

# ELLS SUMMER SCHOOL

## Contributing Institutes

University of Hohenheim, Faculty of Agricultural Sciences and Faculty of Natural Sciences:

- Animal Science
- Biological Chemistry and Nutrition
- Genetics, Dept. General Virology
- Microbiology
- Food Microbiology
- Phytomedicine
- Plant Physiology and Biotechnology
- Zoology, Depts. Animal Ecology, Parasitology

## Join us!



## What is ELLS

The **Euroleague for Life Sciences (ELLS)** is a network of leading universities cooperating in the fields of Natural Resource Management, Agricultural and Forestry Sciences, Life Sciences, Animal Sciences, Nutrition Sciences, Food Sciences, and Environmental Sciences. The focus of ELLS is on joint teaching and learning, student and staff mobility and quality assurance.

## Further Information

For further information please visit our websites:

[www.euroleague.uni-hohenheim.de](http://www.euroleague.uni-hohenheim.de)

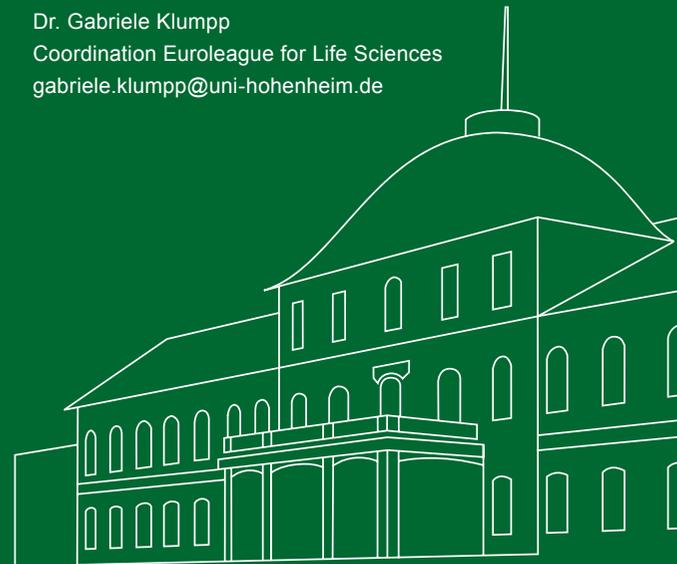
[www.euroleague-study.org](http://www.euroleague-study.org)

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**Euroleague**  
FOR LIFE SCIENCES

UNIVERSITY OF HOHENHEIM



## Summer School

# Pathogens, Parasites and their Hosts

## Ecology, Molecular Interactions and Evolution of Animals, Plants and their Antagonists

July 9 - July 27, 2018



[www.euroleague-study.org/pph](http://www.euroleague-study.org/pph)

## Course Contents

Pathogen-host interactions are a major focus in the work of several institutes at the University of Hohenheim. In a joint initiative of the Faculties of Agricultural Sciences and Natural Sciences, host-pathogen interactions will be the subject of a 3 weeks summer school in July 2018.

The summer school will introduce into the ecology, molecular interactions, and evolution of pathogen-host relationships with respect to

animals,  
plants,  
and microorganisms.

These topics will be addressed in a series of lectures,  
laboratory experiments,  
and excursions.

Following an integrative approach, the aim of the summer school will be a comparison of different biological systems, showing both striking similarities and surprising peculiarities.

## Key Words

How pathogens meet their hosts:

- Behavioural mechanisms
- Chemical and physical recognition
- Life cycles and zoonoses
- Mechanisms of invasion

Host resistance:

- Host resistance in plants and animals
- Secondary plant compounds
- Innate immunity
- Immunology of inflammation

How to overcome host defence:

- Immune suppression
- Antigenic variation
- Molecular mimikry
- Toxins

Coevolution:

- Adaptation between host and pathogen
- Breeding of resistant plants and animals
- Resistance genes in plants and animals
- Multitrophic level interactions

At a glance	
<i>Duration</i>	3 weeks - July 9 to July 27, 2018
<i>Credits</i>	7,5 ECTS
<i>Participants</i>	The course is aimed at students of biology and agricultural sciences or related subjects who have already passed university elementary courses of at least 2 years
<i>Course structure</i>	Mix of lectures, laboratory experience and excursions
<i>Exam</i>	Written exam at the end of the Summer School + group presentations
<i>Location</i>	University of Hohenheim, 70599 Stuttgart, Germany
<i>Organiser</i>	Euroleague for Life Sciences, Office of Hohenheim
<i>Costs</i>	350 € for housing and 50 € for a ticket for public transport. Travel expenses to Hohenheim and food are not included
<i>Call for applications</i>	Please use application forms provided under <a href="http://www.euroleague-study.org/pph">http://www.euroleague-study.org/pph</a>
<i>Deadline for application</i>	March 31, 2018 or until places are filled

