Current information about teaching and research in veterinary parasitology in Hungary.
PARAZITOLÓGIAI
ÉS
ÁLLATTANI TANSZÉK
DEPARTMENT OF PARASITOLOGY
AND
ZOLOGY
The department was established in 1929 by the world-famous parasitologist, Sándor Kotlán, who led education and research until 1966.

From 1966 Tibor Kobulej, and from 1981 Tibor Kassai became the head of the department. They were followed by István Varga (1995–2001).

The level of education is indicated by the fact that two books, Parasitologia by Sándor Kotlán (1944), and Veterinary helminthology by Tibor Kassai (1999) were translated into several languages and are still internationally acknowledged.
Head: Prof. habil. Róbert Farkas DVM PhD DSc Dipl EVPC
Associate professor: Dr. habil. Sándor Hornok DVM PhD; Dr habil. Gábor Földvári MSc, PhD
Senior researchers: (Dr. Éva Fok DVM PhD); Dr. habil. Gábor Majoros DVM PhD

PhD-students: Dr Alexandra Juhász DVM; Dr. Flaisz Barbabra DVM;
Sándor Szekeres MSc in biology; Krisztina Szőke MSc in biology

Bioengineer: Nóra Takács
Laboratory technicians: Mónika Gyurkovszky; Veronika Tóth

Secretary: Istvánne Balázs
### Teaching

- **Obligatory courses**
  - **Zoology** (in Hungarian, German and English)
    - 30 lectures in the 1st semester
  - **Parasitology** (in Hungarian and English)
    - 45+30 lectures and 30+30 practicals in the 6th and 7th semesters
  - **Honey Bee Diseases** (in Hungarian and English)
    - 12 lectures in the 8th semester
- **Elective courses**
  - Arthropod vectors and vector-borne pathogens of veterinary and public health importance in Europe (in Hungarian and English)
    - 30 lectures from the 7th semester
  - Parasitic zoonoses (in Hungarian and English)
    - 15 lectures from the 8th semester
  - Parasitoses of different companion and zoo, safari park and biofarm animals and their importance in the practice (in Hungarian and English)
    - 15 lectures from the 8th semester

**In Hungarian: ca 150 lectures and 400 practicals/per year**

**In English: 117 lectures, 360 practicals/year**

**In German: 30 lectures/year**

In the last 4 years:
- 9 theses (including 5 in English) were defended at the Department
- 20 students (including 7 English) participated in the Students' Scientific Congresses
Research

• Major research projects of the department
  – EDENext (Biology and control of vector-borne infections in Europe).FP7-HEALTH-2010-Single-stage Grant agreement number 261504
  – EurNegVec: European Network for Neglected Vectors and Vector-borne Infections: (COST TD1303)

• Research topics
  – Vectors and vector-borne diseases of domesticated and wild animals
  – Traumatic myiasis
  – Epidemiology and ecology of hard ticks and tick-borne pathogens
  – Development of protostrongylid larvae in the intermediate host and mode of infection of the final host
  – Biocontrol of arthropods of veterinary importance
  – Nematode infections of livestock
  – Helminthoses of companion animals
  – Larval toxocarosis
  – Biocontrol of helminth infections of veterinary importance
Number and IF of the publications

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Professional collaborations

- Lóránd Eötvös University, Budapest, Hungary
- Béla Johan National Center for Epidemiology, Budapest, Hungary
- Institute for Veterinary Medical Research, Hungarian Academy of Sciences, Budapest, Hungary
- University of Veterinary Medicine, Vienna, Austria
- Banat’s University of Agricultural Sciences and Veterinary Medicine, Timisoara, Romania
- Parasitological Institute, Slovak Academy of Sciences, Kosice, Slovakia
- University of Novi Sad, Serbia
- University of Veterinary and Pharmaceutical Sciences, Brno, Czech Republic
- Utrecht University, The Netherlands
- National Institute of Public Health and Environment, Bilthoven, The Netherlands
- The Natural History Museum, London, UK
- Kingston University, Kingston upon Thames, UK
- University of Zurich, Zurich, Switzerland
- Instituto de Investigación en Recursos Cinegéticos, Ciudad Real, Spain
- Università degli Studi di Milano, Italy
- USDA Center for Medical, Agricultural & Veterinary Entomology, Gainesville, Florida, USA
Diagnostic and laboratory services

Service for veterinarians and public
- detection of parasites (qualitative and quantitative examinations)
- control of antiparasitic treatments of animals
- applied methods: morphological inspections and identification, serological and molecular biological

Collaboration with researchers
- monitoring of parasites and joint experiments

Consultancy and supervision
- professional help to practitioners, farmers, pet owners

Diagnostic service of the department

![Graph showing diagnostic service of the department from 2012 to 2015]

- Blue bars represent the total number of diagnostic services.
- Red bars represent diagnostic services provided by the faculty.
Prof. Dr. Egri Borisz  
University of West Hungary

Dr. László Sugár prof. emeritus  
University of West Hungary

Dr. Tamás Sréter PhD  
NÉBIH Diagnostic Laboratory
Fish Pathology and Parasitology Research Team

Institute for Veterinary Medical Research,
Centre for Agricultural Research,
Hungarian Academy of Sciences, Budapest

Hungarian-Serbian Parasitologist Meeting, Szeged, 14th October 2016
Fish Pathology and Parasitology Research Team

At the Veterinary Medical Research Institute of the Hungarian Academy of Sciences, fish pathology research looks back upon a past of 56 years. At present the Fish Pathology and Parasitology Research Team comprises 7 researchers, 1 retired scientific adviser and 1 institute engineer.

The research conducted by the team comprises the fields of fish pathology and parasitology.

Head: Csaba Székely, fisheries engineer, PhD, scientific adviser, honorary professor

Members: László Egyed, DVM, PhD, senior researcher
Gábor Cech, biologist, PhD, research associate
Boglárka Selleyi, molecular biologist, PhD, research associate
Réka Borzák, biologist, PhD student, junior researcher
Diána Sándor, biologist PhD student
Ádám Varga, agricultural engineer, institute engineer

Founder of the team: Kálmán Molnár, DSc, DVM, retired scientific adviser
Members of the Fish Pathology and Parasitology Team (IVMR CAR HAS)

Csaba Székely

Kálmán Molnár

Réka Borzák

Boglárka Sellyei

Ádám Varga

Gábor Cech
Work in the lab and at the field

- **laboratory**
- **Samplings**
  - Lake of Balaton
  - Lake of Kis-Balaton
  - Danube River
Research Activities

The major task is to study diseases causing damages and mortalities of fishes, but investigation of parasitic infections has a priority.

- General parasitological character on pond cultured and natural water fishes
- Development and pathomechanism of metazoans belonging to the Myxozoa
- Occurrence, host specificity, adaptation to hosts and treatment of fish coccidia
- Gill diseases caused by monogeneans infecting the common carp, Chinese carps and the European catfish
- Development and pathomechanisms of Dracunculoid (Philometra, Skrjabillanus) and Anguillicoloid nematodes with a special attention to Anguillicoloides crassus caused mass mortality in Lake Balaton
- Description of new, unknown fish parasites in Hungary, and evaluation of their pathogenic importance
- Connections between unfavourable environmental effects and diseases caused by fish parasites
- New treatments against economically important parasites of fish
- Ulcerative disease - associated bacteriological studies of cultured and natural water fishes focusing on Aeromonas and Flavobacterium species
- Investigation of viruses involvement in mass mortality of the farmed and natural water fishes
Current and recent Projects

- FCT (Fundacao para a Ciencia e a Tecnologia): IDASS Myx Infection dynamic of Aquacultured Seabass and Seabream by Myxozoa (2012-2015)
- Malaysian Cooperation: Brain Gain Malaysia, Malaysian PhD student
- ParaFishControl (2015-2020) – EU Horizon 2020
- GINOP-2.3.2-15 (2016-2020) - Balaton Fish Research Project
Recent major publications of the team (2015-2016)


