Workshop ECVPH on economics applied to animal health

Trainer:  
Dr. Barbara Häslers, PhD  
bhaesler@rvc.ac.uk  
Royal Veterinary College, London, UK  
Dr. Jörn Gethmann  
Joern.Gethmann@fli.de  
Friedrich-Loeffler-Institut

Organisation:  
Franziska Schäkel  
Institut für Biometrie, Epidemiologie und Informationsverarbeitung, WHO  
Collaborating Centre for Research and Training for Health at the Human-Animal-Environment Interface  
Tierärztliche Hochschule Hannover  
franziska.schaekel@tiho-hannover.de

Dr. Roswitha Merle  
Institut für Veterinär-Epidemiologie und Biometrie  
Fachbereich Veterinärmedizin  
FU Berlin  
roswitha.merle@fu-berlin.de

DATES, LOCATION AND REGISTRATION INFOS

Date: 8 - 10 July 2019
Location: University of Veterinary Medicine Hannover, Foundation  
Bünteweg 2,  
30559 Hannover  
Germany
Room: TiHo Tower, Room 217
Language: English

Participant’s places are limited!

Registration is available on a first-come-first-serve basis until June 11, 2019, please send an Email including your name and affiliation to Franziska.schaekel@tiho-hannover.de.

Participation is free of charge; costs for lunch, hotel as well as any other costs are not covered!

SCOPE AND AIM

Animal health issues play an important role in animal production specifically and in society as a whole. Economic concepts, approaches and methods applied to animal health are important instruments to support decision making related to animal health management at different levels of society. Economics in animal health studies the economic consequences of disease in different populations, investigates how scarce resources (e.g. money, time and labour) can be allocated in an efficient way to animal health management and looks into human behaviour and

---

1 | ECPVH workshop economics applied to animal health, Hannover, July 2019
decision-making including economic incentives and disincentives. It is the study on how well informed, rational decisions can be taken where risks, costs and benefits of alternatives are estimated and compared.

This workshop aims at conveying the basics of economics and its use in animal health research and decision making. The workshop will provide a combination of lectures, discussions, small exercises as well as group work.

**CORE CONCEPTS**

During the workshop, the following core concepts will be covered:

(a) Basic methodological concepts and definitions of economics applied to animal health economics (EAH) including
   a. Rational choice
   b. Opportunity cost
   c. Marginality

(b) Disease impact assessment

(c) Application of EAH principles and models to animal diseases and veterinary interventions at the farm level
   a. Gross margin analysis
   b. Partial budget analysis, financial cost-benefit analysis

(d) Application of EAH principles and models to animal disease outbreaks and disease control measures at the population level
   a. Baselines
   b. Modelling data
   c. Social cost-benefit analysis

**LEARNING OBJECTIVES**

At the end of this course you should be able to

1. Explain critical economic concepts relevant to inform resource allocation for animal disease management
2. Outline the necessary steps to assess disease impact and explain the use of this information for decision making
3. Conduct basic assessments of health and disease interventions at different levels
4. Discuss the principles of data availability, data collection and modelling for economic analysis

**PREPARATION AND MATERIALS**

This is an introductory course to economics applied to animal health and we do not expect participants to have any previous knowledge on economics. However, some of the exercises will be done in Excel and it would therefore be good to familiarise yourself with Excel if you have not used the software before.

Participants should bring their own laptops. It is not foreseen that specialist software will need to be downloaded and installed; the common Office package or equivalent will be sufficient.

All course materials will be made available throughout the course in a shared folder.
## TIMETABLE

### DAY 1 (8 JULY 2019)

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.00-14.00</td>
<td>Introduction to course and structure, personal introductions and student expectations Group activity to discuss what economics is and where / how economics plays a role in animal health</td>
<td>Barbara Häsler (and all)</td>
</tr>
<tr>
<td>14.00-15.00</td>
<td>Lecture (including short exercise): What is economics, key concepts – Rational choice, opportunity cost, marginality</td>
<td>Jörn Gethmann</td>
</tr>
<tr>
<td>15.00-15.30</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>15.30-16.00</td>
<td>Lecture impact assessment and baselines</td>
<td>Barbara Häsler</td>
</tr>
<tr>
<td>16.00-17.00</td>
<td>Exercise on impact assessment</td>
<td>Barbara Häsler</td>
</tr>
<tr>
<td>17.00-17.30</td>
<td>Introduction to group work exercise</td>
<td>Jörn Gethmann</td>
</tr>
</tbody>
</table>

### DAY 2 (9 JULY 2019)

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>08.30-09.30</td>
<td>Work on group task</td>
<td>All</td>
</tr>
<tr>
<td>09.30-10.30</td>
<td>Lecture: Gross margin analysis including cost assessment</td>
<td>Barbara Häsler</td>
</tr>
<tr>
<td>10.30-11.00</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>11.00-12.30</td>
<td>Exercise gross margin analysis</td>
<td>Jörn Gethmann</td>
</tr>
<tr>
<td>12.30-13.30</td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td>13.30-15.00</td>
<td>Lecture: Partial budget analysis</td>
<td>Barbara Häsler</td>
</tr>
<tr>
<td>15.00-15.30</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>15.30-16.30</td>
<td>Exercise: Partial budget analysis</td>
<td>Barbara Häsler</td>
</tr>
<tr>
<td>16.30-17.30</td>
<td>Work on group task</td>
<td>All</td>
</tr>
</tbody>
</table>

### DAY 3 (10 JULY 2019)

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>08.30-09.30</td>
<td>Lecture: Cost-benefit analysis (financial and social)</td>
<td>Jörn Gethmann</td>
</tr>
<tr>
<td>09.30-10.30</td>
<td>Exercise: Cost-benefit analysis</td>
<td>Barbara Häsler</td>
</tr>
<tr>
<td>10.30-11.00</td>
<td>Break</td>
<td></td>
</tr>
<tr>
<td>11.00-11.30</td>
<td>Work on group task</td>
<td>All</td>
</tr>
<tr>
<td>11.30-12.30</td>
<td>Short presentations of group work</td>
<td>All</td>
</tr>
<tr>
<td>12.30-13.30</td>
<td>Lunch</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Afternoon</td>
<td></td>
</tr>
</tbody>
</table>
Jörn Gethmann is a veterinarian specialized in veterinary epidemiology and animal health economics. He is working as a senior scientist at the Institute of Epidemiology, Friedrich Loeffler-Institute. His work focuses on the management of animal diseases including animal disease economics. His recent research concentrates on the economics of Bluetongue disease, BSE and BVD.

Barbara Häslar has a first degree in veterinary medicine and specialises in the use of economics applied to animal health and veterinary epidemiology. Her PhD was on the economics of animal health surveillance and she obtained a postgraduate certificate in higher education in economics. Her research focuses on the evaluation of disease mitigation strategies in developed and developing countries, with a particular focus on food systems approaches. She works as a Senior Lecturer in Agrihealth at the Royal Veterinary College and the Leverhulme Centre for Integrative Research in Agriculture and Health.