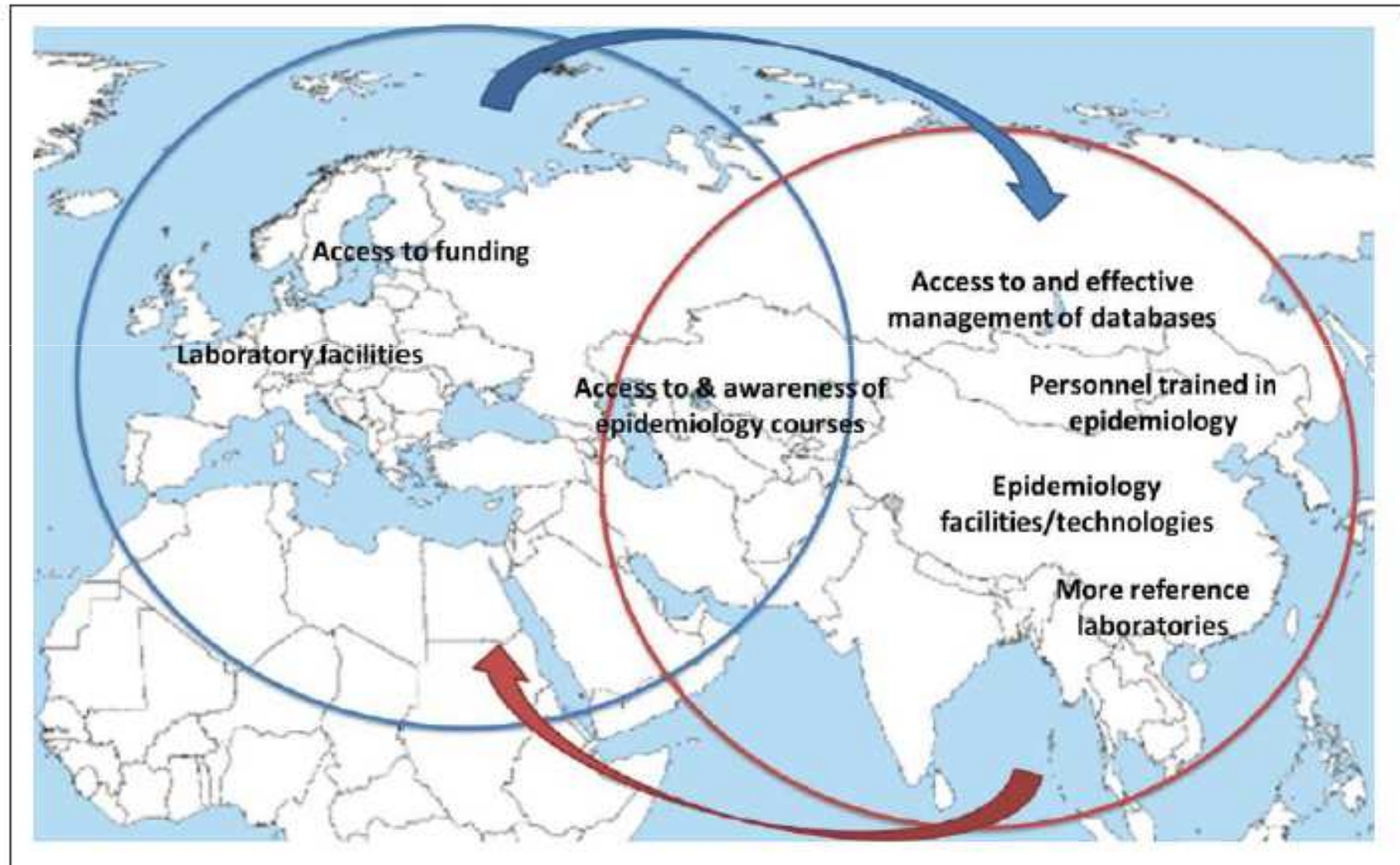


- Animal health priorities in EU and China
- Synergies and gaps
- Potentials for collaborations between EU and China
- The Field Epidemiology Training Programme for Veterinarians (FETPv)





- Bovine Tuberculosis
- African Swine Fever
- Classical Swine Fever
- Antimicrobial resistance
- Avian influenza
- Porcine Respiratory and Reproductive Syndrome
- Peste des Petits Ruminants





- Workshops
 - Risk-based surveillance
 - Vaccine and diagnostic technology development
 - ...
- Webinars
 - Rabies prevention and control
 - H7N9 epidemiology & surveillance
 - Research agendas
 - ...
- Exchange programmes
- Sustainable collaboration tools
 - Partnerships
 - Project applications






China Field Epidemiology Training Program for Veterinarians (FETPV)



Based on the training models implemented for human epidemiology

- US CDC- Epidemic Intelligence Service (EIS) program (1953)
- **FETP**
 - Initial objective: Train field epidemiologists in developing countries
 - **“Learn by doing”- 20-25% in classroom + 75-80% field work**
 - Owned by individual countries
 - Meet the needs of each country
- **PR China:**
 - FETP introduced in 2001
 - FETPV in 2010

70 
FETPs have been established
in 70 countries

80% 
Nearly 80% of graduates continue
to serve in public health programs
in their home countries

3,100 
Over 3,100 FETP graduates play
a key role in disease surveillance
and response



- Intensification of animal production systems
- 75% of emerging pathogens affecting humans are zoonotic
- Emergence of Avian Influenza viruses and AMR are major public and animal health issues
- Secure provision of skilled veterinary staff
 - Government services
 - Private industry



中华人民共和国农业部兽医局
Veterinary Bureau,
Ministry of Agriculture



中国动物卫生与流行病学中心
China Animal Health and
Epidemiology Center



USAID
FROM THE AMERICAN PEOPLE



联合国粮食及农业组织
Food and Agriculture Organization
of the United Nations



EU-China Trade Project (II)
中国-欧盟世贸项目(二期)



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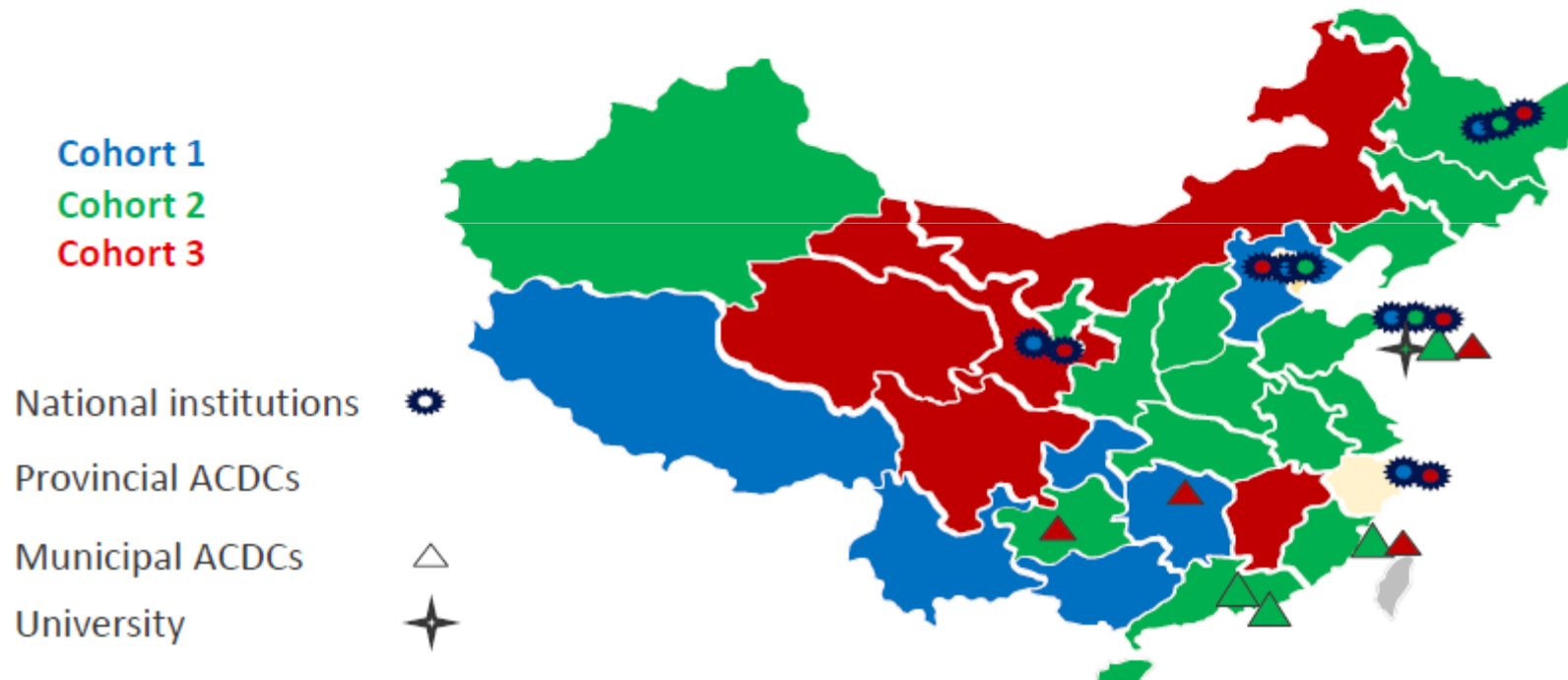
And many more: *Netherlands, USDA, CIRAD, US CDC, Murdoch University, FLI...*



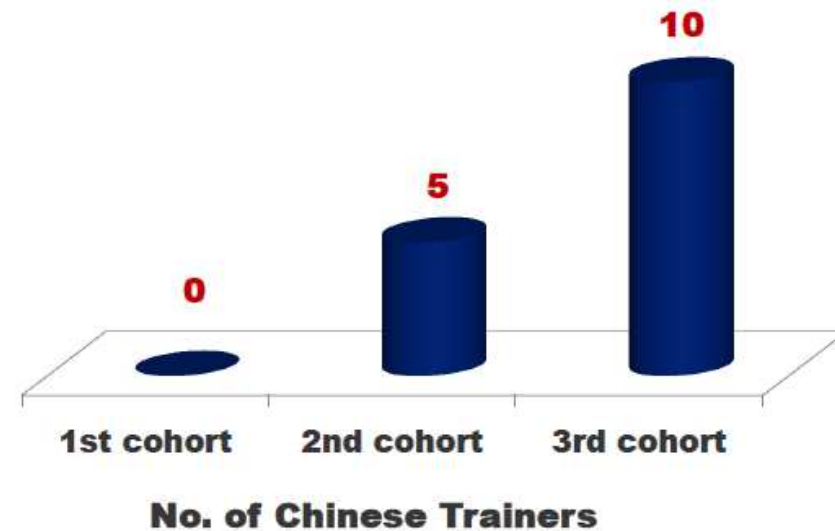
- Interdisciplinary (One Health) approaches in field epidemiology training
- Create a sustainable program
- Standardize the knowledge and methodology on applied veterinary epidemiology for China
- Strengthen partnerships among national, provincial and international institutions and foster collaboration
- Nurture trainers and mentors within a national network for training veterinary epidemiologists in China

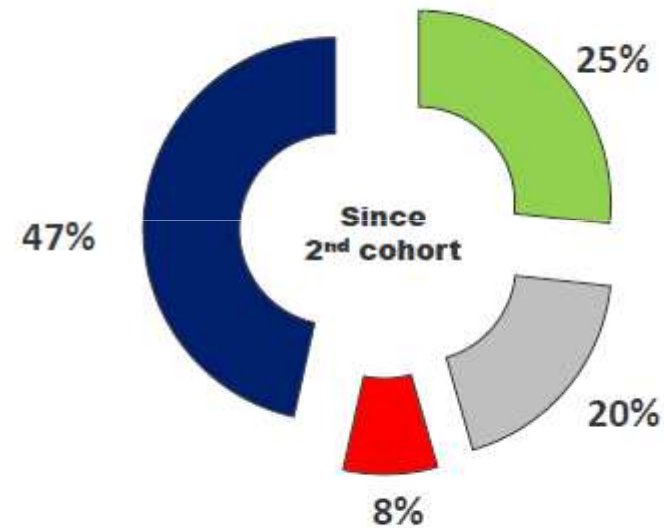
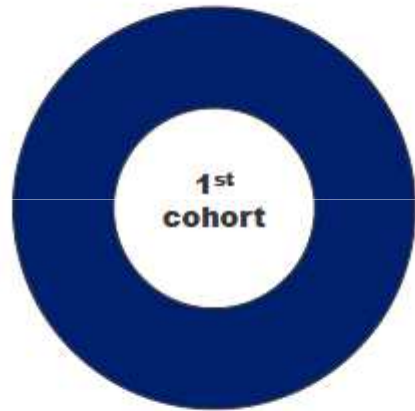
- **Five modules over 2 year-period:**
 - Introductory course (4 weeks)
 - Module 1: Outbreak investigation + Field exercise(s) (4 weeks)
 - Module 2: Surveillance (4 weeks)
 - Module 3: Risk Analysis (2 weeks)
 - Module 4: Integration and advanced topics (4 weeks)





- Build training capacity at national and local levels
- Ensure sustainability of C-FETPV programme on the long term
- Regular monitoring and program evaluation





- FAO/USAID
- Other international partners (EU, USDA, Netherlands)
- MoA, CAHEC, China
- Trainees' institutes



Joint courses between C-FETPV and C-FETP

- Synergies between medical and veterinary epidemiologists
- Promotes networking
- Identification common goals (“One Health”)



Veterinary Epidemiology workshop for Executives

- CAHEC/ EU-China Trade Project
- Senior Officials
- National and provincial Animal Centers from Disease Prevention and Control (CDCs)
- Aim- Strengthen ability and capacity for:
 - Effective animal and public health programs
 - Implementation of the National Medium and Long-Term Plan for Prevention and Control of Animal Epidemics (2012-2020).



Veterinary Epidemiology Training for University Academics

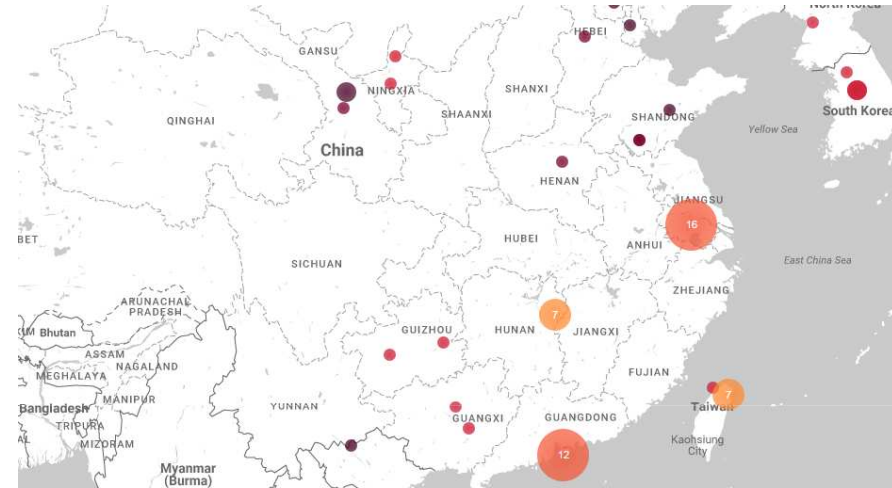
- FAO ECTAD China
- Planning and development of undergraduate curricula for epidemiology
 - Teaching methodologies
 - Development of case studies
- Postgraduate training





Re-emergence of H7N9 in Eastern China (Oct 14)

- Impact local poultry trade (Jan-Feb 15)
 - Reduced demand live birds
 - Decreased prices
 - Closure of wet markets
 - Severe disruption of supply chains



Involvement FETPV network

- Research projects
 - Markets supply chains
 - Epidemiology & evolution of influenza viruses
- Training
 - Value chain analysis
 - Surveillance
 - Biosecurity measures

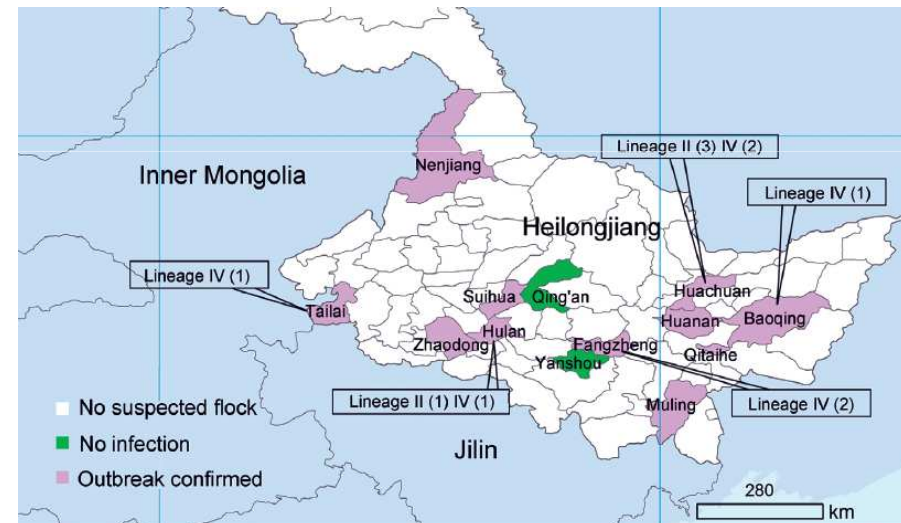




Outbreak investigations

- Integration of epidemiological and laboratory skills and knowledge
- Development and implementation of short and long term interventions
- Potential impact in policy
- May drive future research & surveillance efforts

Peste des Petits Ruminants outbreak 2014



(Source: Wang et al, Peste des Petits Ruminants virus in Heilongjiang Province, China, 2014, *EID*, Vol 21 No 4 April 2015)



Thank you for your attention!



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