INTERRISK: AN INTERNATIONAL
ONE HEALTH MASTER PROGRAM IN
SOUTHEAST ASIA
• The ComAcross project:
  – Companion approach for cross-sectoral collaboration in health risks management in SEA, at the human/animal/environment interface

• Four clusters of activities:
  – Activity 1: guiding target groups through the setup of a Community of Practice
  – Activity 2: “filling the gaps” in target groups skills, through professional trainings and capacity building
  – Activity 3: development of an academic Curriculum for awareness raising, training and capacity building of the next generation of One Health actors
  – Activity 4: disseminating ComAcross outcomes and lessons of the “Learning by Doing” process conducted throughout the action
The need for One Health training in Southeast Asia

• Southeast Asia: a hotspot for disease emergence and zoonotic diseases transmission
  – SARS, HPAI
  – leptospirosis, viral encephalitis

• One Health approach
  – cooperation between animal, public and environmental health institutions to defeat diseases that threaten both animal and human health.

• Training needs in SEA
  – lack of interdisciplinary opportunities for students
Web Survey

• To better evaluate training needs:
  – September – November 2011

• 53 participants
Web Survey: results

Key competencies expected in SEA

1. Identification, understanding and analyze of the health risks
2. Implementation of an epidemiological surveillance program
3. Implementation of a control program
4. Development of a risk prevention policy
5. Integration of the social and economic aspects in the programs activities
6. Transversal skills (participatory approach, communication, methodology)
7. Management tools used as an aid for decision-making
Web Survey: results

Most important topics identified by participants

- Risk Analysis
- Socio-economic assessments
- Surveillance
- Spatial analysis
- Antibiotic management
- Decision making
- Epidemiology
- Feed back to farmers
- Microbiology
- Advanced statistics
- Waste management
The philosophy of InterRisk Master

- **An international master program based in Southeast Asia**
  - International program (SEA and UE)
  - All courses held in Kasetsart University (Thailand)
  - Double-diploma French-Thai

- **A One Health approach**
  - Training for better assessment and management of health risks at the human, animal and ecosystem interface

- **Program aims and key competencies expected**
  - To conceptualise and design holistic programs integrating epidemiological, ecological, and socio-economic approaches
Equipement and facilities

- All courses held at Kasetsart University

- Teaching rooms

- Laboratory facilities for practicals

- Farm visits

- Field trips
Evaluation and management of risks in a systemic perspective

To set up a surveillance system

To identify and analyze health risks

To select and use appropriate tools in a decision-making perspective

To integrate social and economical aspects in the activities

Complementary skills

To set up a control program

To set up risk prevention activities
Career impact

- 40% of participants interviewed declared that they would be ready to hire InterRisk graduates in the future.
- More than 80% also declared that InterRisk students would have good job opportunities at the end of the Master.

- Wide range of career opportunities, both nationally and internationally, in **public health or veterinary public health**.
- Government, research, international organizations, NGOs, and other organisations where professionals are involved in the implementation and management of health programs.
- Some InterRisk degree recipients may engage beyond in PhD projects.
Key partners

- **Research institutes and universities**
  - IRD (Research Institute for Development, France), CNRS (National Center for Scientific Research, France)
  - Pasteur Institutes, Mahidol Faculty of Tropical Medicine and La-Oxford-Mahosot Hospital-Wellcome Trust Research Unit (LOMWRU) of Oxford University
  - AIT (Asian Institute of Technology)
  - Chulalongkorn University
  - ILRI (International Livestock Research Institute), Chiang Mai University and Gadja Madha University
  - The Royal University of Phnom Penh
The GREASE network

http://www.grease-network.org/

• Core Members

  cirad
  Kasetsart University
  National Institute for Veterinary Research
  National Veterinary Research Institute
  Central Mindanao University
  National University of Laos

• Associated Partners

  Asian Institute of Technology
  Gadjah Mada University
  Thammasat University
Key partners

• **Other stakeholders**
  - private sector (CP, BETAGRO...),
  - international agencies (OIE, FAO, WHO),
  - veterinary and public health services (Ministry of public health, Department of Livestock Development)
  - NGOs (AVSF-veterinarians without borders France, AVSF Canada, GARC - Global Alliance for Rabies Control)
Teaching philosophy

• “One Health”: making veterinary, medical and biosciences students work together
  – case studies from actual hotspots of effective One Health collaboration in South East Asia

• Zoonotic diseases and antimicrobial resistances will specifically be targeted
  – rabies, japanese encephalitis, leptospirosis, cysticercosis, influenza, antimicrobrial resistances

• Cross-country health issues
  – in order to push students to think and work at a regional scale when appropriate.

• Community-based participatory actions
Teaching philosophy

• Promoting active learning, based on real case problem-solving
  – practical works (lab experiments for disease diagnostic)
  – field visits (biosecurity audits, outbreak investigation)
  – computer-based problem solving (data analysis, biostatistics and epi).
  – self-study

• Facilitating interactions with professionals from the private agricultural sector, international organizations, governmental agencies, NGOs and research institutes
  – placement of students for training periods in on-going One Health projects,
  – bi-annual seminars gathering students, researchers, academic staff, project managers and industrials,
  – construction of an Alumni association & social events
Main lines of organization

• **Teaching committee**: representatives of each core institutions.
  – reviews requests for new courses or modifications in existing courses and course evaluations, substantial modifications to class sizes, course scheduling, learning objectives, and guidelines for teaching assistants
  – is responsible for the selection process of future candidates

• **External advisory board**: various disciplines in the One Health community, and various sectors (academic, private, institutional)
  – provides guidance to the teaching committee about the public health priorities in the SEA region, and about program evaluation
  – helps to identify opportunities of collaboration with other region partners and career opportunity for graduates.

• **Short and long term evaluation of the master**
Program structure – M1

- Scientific English
- Infectiology: infectious agents, microbiology, parasitology and drug-resistant forms, immunology, vaccinology and diagnostic tests
- Basic epidemiology and biostatistics
- Basic database management
- Production systems and value chains, principles and standards in biosecurity
- Research methodology

+ 4 months field training in a research institute, governmental organization or NGO
Program structure – M2

- Research methodology
- Advanced statistics
- Advanced epidemiology
- Geographic information systems
- Risk analysis
- Surveillance systems
- Animal Health Economics
- Social approaches in health risk
- Prevention and control of zoonotic diseases
- Health ecology

+ 6 months field training in a research institute, governmental organization or NGO

Master thesis defended in front of an academic master jury + Presentation of results in a scientific conference with proceedings.
Entry requirements

• Students from Southeast Asian and European countries.
  – Possibilities of scholarships are available

• Bachelor’s degree in: economics, social or political sciences, medicine, pharmacy, biology, veterinary schools, engineering schools, agronomy, ecology and environmental sciences.

• Admission in M2 is open to holders of a M1 level.

• Possibility of direct admission in M1 (InterRisk teaching committee):
  – advanced experience in public health (up to year 5), degree in veterinary or medical sciences, outstanding performances in a bachelor curriculum in public health and related sciences.
Launching of the Master

• Information and advertisement: September 2014
• Opening for student registration: April 2015
• Call for applications will be announced through several websites, including GREASE website: http://www.grease-network.com/

• Start of the Master 1: August 2015 (M1 & M2)

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• Registration fees: 5 000 – 10 000 euros
  – to be validated by the steering committee

• Scholarships available (in 2015):
  – M1: 4 full, 4 half
  – M2: 2 full, 4 half

• Further scholarships to be confirmed
  – Kasetsart University
  – French University
  – French Embassy
  – USAID under THOHUN
  – Other
Stand alone modules
- Professional training

- GIS (1 week) – 900 €
- Risk analysis (2 weeks) – 1500 €
- Epidemiomosurveillance (3 weeks) – 2200 €
- Socio-economic approaches to health risks (3 weeks) – 2200 €
- Advanced biostatistics and epidemiology (4 weeks) – 3000 €
Thanks for your attention

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