



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

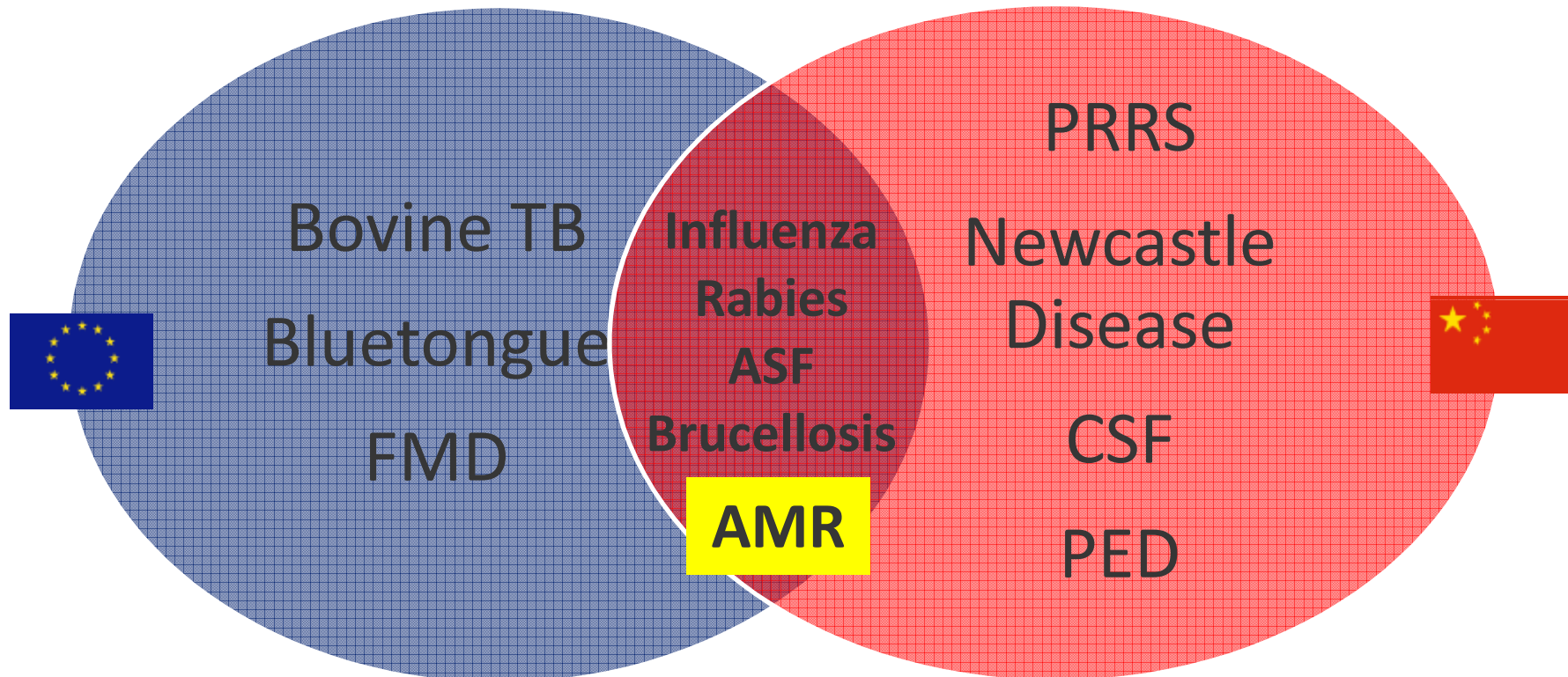
29th September, 2016, Madrid, Spain

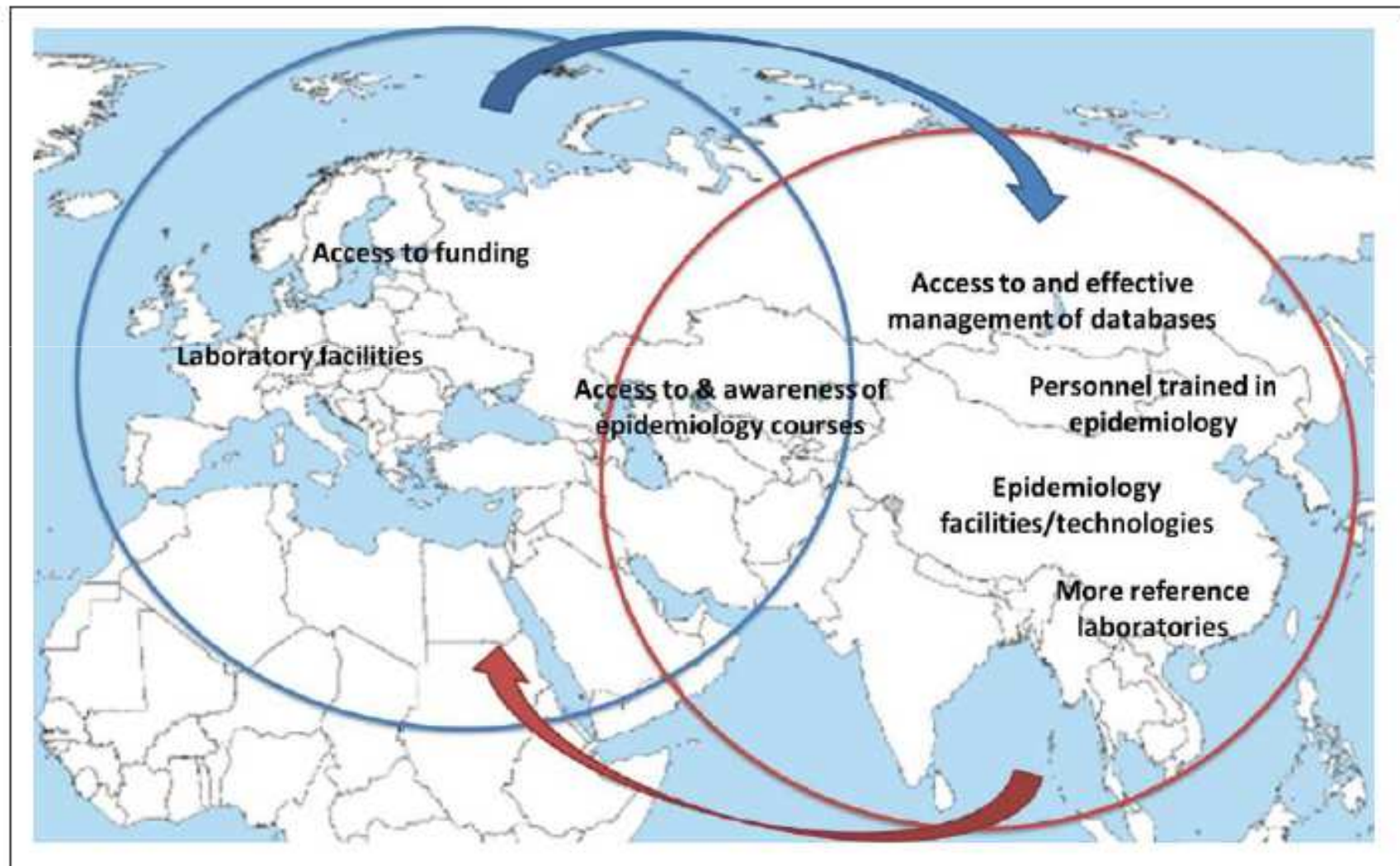


This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement No: 613804



- 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)







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- 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
 - ...
- Exchanges
- 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



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)



RVC Royal
Veterinary
College
University of London

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



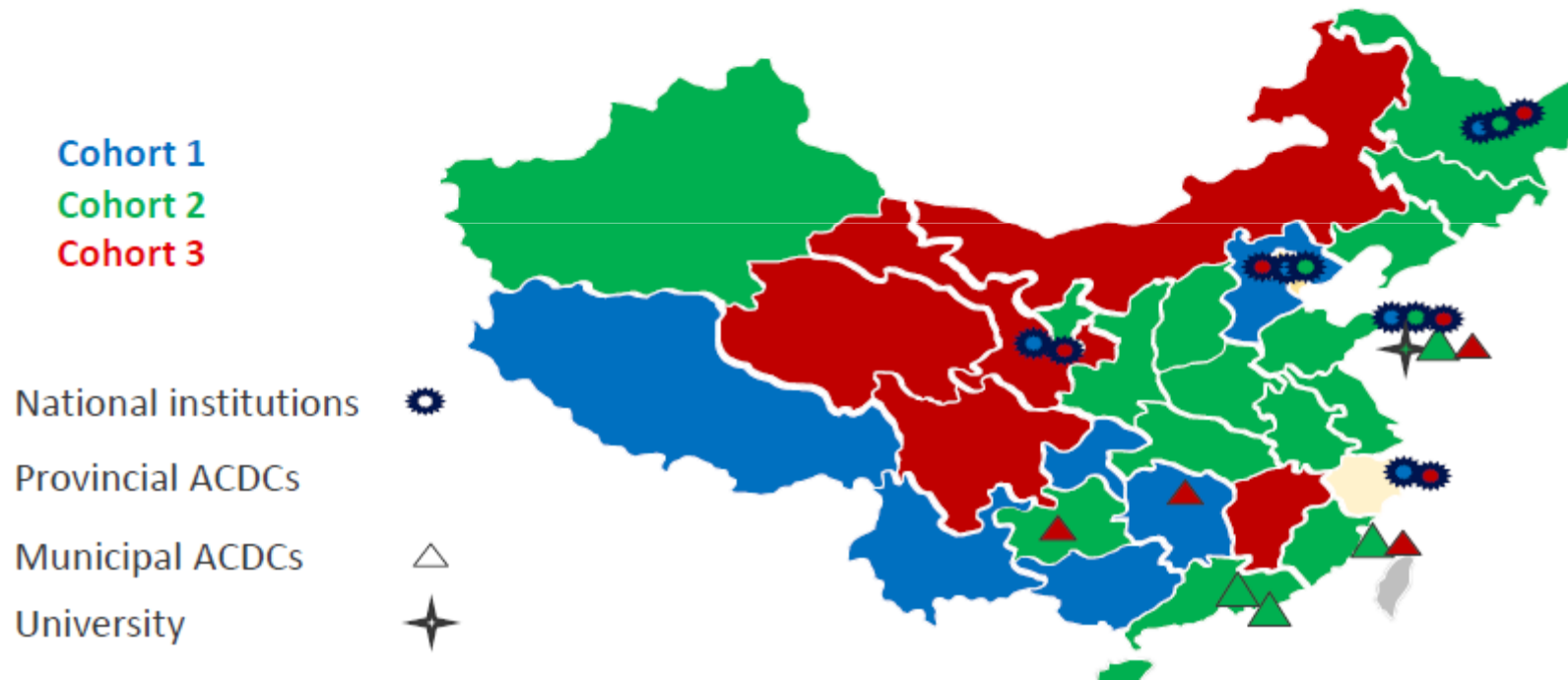
- Intensification of animal production systems
- 75% of emerging pathogens affecting humans are zoonotic
- Emergence of Avian Influenza viruses and AMR are major public and animal health issue
- Secure provision of skilled veterinary staff
 - Government services
 - Private industry



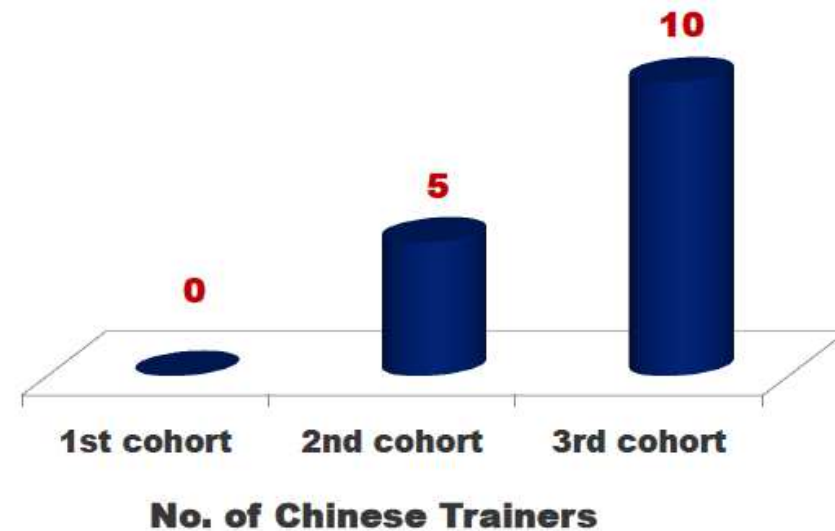
- Interdisciplinary (One Health) approaches in field epidemiology training
- Create a sustainable program
- Standardize the knowledge and methodology on applied veterinary epidemiology for China
- Strengthen partnerships among national, provincial and international institutions and foster collaboration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

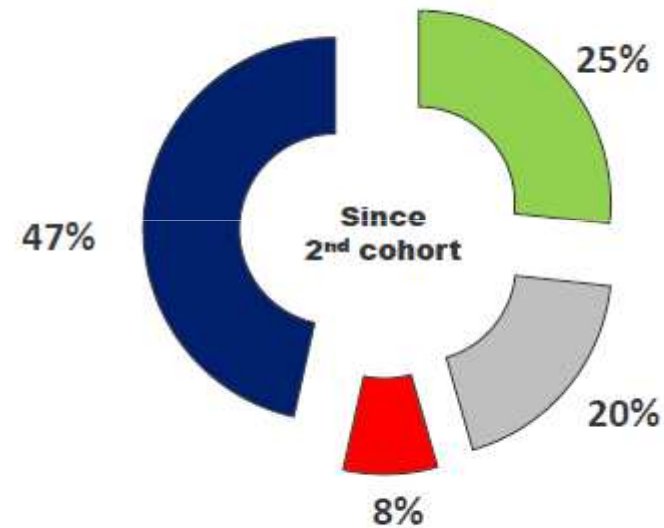
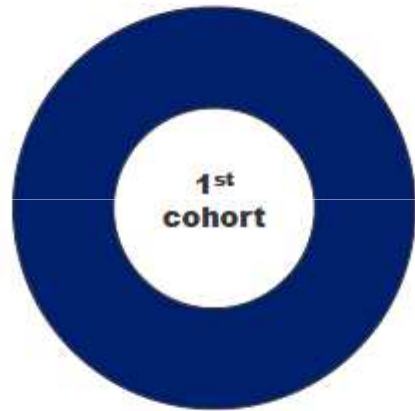
- **Five modules over 2 year-period:**
 - Introductory course (4 weeks)
 - Module 1: Outbreak investigation + Field exercise(s) (4 weeks)
 - Module 2: Surveillance (4 weeks)
 - Module 3: Risk Analysis (2 weeks)
 - Module 4: Integration and advanced topics (4 weeks)





- 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”)





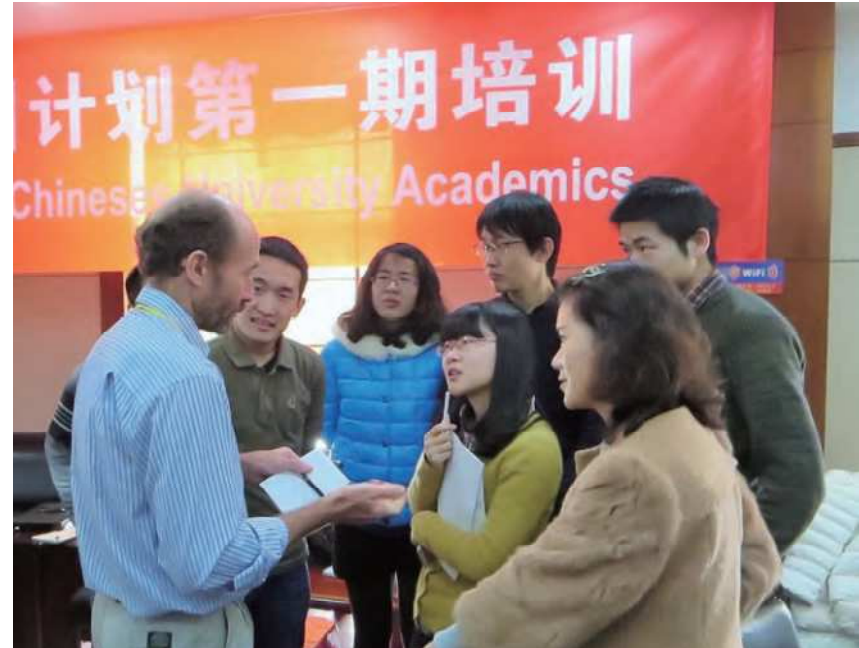
Veterinary Epidemiology workshop for Executives

- 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

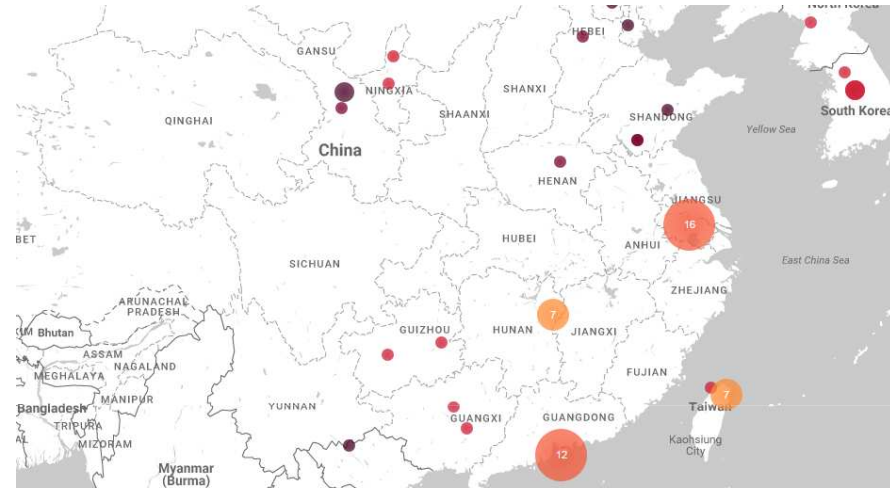
- FAO ECTAD China
- Planning and development of undergrad curricula for epidemiology
 - Teaching methodologies
 - Development of case studies
- Postgraduate training





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
 - Value chain analysis
 - Epidemiology & evolution of influenza viruses
- Training
 - Value chain analysis
 - Surveillance
 - Biosecurity measures

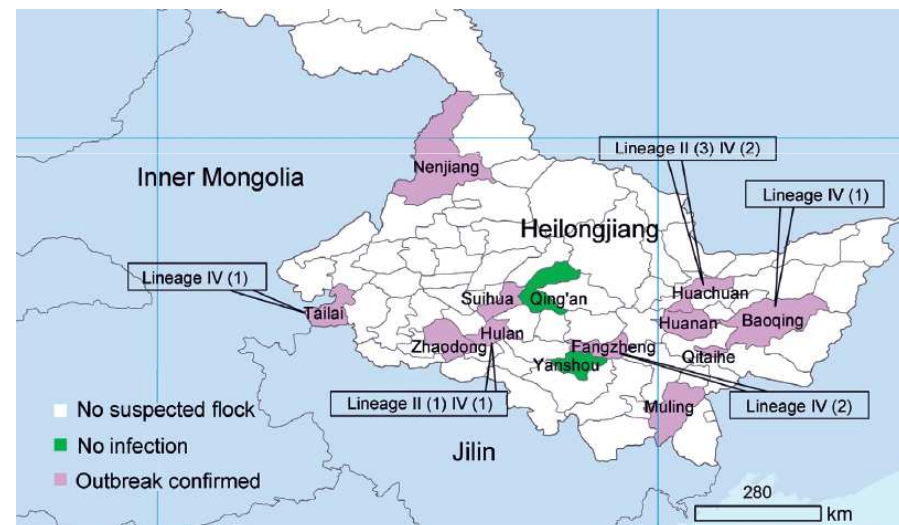




Outbreak investigations

- Combination 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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