



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 2012.

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

Participants: 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.

The maximum number of participants is 20.

Credits: 6 ECTS

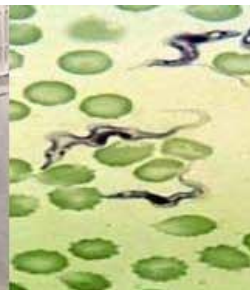
Location: University of Hohenheim,
70599 Stuttgart, Germany

Organiser: Euroleague for Life Sciences,
Office of Hohenheim

Costs: 300 EURO for housing and 50 € for a ticket for public transport. Travel expenses to Hohenheim and food are not included.

Call for applications: Please use application forms provided under
<https://euroleague.uni-hohenheim.de/sommer.html>.

Deadline for application: 30 April 2012 or until places are filled.





Contributing institutes

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

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

Further Information

For further information please contact our websites:

<http://euroleague-study.org/en/programs/>
or

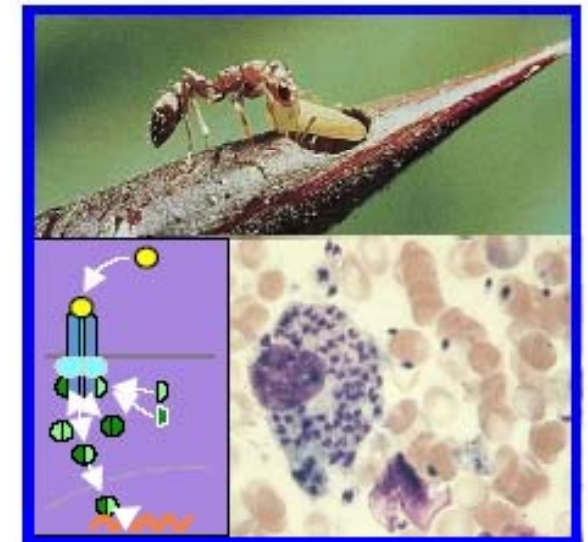
<https://euroleague.uni-hohenheim.de/>

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Pathogens, Parasites and their Hosts

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



Summer School
9 July – 27 July 2012

UNIVERSITY OF HOHENHEIM

