



Summer School 2017: “Helminths”

What is it about? We want to introduce participants to the foundations of helminthology, with a focus on biology, taxonomy and determination of specimen. The Summer School is a cooperation between the University of Veterinary Medicine Vienna (Prof. A. Joachim), the Natural History Museum Vienna (Dr. H. Sattmann) and the Zoological and Botanical Society Austria (Prof. F. Schiemer, University of Vienna), as well as the European Veterinary Parasitology College.

Time and duration: September 11-15, 2017, 1 week full-time

Maximum number of participants: 20, incl. 5 EVPC Residents

Costs for consumables: € 150,-/participant

Course language: English

Summary: During the summer school, participants will be introduced to the foundations of systematic helminthology by presentations, demonstrations and, of course, mostly practicals. By the end of the course students will be able to reliably differentiate the major taxonomic groups, and they will familiarise themselves with the biological principles of helminths regarding reproduction, spreading, infection and interactions with the host. Helminths will be isolated from different host species, including fish and mammals, during post mortem examinations; specimen isolated from invertebrates, amphibians, reptiles, birds and other hosts will be included in the practical parts on preservation, preparation and determination. Classical methods of morphological determination by light and scanning electron microscopy will be complemented by molecular typing techniques. Production of permanent mounts will be carried out and the organisation of a scientific collection including electronic metadata in a database will be demonstrated. For details see the appendix “Course Schedule”.

Experts involved: Prof. Joachim (University of Veterinary Medicine Vienna), Dr. Sattmann (Natural History Museum Vienna), Dr. Duscher (University of Veterinary Medicine Vienna), Dr. Konecny (Environment Agency Austria), Dr. Führer (University of Veterinary Medicine Vienna), Mag. Hörweg (Natural History Museum Vienna), Dr. Hinney (University of Veterinary Medicine Vienna)

Who can participate? Students of biology, veterinary medicine or related subjects, as well as residents of the EVPC.

When does the application start? Application will open March 1st, 2017. You can apply with a short letter of motivation and CV to Anja.Joachim@vetmeduni.ac.at. Please note that applications will be handled on a “first-come-first-served” basis, but from March 1st, 2017 onwards only!



Appendix: Planned schedule

| Day | Time | Place* | Presentations | Practicals |
|---------------------------|-------------|-------------|---|--|
| 1, Monday, 11/09 | 10.00-12.00 | NHM | General introduction Systematics of platyhelminths | |
| | 13.00-17.00 | NHM | Tour of the Museum Collection, „Behind the scenes“ | Demonstration of selected specimens of platyhelminths; hatching of cercariae; dissection of molluscs as intermediate hosts |
| 2, Tuesday, 12/09 | 10.00-12.00 | NHM | Biology of platyhelminths Systematics of nematodes | |
| | 13.00-17.00 | | | Dissection of amphibia, fish and mammals Sampling of tissue and parasites for molecular analysis, preparation of mounts |
| 3, Wednesday, 13/09 | 10.00-12.00 | Vetmed | Biology of nematodes Systematics and biology of other helminths | |
| | 13.00-17.00 | | | Dissection of hosts and sampling cont. |
| 4, Thursday, 14/09 | 10.00-12.00 | Vetmed | Introduction to morphological and molecular determination (Barcoding) | Morphological determination of specimen |
| | 13.00-17.00 | | | Molecular determination of specimen In vitro cultivation of nematode larvae (demonstration and practical work) |
| 5, Friday, 15/09 | 10.00-12.00 | Vetmed, NHM | Presentation of results | |
| | 13.00-17.00 | tbd | Presentation cont. Roundup and discussion | |

*NHM: Natural History Museum Vienna, www.nhm-wien.ac.at

*Vetmed: University of Veterinary Medicine Vienna, www.vetmeduni.ac.at/

