vetmeduni

Annual Report 2023
University of Veterinary Medicine, Vienna

Photos: (Cover) Thomas Suchanek/Vetmeduni, (University) Thomas Suchanek/Vetmeduni

University

Petra Winter
Rector

In 2023, a number of forward-looking decisions and projects took centre stage. Under the vetmeduni+ process, our scientific operations have been reorganised to further boost collaboration and common actions in research, teaching, clinical and administrative work. The Centre for Veterinary Systems Transformation and Sustainability, which is to be newly established, illustrates that also the programme contents revolve around transformation. Other important steps for further development include the new Development Plan and new appointments – inter alia for the Uni-Med-Impulse 2030 programme, the new Master's Programme for Digital Animal Health Management as well as the newly published Values Folder. The lecture series 'From (keeping) silence to remembrance' provided valuable impetus for our future culture of remembrance.

Michaela Schaffhauser-Linzatti
Chairwoman of the University Council

The past year was characterised by institutional development. The Development Plan approved in December focuses on sustainable strategies and on the expansion of Vetmeduni as a leading institution in research and teaching, thus forming the basis for the Performance Agreement to be negotiated in 2024. Within the framework of vetmeduni+, an integrative process of analysing the university's composition and organisation was carried out, which has resulted in an Organisation Plan focusing on greater efficiency in research and leaner structures in administrative units. The University Council congratulates the university's governing bodies on their outstanding leadership in the past year despite ongoing challenges.

Manuela Raith
Vice-Rector for Resources and Digitalisation

In negotiations with the Federal Ministry of Education, Science and Research (BMBWF), our university again succeeded in obtaining more funds to compensate for inflation in 2023 enabling us to implement the projects planned for the 2022-2024 Performance Agreement Period. I am particularly pleased that the key performance indicators relevant for management (study programmes subject to exams, basic research output including professorships and equivalents) were achieved by the cut-off date, with tolerance levels being taken into account. My thanks go to each and every one who contributed to achieving these indicators! I would also like to underscore the contribution of all those who helped reduce energy consumption in 2023 and thus enhance climate protection through their conduct within the Mission GreenVet initiative launched in 2022.

Photos: (1, 3) Christian Steinbrenner/Vetmeduni, (2) Philipp Lichtenegger/Vetmeduni

University

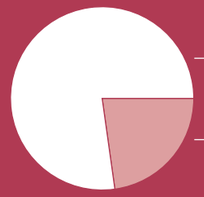
PROFESSORS

18 women
24 men
42 total

ACADEMIC STAFF

474 women
247 men
721 total

STUDENTS



1,965 women
576 men
2,541 total

ADMINISTRATIVE AND SUPPORT STAFF

462 women
211 men
673 total

STAFF
1,474

STUDENTS
2,541
total (degree and non-degree students)

ANIMAL PATIENTS
40,298
total (figures exclude productive poultry and visits for the purpose of herd health management)

WORLDWIDE SUBJECT RANKINGS: TOP RESULTS FOR VETMEDUNI

In 2023, the University of Veterinary Medicine, Vienna, was again among the top performers in the global ranking of academic subjects, also known as Shanghai Ranking. Scoring the 11th rank in the subject of 'Veterinary Sciences', Vetmeduni is an integral part of internationally leading universities. With its 32nd place in the Quacquarelli Symonds world university rankings by subjects, Vetmeduni remained within the top 50 universities worldwide in the year under report.

NEW ORGANISATION PLAN AT VETMEDUNI

A university-wide participatory process called 'vetmeduni+ shaping the future together' was launched in 2023 resulting in a new structure for Vetmeduni, which was adopted by the University Council and implemented at the end of the same year. In lieu of the previous five departments, Vetmeduni now has four departments with a total of 13 centres as of 1 January 2024. Thanks to this reorganisation, Vetmeduni is fit for the future and can meet the challenges in research, teaching, clinical and administrative work with greater agility.

- Department of Biological Sciences and Pathobiology
- Department of Interdisciplinary Life Sciences
- Clinical Department for Small Animals and Horses
- Clinical Department for Farm Animals and Food System Science

For more information go to: https://www.vetmeduni.ac.at/universitaet/infoservice/news/news-detail/vetmeduni-stellt-sich-organisatorisch-neu-auf

New Professorships

Janina Burk-Luibl
Physiology

Martina Mosing
Anaesthesia and Analgesia

New Visiting Professorship

Claudia Bieber
Wildlife Science

For portrayals of the new professors in the VETMED Magazine go to: https://www.vetmeduni.ac.at/universitaet/infoservice/vetmed-das-magazin

Photos: (1-9, 11) Michael Bernkopf/Vetmeduni, (10) private, (12) Thomas Suchanek/Vetmeduni

New Associate and Assistant Professorships

Dagmar Gotthardt
Pharmacology and Toxicology

Borbala Foris
Animal Welfare Sciences Farm Animals

Valeria Marasco
Wildlife Physiology

Alba Hykollari
Biochemistry/Bioanalytical Chemistry

Tobias Käser
Immunology

Matthias Loretto
Movement Ecology in Wildlife Research

Christof Bertram
Pathology

Elisabeth Varga
Analytical Chemistry – Food and Environmental Analysis

Heidi Neubauer
Molecular Cell Biology

Everyday Veterinary Life of Tomorrow

In research and teaching, Vetmeduni is increasingly focusing on the analysis of big data, digitalisation and the potential of new technologies. With the strategic project eHealth@vetmed, the University of Veterinary Medicine, Vienna, is dedicated to digitalisation in veterinary medicine and the further development of the veterinary profession at various levels and as part of extensive measures. The HOLSTEIN research project, which is funded by the state of Lower Austria, aims to improve animal health using modern technologies. Another step in this direction was the launch of the new Master's Programme 'Digitalisation in Animal Health Management – Precision Animal Health' in 2023. The FWF-funded doctoral programme 'PLFDoc – Precision Livestock Farming', a cooperation between Vetmeduni, the Vienna University of Technology and the University of Applied Sciences Upper Austria, is also new. This interdisciplinary training programme is intended to enhance sustainable agriculture and improve livestock farming. These milestones were presented at a press conference at the Concordia Press Club by Rector Petra Winter and the researchers involved.

Rector Petra Winter with Michael Iwersen (Head of the doctoral programme, centre) and Peter M. Roth (Professor of Computational Medicine, right)

For an overview of all VetmedTalks held so far go to: https://www.youtube.com/playlist?list=PLQkwsVEtJy1y79_aUiguMjcS6eEVZc2RX

For an overview of SDG measures taken go to: https://www.vetmeduni.ac.at/universitaet/profil/sustainable-development-goals

New University Council of Vetmeduni

On 1 March 2023, the new University Council of the University of Veterinary Medicine, Vienna, convened for its first qua inaugural meeting. Cathrine Trattner, who had already been part of the outgoing University Council, was elected as the fifth member of this body. Michaela Schaffhauser-Linzatti took over the chair, her deputy is Arne Bathke. Alongside the Senate, the University Council is a key governing body of Austrian universities.

The members of the University Council (from left to right): Michaela Schaffhauser-Linzatti, Brigitte von Rechenberg, Cathrine Trattner, Günther Wiesinger and Arne Bathke.

SDG Sustainability Campaign

For the second time, SDG 3 'Good Health and Well-Being' was the university's SDG communication focus in 2023, with the highlight once more being the successful interactive online format VetmedTalk. Internal and external experts discussed such topics as healthy country, healthy food, healthy animals as well as the question 'What actually is healthy?' and presented the latest research findings.

Photos: (1, 4) Ernst Hammerschmid/Vetmeduni, (2, 3) Thomas Suchanek/Vetmeduni, (5) Dominik Kiss/Vetmeduni

VetmedRegio Regionalisation Initiative

Among other initiatives in 2023, Vetmed Regio aims to strengthen veterinary services in rural areas by raising children's and adolescents' interest in the work of (livestock) vets. Relevant initiatives included participation in the KinderUniGraz (Graz Children's University) in cooperation with the Lippizaner stud farm in Piber as well as participation in the KinderSommerUni (Children's Summer University) Innsbruck, info booths at the Lower Austrian Research Festival and the VetINNSights Summer School in Tyrol. The initiative was rounded off by the new specialisation module 'Ruminant Medicine in the Alpine Region' for students in Tyrol, internships offered by the state of Tyrol and the networking meeting 'South Tyrol meets Vienna'. Vetmeduni put up a large info booth at one of the 2023 events of the Science Academy Lower Austria in St. Pölten, which provided information on the 'Animals and us – how animal welfare, food safety and climate protection are connected' course to be introduced in 2024. In addition, Vetmeduni was represented at the Open Day of the Austrian Ornithological Centre in Seebarn, at workshops in the Wolf Science Center in Ernstbrunn, at the animal shelter in Pinzgau and at the VetmeduniTalk during the 37th Annual Meeting of the Association of Austrian Small Animal Veterinarians (VÖK) in Salzburg. For the first time, Vetmeduni Vienna and Meduni Innsbruck organised a joint symposium in Innsbruck entitled 'One Health Tyrol. Working together for healthy animals and human beings'.

For all initiatives of VetmedRegio go to: https://www.vetmeduni.ac.at/universitaet/profil/vetmedregio

As part of the Children's University, Vetmeduni offered a varied programme for inquisitive children.

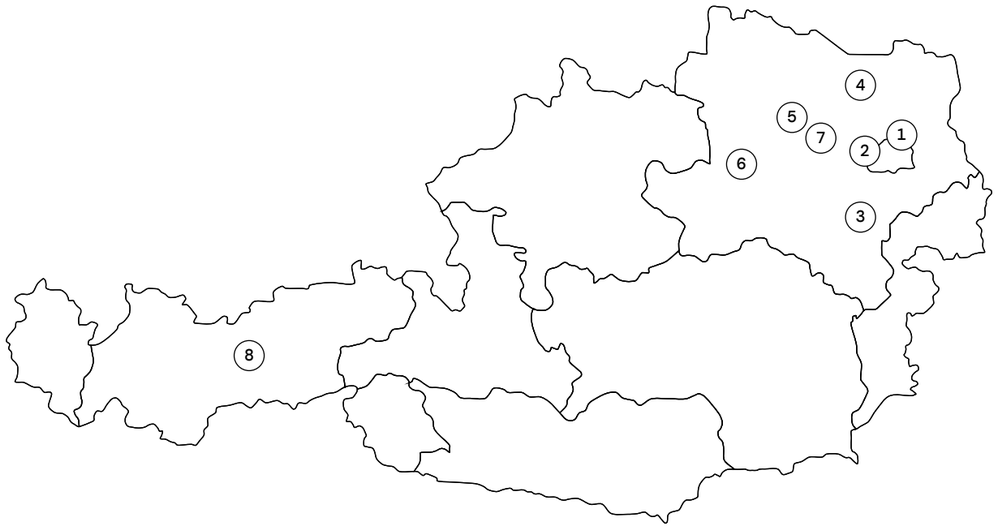
Vetmeduni Alumni

In 2023, Vetmeduni once again strengthened its graduate network with various measures and activities. In June, Vetmeduni hosted the first alumni reunion (for the 2006 and 2007 cohorts) at the Vienna campus. More than 70 alumni arrived from all over Austria and even from Germany, Ireland, the UK, the Netherlands, Luxembourg, Italy and Serbia to meet former colleagues at their alma mater. Last year's Annual Meeting of the Association of Austrian Small Animal Veterinarians (VÖK) was the first to include a VetmeduniTalk, the topic being 'The assistance dog and its owner – a team with special needs'. Another service in the year under report was the alumni booth with alumni photos at the ceremony marking the conferral of academic degrees. Our Alumni Team presented each graduate with a small starter pack (alumni goodie bag). To make the career paths of alumni more visible, career portrayals (interviews) are regularly published on our website and in our newsletter. In addition, abridged versions of selected portrayals are published in VETMED Magazine.

Staying in touch: Vetmeduni regularly informs its alumni about news from teaching, research, science and practice at their alma mater

The Vetmeduni Alumni Newsletter: https://www.vetmeduni.ac.at/alumni/alumni-newsletter

Sites



1
Vetmeduni Campus,
Floridsdorf, Vienna

2
Research Institute of Wildlife
Ecology (FIWI), Konrad Lorenz
Institute of Ethology (KLIVV),
Ottakring, Vienna

3
VetFarm
Kremesberg, Pottenstein,
Lower Austria
- Rehgras estate, Furth/Triesting
- Haidlhof estate, Bad Vöslau
- Medau estate, Berndorf

4
Wolf Science Center (WSC),
Ernstbrunn, Lower Austria

5
Satellite of the Austrian
Ornithological Centre (AOC),
Seebarn / Grafenwörth,
Lower Austria

6
Reproduction Center Wieselburg (RCW),
Wieselburg, Lower Austria

7
Interuniversity Department for
Agrobiotechnology (IFA Tulln,
Lower Austria), together with the
Vienna University of Natural Resources
and Life Sciences (BOKU) and
the Vienna University of Technology

8
Satellite Facility for Ruminants in
the Alpine Region, Innsbruck, Tyrol

Study

Photo: (Study) Stephanie Scholz/Vetmeduni

Magdalena Beer
Chairwoman of the Student Union of the University of Veterinary Medicine, Vienna (HVU)

Last year was a great year for us all. Like every year, there was much going on at Vetmeduni, and a large number of students could be seen on campus. They all enjoyed being able to benefit from the university and its resources. Moreover, we are happy about having much animal-based teaching, with many projects and opportunities for expansion available in this area over the past year. Meanwhile, mainstream students have changed from communicative team players who see the university as a family environment to solitary beings studying from their homes in a hybrid teaching setting. Last year, the members of the chair team of the Student Union (ÖH) slightly changed after the ÖH elections in May, but our work ethics did not. We continue to work as motivated as before.

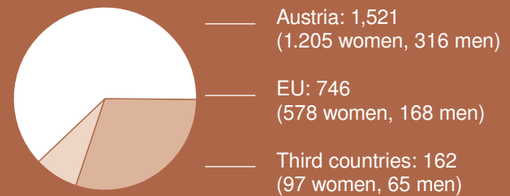
Herwig Grimm and Sabine Hammer
Chairman and Deputy Chairwoman of the Senate of the University of Veterinary Medicine, Vienna

As the Senate Chair team, we would like to express our sincere thanks for the great job done by the Senate members and the employees we represent in the Senate. 2023 has underscored the important function of the Senate as an indispensable interface and platform for the exchange of arguments and perspectives concerning the strategic thrust of our university. It is no secret that the decisions taken in 2023 will shape the work of all employees in 2024. It is foreseeable that the Organisation Plan will not be implemented without additional work and some friction. In this process, it will be important to keep one thing in mind: transitions offer the opportunity to leave the old behind, continue the tried and tested and bring something new into the world. We wish everyone the courage and strength to be part of this joint effort.

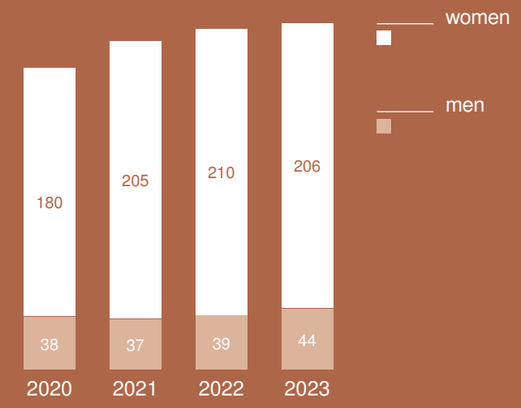
Photos: (1) Lisa Hajek, (2, 3) Michael Bernkopf/Vetmeduni

Study

DEGREE STUDENTS
BY COUNTRY OF ORIGIN



QUALIFIED FOR ADMISSION TO THE DIPLOMA
PROGRAMME IN VETERINARY MEDICINE



APPLICANTS/ADMISSIONS 2023 (FOR THE 2023/2024 ACADEMIC YEAR)	APPLICANTS			QUALIFIED FOR ADMISSION		
	WOMEN	MEN	TOTAL	WOMEN	MEN	TOTAL
Diploma Programme in Veterinary Medicine	926	151	1,077	206	44	250
Bachelor's Programme in Biomedicine and Biotechnology	158	30	188	51	16	67
Master's Programme in Comparative Biomedicine	19	7	26	16	4	20
Interdisciplinary Master's Programme in Human-Animal Interactions (IMHAI)	23	1	24	23	1	24
Master's Programme in Precision Animal Health	6	8	14	6	8	14
Total	1,103	188	1,291	302	73	375

No figures are available for the Master's Programmes in Wildlife Ecology and Wildlife Management as well as Evolutionary Systems Biology since admission to these programmes is not managed by Vetmeduni.

No admission procedure took place for the Bachelor's Programme in Equine Sciences for the 2022/23 academic year since this programme is about to expire.

Courses of Study

Diploma Degree Programme

Veterinary Medicine

Bachelor's Programmes

Biomedicine and Biotechnology

Equine Sciences[1]

Master's Programmes

Master's Programme in Comparative Biomedicine – Infection Biomedicine and Tumour Signalling Pathways

Interdisciplinary Master's Programme in Human-Animal Interactions (IMHAI)

Master's Programme in Precision Animal Health

Master's Programme in Wildlife Ecology and Wildlife Management[2]

Master's Programme in Evolutionary Systems Biology[3]

Doctoral Programme

Veterinary Medicine

PhD Programme

[1] in cooperation with the University of Natural Resources and Life Sciences (BOKU), Vienna. This programme will be phased out. It is no longer possible to be (re-) admitted to this programme.

[2] in cooperation with the University of Natural Resources and Life Sciences (BOKU), Vienna.

[3] in cooperation with the University of Vienna.

Fresh Impetus for Teaching

The 'kick-start breakfast' series (Impulsfrühstücke) offers inputs by national and international experts on pedagogy and didactics and invites participants to discuss the topics presented. These events are recorded and made available to interested parties at the university's media library VetMediathek. The 2023 topics included:

- 'Improve teaching by giving and taking feedback' and 'Problem-centred learning'; Jan Ehlers, University Witten/Herdecke
- 'Self-regulated learning in Clinical Rotation I: results of the diary study'; Evelyn Steinberg, Vetmeduni
- 'Talking during a test?! Embracing mobile instant messaging during assessment'; Cecile Janse van Rensburg, University of Pretoria
- 'H5P – digital tools in teaching'; Martina Mosing, Vetmeduni
- 'How to impart science and scientific thought'; Christian Bertsch, Institute of Science and Technology Austria – ISTA

Evaluation Team for 'Small' Study Programmes

With the beginning of the new term of the Evaluation Team in October 2023, two separate working parties were established – one for veterinary medicine and a special working party for the bachelor's and master's programmes. As early as mid-December, the parties met to discuss the evaluations of the summer semester, which are part of the Performance Agreement concluded with the Ministry of Science.

Illustrations: Matthias Moser/Vetmeduni

Road Show

The so-called 'Road Show', in which the Vetmeduni's study programmes are presented to schools around Austria, included a total of 12 schools (eight grammar schools and four agricultural schools), as well as an educational guidance fair (Villach), in seven federal states in 2023. The number of activities more than doubled compared to previous years. In addition, Vetmeduni participated in the 'Study in Austria webinar in cooperation with the Foreign Trade Centre Mexico' and another event organised in cooperation with the Austrian Embassy in Hanoi, where Vetmeduni gave a short 15-minute presentation to introduce the university and the study programmes available.

Education Awards

The Teaching Vets Symposium took place in the Great Hall of Vetmeduni. The ninth part of the symposium series on innovative didactics at Vetmeduni was dedicated to current developments in tertiary education. During this event, prizes were awarded in the categories of Teaching, Instructor and Students of the Year as well as the Student Award of the Students' Union (HVU) and the VetDidactics Certificate.

For all award winners go to: https://www.vetmeduni.ac.at/universitaet/infoservice/news/news-detail/teaching-vets-symposium-9-preise-fuer-herausragende-lehrende

Successful Launch of the Master's Programme in Precision Animal Health

The new Master's Programme in Precision Animal Health focusing on digitalisation in animal health management began in the winter semester 2023/24. Twelve students from seven countries in four continents have enrolled in this programme. Teaching is predominantly provided in asynchronous and synchronous online formats with two blocked weeks requiring on-site attendance for practical lessons at the Vienna Campus and at the Kremesberg VetFarm. The programme is designed for students interested in enhancing their knowledge at the interface of veterinary medicine, animal husbandry and nutrition, animal production and modern information-based technologies.

For more information on this Master's Programme go to: https://www.vetmeduni.ac.at/pah

Publicity and Information Events for Prospective Students

To further increase the number of applicants, in particular for other master's programmes offered by Vetmeduni, an initiative was launched at the beginning of the year to promote the university's study programmes. For this purpose, the programmes' performance on websites and search portals was optimised. As part of this, a campaign was launched on Studyportals to promote three master's programmes in particular: Comparative Biomedicine, Human-Animal Interactions, and Precision Animal Health (Digitalisation in Animal Health Management). In addition, the previous on-site information events, which had focused on the diploma programmes, were expanded to include the bachelor's and master's programmes, as well as being offered more frequently and supplemented by online formats. These measures resulted in double the number of applicants to the master's programmes in 2023.

Graduates

2023/2024	WOMEN	MEN	TOTAL
Diploma Programme in Veterinary Medicine	165	34	199
Bachelor's Programme in Biomedicine and Biotechnology	22	7	29
Bachelor's Programme in Equine Sciences[1]	9.38	0	9.38
Master's Programme in Comparative Biomedicine – Infection Biomedicine and Tumour Signalling Pathways	11	0	11
Interdisciplinary Master's Programme in Human-Animal Interactions (IMHAI)	21	3	24
Master's Programme in Wildlife Ecology and Wildlife Management[2]	1.6	1	2.6
Master's Programme in Evolutionary Systems Biology[3]	0.56	1.4	1.96
Doctoral Programme in Veterinary Medicine	20	8	28
PhD Programmes	13	7	20
Total	263.54	61.4	324.94

Note: In the case of cooperation partners, graduates are counted according to the allocation formula.

[1] Bachelor's Programme in Equine Sciences
0.67 Vetmeduni; 0.33 University of Natural Resources and Life Sciences (BOKU).

[2] Master's Programme in Wildlife Ecology and Wildlife Management
0.1 Vetmeduni; 0.9 University of Natural Resources and Life Sciences (BOKU).

[3] Master's Programme in Evolutionary Systems Biology
0.28 Vetmeduni; 0.72 University of Vienna.

Research

Photo: (Research) Thomas Suchanek/Vetmeduni

Otto Doblhoff-Dier
Vice-Rector for Research and International Relations

2023 was a year in which third-party funds were successfully acquired for projects and a great variety of publications produced. In the midst of international crises, Vetmeduni was particularly committed to expanding its research topics and international cooperation schemes to create a scientific basis for urgently needed innovations in the broad field of One Health – One Welfare. As Austria's University of Veterinary Medicine, we feel obliged to support the so-called 'third mission' by closely collaborating with our stakeholder groups such as veterinarians, private and agricultural animal owners, industry or national and international public entities.

Mathias Müller
Head of the Department of Biological Sciences and Pathobiology

The preclinical disciplines in the new Department of Biological Sciences and Pathobiology were merged in 2023. We want to express our deepest thanks to the long-standing Head of the Department of Pathobiology, Armin Saalmüller, for his dedicated work. We bade farewell to Martina Patzl as well as to Reinhold Erben and Norbert Nowotny, as they retired in 2023. We wish them good health, success and happiness in the new period of their lives. Barbara Metzler-Zebeli moved to the Clinical Department for Farm Animals and Food System Science. We cordially welcome Janina Burk-Luibl to the physiology team. In addition, qualification positions in the fields of immunology (Tobias Käser), molecular cell biology (Heidi Neubauer), pathology (Christof Bertram) and pharmacology (Dagmar Gotthardt) were successfully filled and further developed. We look forward to collaborating with these colleagues.

Ludwig Huber
Head of the Department of Interdisciplinary Life Sciences

The Department of Interdisciplinary Life Sciences uses a wide range of methods to research current questions at the interface of humans, animals and the environment. The approaches of the Research Institute of Wildlife Ecology range from individuals and populations to ecosystems with the aim, inter alia, of developing modern wildlife management. With state-of-the-art methods, the Konrad Lorenz Institute of Ethology addresses fundamental questions of evolution, development, physiology and the function of behaviour both in the laboratory and in the field. The Messerli Research Institute has established itself as a centre of competence and training for sustainable and responsible human-animal interactions.

Photos: (1) Christian Steinbrenner/Vetmeduni, (2, 3) Thomas Suchanek/Vetmeduni

Research

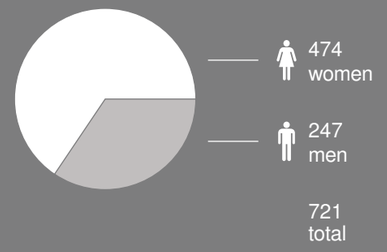
801

ACADEMIC STAFF TOTAL (2022: 790)

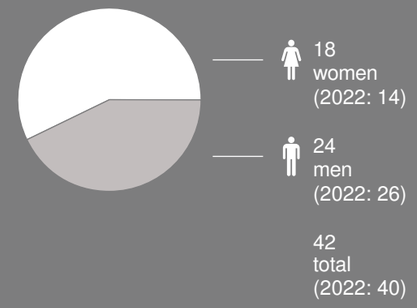
905

SCIENTIFIC PUBLICATIONS TOTAL

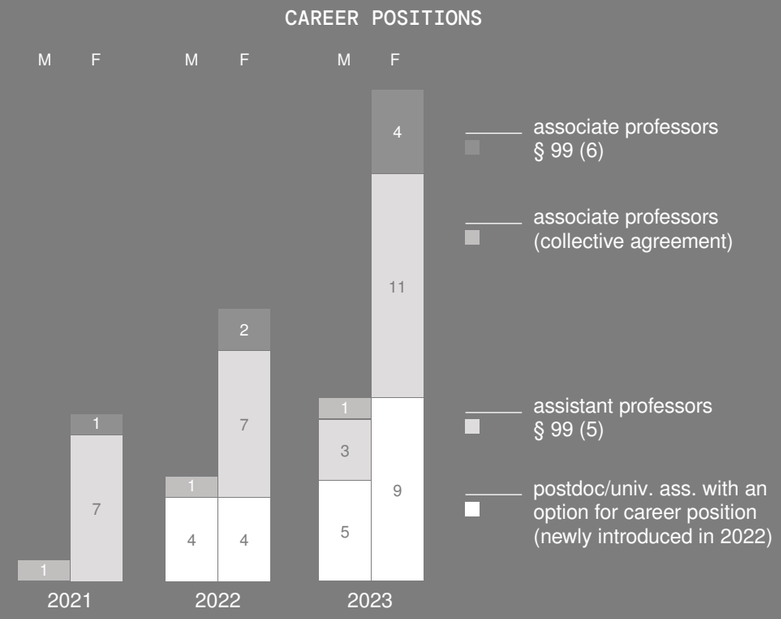
ACADEMIC STAFF 2023



PROFESSORS 2023



CAREER POSITIONS



The great variety of science at Vetmeduni can be seen from the following selection of research projects either approved or continued in 2023

SHIELD – Securing Host Immunity: Elimination versus Destruction

Project coordinator: Maria Sibilia, Medical University of Vienna
Project manager: Vetmeduni and Vice-coordinator: Birgit Strobl
Funding agency: FWF – Austrian Science Fund

The immune system defends our body against external (pathogens) and internal (cancer) threats. The elimination of these threats or a misdirected attack on the body's own tissue will inevitably lead to collateral damage. Consequently, safeguarding tissue integrity is of the utmost importance. SHIELD is a unique doctoral programme, which focuses explicitly on these fundamental aspects of host immunity. Eleven research groups use clinically relevant infection models and patient material in conjunction with a variety of genetically modified mouse models for mechanistic studies. The PhD projects address three different, yet closely related, research topics: 1. pathogen and tumour elimination (from SARS-CoV-2 and Candida albicans to melanoma); 2. cellular and molecular immunity (from T-cell differentiation and exhaustion to interferon signal transduction); and 3. tissue destruction caused by autoimmunity (focusing on lupus, rheumatoid arthritis and immune privilege). SHIELD enables doctoral students to experience and conduct excellent fundamental and translational research. The programme will help prepare them for competitive career pathways in science and beyond.

Supporting Governance Action to Improve the Prevention, Prosecution and Law Enforcement of Wildlife Crime

Project leader: Felix Knauer
Funding agency: EU (Commission of the European Union)

Thousands of strictly protected wild animals have been illegally killed in Germany and Austria in recent years. For many species, illegal hunting is a massive problem. Moreover, only a few offenders are identified and, if they are, rarely convicted. To stop this trend, an unusual coalition of 13 partners from nature conservation organisations, authorities, veterinary medicine, police and research entities from Austria and Germany has launched the cross-border 'wildLIFE-crime' project. This project, which is to run till 2028, aims to reduce the illegal killing of wild animals in Germany and Austria and increase the efficiency of law enforcement through better cooperation between civil society, science community and authorities.

Improvements in the forensic-pathological chain of investigation, in the analysis of the legal framework, based on examples of cases, in the development of practice-centred guidelines and of a case database are intended to help investigating authorities in combatting wildlife crime. The project is co-financed by LIFE, the EU's nature conservation funding programme, and coordinated by WWF Germany.

Photos: (1, 3-5) Thomas Suchanek/Vetmeduni, (2) pixabay

Monitoring of Salmonella Infantis Variants in Broilers in the Context of Increased Antibiotic Resistance Caused by the Megaplasmid pESI

Project leader: Claudia Hess
Funding agency: Federal Ministry of Agriculture, Forestry, Regions and Water Management

For some years now, Salmonella Infantis has been the most common salmonella species in broilers in the European Union. A previous DaFNE project showed, inter alia, that variants occur. The strain variations exhibit differences in growth characteristics as well as in their genetic profile. These variations are of importance in epidemiological terms, as they can lead to incorrect assessments of samples. An additional genetic molecule, the so-called pESI plasmid, has been discovered in some of these strain variations. pESI increases bacterial fitness and causes greater insensitivity to antibiotics as well, thus promoting the spread of this pathogen. The present project aims to investigate different aspects of these variants, ranging from possible improvements in detection methods to studies on susceptibility to disinfectants and experimental animal studies concerning the behaviour of these variants and the transfer of the pESI plasmid to other bacteria in animals. It should make another major contribution to enhancing food safety and quality.

Pipeline for Rapid Emergency for Diagnostics of Transboundary Infectious Diseases

Project leader: Olga Makarova
Funding agency: EU (Commission of the European Union)

Travelling, global warming and changes in the environment are accelerating the spread of infectious diseases of zoonotic origin. PREPARE-TID is a multidisciplinary research consortium composed of 16 European and four international research organisations and SMEs with the objective of improving access to novel diagnostics for the identification of pathogens that have pandemic potential. Under this project, the University of Veterinary Medicine, Vienna, will provide expertise on antimicrobial resistances within the One Health context. In future, the consortium will make available point-of-care and mobile diagnostic options that can be used in the event of an epidemic or pandemic, and that can be mass-produced.

Consulting and DNA Analysing of Large Predators for the Austria Centre Bear, Wolf, and Lynx

Project leader: Claudia Bieber
Funding agency: Austrian Center Bear, Wolf, and Lynx (ÖZ)

Since the foundation of the Austria Centre Bear, Wolf, and Lynx, the Research Institute of Wildlife Ecology (FIWI) has been working closely with this entity to support the monitoring of large predators in Austria. The FIWI's contribution consists in, for instance, examining torn animals (wild and farm animals killed) and offering training courses on this issue as well as processing the genetic analyses of samples sent in. The genetic samples we receive include blood, faeces, hair and tissue samples. They can be analysed for traces of DNA and allow conclusions as to whether a large predator was involved in the incident. Once the genetic material of large predators has been identified, they can be further analysed for their kinship, enabling us to determine how documented wolves are related to one another. All these analyses are carried out in our laboratory to the highest standards and under ongoing quality control. We are very pleased that a long-term agreement was concluded with the ÖZ Center in 2023, under which the FIWI team has better and more reliable planning options. It is particularly encouraging that the new agreement gives high priority to research endeavours.

Overimitation in Dogs: Ontogenetic and Phylogenetic Influences

Project leader: Ludwig Huber
Funding agency: FWF – Austrian Science Fund

The FWF project intends to conduct a comprehensive study of the tendency towards ‘overimitation’ in dogs, meaning whether dogs imitate unnecessary or unreasonable actions of humans. This seemingly irrational behaviour is known among humans (children and adults), while it is completely absent in great apes. However, the Clever Dog Lab at the Messerli Research Institute of Vetmeduni has been able to demonstrate this behaviour in dogs. The project leader, Ludwig Huber, suspects that this behaviour is due to the special dog-human relationship rather than to some cognitive deficit. It also appears to be related to the dogs’ understanding of human pointing gestures as well as to their reluctance to ignore misleading human cues. The few experimental studies on overimitation in dogs require further experimental arrangements and special controls to clarify the underlying mechanisms and various influences on this peculiar behaviour. The project team is confident that it will be able to explain this behaviour given its long-term experience and comprehensive knowledge of canine behaviour as well as the application of state-of-the-art measuring methods and the recruitment of excellent staff.

National Contribution to the European BBMRI.ERIC Network #3

Project leader: Ingrid Walter
Funding agency: Federal Ministry of Education, Science and Research

Biobanks have been recognised as a key resource for research. The pan-European BBMRI- ERIC (Biobanking and Biomolecular Resources. Research Infrastructure-European Research Infrastructure Consortium) has been established to promote this resource. Austria participates in this consortium through its national network BBMRI.at, which includes all biobanks held by medical universities in the country. Represented by VetBiobank, Vetmeduni occupies a special position within this consortium, as it is the only partner from the field of veterinary medicine. VetBiobank collects high-quality samples in accordance with international standards that are mandatory for human biobanks, thus enabling comparative analyses of human and animal samples. For the third period of the project, VetBiobank has been commissioned to identify other potential veterinary partners within the BBMRI-ERIC member countries for the purpose of jointly providing a pool of high-quality veterinary samples for research.

Dog on a Chip – a Modular Canine Multi-Organoids-on-a-Chip System as Animal Experimentation Substitution Platform

Project leader: Iwan Burgener
Funding agency: FWF – Austrian Science Fund

Roughly 11 million animals are used for research in Europe every year. In addition to ethical concerns, animal experiments have other drawbacks, including the partially questionable transferability of the results to humans. Organoids are laboratory-grown groups of cells derived from stem cells, which have organised themselves into structures that resemble those of organs. This technology is evolving into a promising way of investigating organ functions and diseases, and of predicting the safety and efficacy of new drugs. By integrating different types of organoids, we intend to establish a versatile mini-platform for dogs, which replaces animal experiments and focuses on the gastrointestinal tract and related organs. As pioneers in the field of canine organoids, we have created intestinal and liver organoids and will grow and characterise brain and pancreatic organoids with the aim of modelling gastrointestinal diseases and the gut-brain axis. The design of our model is to be such that it can be tailored to and optimised for scientific questions. Moreover, it can be adjusted to other cell types, including human and various other animal models.

Photos: (1, 2, 4–6) Thomas Suchanek, (3) Michael Bernkopf/Vetmeduni

The Role of Retinol Uptake Receptor, STRA6, in Stromal Cell-Mediated Regulation of B-Cell Immunity

Project leader: Katarzyna Maria Sitnik
Funding agency: FWF – Austrian Science Fund

The formation of antibodies is not only the cornerstone of effective host resistance to persistent infections but also the basis for protective immunity achieved through vaccination. My research focuses on the discovery of new mechanisms leading to the formation of antibodies. In this project, we investigate the role of fibroblastic stroma cells in regulating the proliferation and maturation of antibody-producing cells within secondary lymphatic organs such as lymph nodes. The project is based on our initial finding that stroma cells interacting with antibody-producing cells selectively express the STRA6 receptor, which regulates cellular uptake and availability of vitamin A. We assume that the STRA6-mediated regulation of vitamin A homeostasis is an important mechanism by which stroma cells promote the formation of antibodies. We use state-of-the art cellular, molecular and omics methods to explore the effects of STRA6 deletion on the formation of antibodies. Data from this project will help improve the understanding of protective immunity.

Food Waste, Food Safety, Sustainability, Meat Spoilage, Toxin Production, Cleaning, Disinfection, Slaughterhouse, Meat Processing Plant, Vacuum-Packaging

Project leader: Samart Dorn-In
Funding agency: Federal Ministry of Agriculture, Forestry, Regions and Water Management

The production of meat takes an enormous amount of resources. Consequently, meat spoilage causes major economic damage, including negative effects on the environment. Since most spoilage organisms are adapted to room temperature and require oxygen, their growth can be inhibited by vacuuming meat and storing it in a cool place. Under these conditions, however, certain hitherto little-known members of the genus Clostridium can thrive. These bacteria grow primarily or exclusively at low temperatures and in the absence of oxygen. These special requirements give them a niche advantage in vacuumed meat, where they play a major role as spoilage organisms. In Austria, only limited data have been available so far on the incidence of these clostridia in slaughterhouses and meat processing plants, vacuum-packed meats and meat products in retail. The present project aims to address this by collecting data on the exposure of the entire beef production chain in Austria. The clostridia detected will then be tested for their sensitivity or resistance to the cleaning agents and disinfectants approved for food enterprises.

Telomere Dynamics as an Indicator of Cumulative Lifetime Experience in Domestic Chickens

Project leader: Janja Sirovnik
Funding agency: FWF – Austrian Science Fund

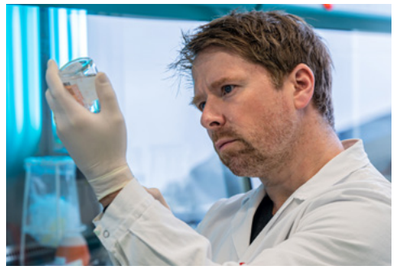
The quality of life of animals is a growing concern, but the approaches to assessing this quality are lacking. Methods to assess cumulative life experiences would provide objective ways and means of examining the quality of life of animals. Telomere dynamics (meaning the changes in telomere length) might indicate the overall quality of an animal’s life. Telomeres are repetitive DNA sequences at the ends of all chromosomes which shorten at each cell division.

In humans, stressful experiences lead to shorter telomeres, while stress-induced shortening of telomeres can be mitigated by or even reversed by positive lifestyle interventions. Hence the dynamics of telomeres is a valid biomarker for cumulative experiences in humans. Related research indicates that shorter telomeres or their accelerated shortening in animals, too, result from negative life experiences. However, the interactive effects of positive and negative experiences on telomer dynamics in animals remain largely unexplored. To validate telomer dynamics as an indicator of the cumulative quality of life in animals, we will use chickens to measure telomere length in a model by manipulating the amount of positive and negative experiences.

Inferring Gene Flow from Phylogenies with Ubiquitous Genomes

Project leader: Rui Borges
Funding agency: FWF – Austrian Science Fund

In 1837, Charles Darwin revolutionised evolutionary biology with the introduction of the first phylogenetic tree – a visual representation of the evolution of finches in the Galapagos Islands. Darwin dared to write 'I think' at the top of the tree, thus immortalising this image. Despite the enormous importance of the illustration, it is crucial to recognise its simplicity. The drawing suggests that two species immediately differ from a common ancestor within a period of time. Current studies, however, show that some species continue to evolve differently as they reproduce. This phenomenon questions Darwin's intuition: if species share their DNA (gene flow), how can they evolve into different species? The present project attempts to answer precisely this question. Through the use of sophisticated mathematical models and genomic data of different species such as fireflies, fruit flies, persimmon trees and grasshoppers, we want to understand the extent and frequency of DNA exchange phenomena during the speciation process. These models are also designed to clarify how species can diversify so markedly despite the exchange of genetic material.



Development of a Chlamydia trachomatis Vaccine in an Outbred Pre-Exposed Swine Animal Model

Project leader: Tobias Käser
Funding agency: National Institutes of Health

Genital chlamydial infections are the most common sexually transmitted bacterial diseases in humans. Although these infections can be treated with antibiotics, they often remain untreated due to the frequent absence of symptoms. To avoid the serious late sequelae of genital chlamydial infections like infertility, ectopic pregnancies and chronic abdominal pain, a vaccine is needed.

Pigs have many similarities to humans, and we have shown that fattening pigs pre-infected with the porcine chlamydial pathogen are excellent model animals for developing a vaccine against the human Chlamydia trachomatis pathogen. The objective of this NIH-funded project thus is to develop a vaccine against C. trachomatis in the pig model. So far, we have been able to show that a combination of intramuscular/intranasal administration of the selected candidate vaccine triggers a strong immune response. In future, we will test whether the triggered immune answer will also protect from a challenge infection with C. trachomatis. If this is the case, the candidate vaccine in question could be tested in clinical trials to protect people from developing genital chlamydial infections.

Let me out! Proximate Factors Mediating Helping Behaviour in Pigs

Project leader: Jean-Loup Rault
Funding agency: FWF – Austrian Science Fund and DFG – German Research Foundation

Pigs are known for their intelligence and social nature. Can they discern a conspecific in need of help and actively support each other? Researchers of the Centre for Animal Nutrition and Welfare of Vetmeduni and the German Research Institute of Farm Animal Biology (FBN) are investigating these questions and have developed a novel method to study helping behaviour, where pigs can be tested while remaining in their normal social groups within their usual pigsty environment. Among other things, the researchers study the influence of partnerships, dominance relationships and personal experiences of being 'locked in' on the pigs' decision to help. The physiological changes in pigs while helping or not are monitored as well. A deeper understanding of the pigs' prosocial behaviour and their emotional state and group dynamics can be a major contribution towards animal welfare. Pig farmers, in turn, can use these findings to promote positive behaviour within groups by, for instance, giving pigs more control over their surroundings.

Photos: (1, 3) Thomas Suchanek/Vetmeduni, (2) Michael Bernkopf/Vetmeduni

Newly Approved Research Projects at a Glance

FUNDING AGENCY	PROJECT TITLE	PROJECT LEADER
FWF – Austrian Science Fund	Xenobiotics and Pathogenicity of Avian Influenza Viruses	Aftabi Younes
Austrian Academy of Sciences	The Role of RNAs in Biomolecular Condensation of Leukemia Fusion Oncoproteins	Allram Melanie
FWF – Austrian Science Fund	Robust and Accurate Multi-Tumor, Multi-Species, Multi-Laboratory and Multi-Scanner Mitosis Detection with Large-Scale Datasets and Artificial Intelligence	Bertram Christof Albert
Austria Centre Bear, Wolf, and Lynx	Consulting and DNA Analysing of Large Predators for the Austria Centre Bear, Wolf, and Lynx	Bieber Claudia
FWF – Austrian Science Fund	Dog on a Chip – a Modular Canine Multi-Organoids-on-a-Chip System as Animal Experimentation Substitution Platform	Burgener Iwan
Austrian Agency for Education and Internationalisation (OeAD)	Strengthening Smallholders Breeding Capacities Towards Sustainable Pig Production in Burkina Faso	Burger Pamela
Stiftung Pro Pferd – foundation to promote equine research projects	Melanoma-Derived Extracellular Vesicles	Cavalleri Jessika-Maximiliane
Federal Ministry of Agriculture, Forestry, Regions and Water Management	Food Waste, Food Safety, Sustainability, Meat Spoilage, Toxin Production, Cleaning, Disinfection, Slaughterhouse, Meat Processing Plant, Vacuum-Packaging	Dorn-In Samart
FWF – Austrian Science Fund	Stigmatisation of a Profession? An Empirically Informed Ethical Analysis of Veterinary Work in Slaughterhouses	Dürnberger Christian
City of Vienna	Detection and Use of In-House Smearing Cultures in Austrian Dairies	Dzieciol Monika
Vienna Science and Technology Fund (WWTF)	Implementing Novel Feeding Strategies to Improve Animal Welfare and the Release Success of Commercial Fish Farms.	Fischer Stefan
Federal Ministry of Education, Science and Research	Understanding Brush Use in Dairy Cattle as a Potential Positive Animal Welfare Indicator	Foris Borbala
Office of the Upper Austrian Government	Mosquito Monitoring Upper Austria – 2023	Führer Hans-Peter

Note: This table presents an excerpt from those research projects that were granted funding in 2023. Owing to confidentiality provisions not all projects may be published.

FUNDING AGENCY	PROJECT TITLE	PROJECT LEADER
Municipal Department 15 of the City of Vienna, Public Health Services (MA 15)	Mosquito Monitoring Vienna – 2023	Führer Hans-Peter
QGV – Austrian Association of Quality Poultry	Evaluation and Optimisation of Diagnostic Test Methods for the Detection of the Egg Drop Syndrome (EDS) Virus	Grafl Beatrice
Government of the Kingdom of Saudi Arabia – King Faisal University	Characterisation of Equine Major Histocompatibility Complex (MHC) Haplotype Diversity and Pathogen Correlations	Hammer Sabina
BIOS Science Austria – association to promote life sciences	Ensiled Insect Larvae as a Sustainable Protein Source for Non-Ruminants	Hartinger Thomas Dietmar Said
Federal Ministry of Agriculture, Forestry, Regions and Water Management	Monitoring of Salmonella Infantis Variants in Broilers in the Context of Increased Antibiotic Resistance Caused by the Megaplasmid pESI	Hess Claudia
QGV – Austrian Association of Quality Poultry	Salmonella Monitoring in Austrian Poultry Flocks	Hess Claudia
Austrian Society for Meat Science and Technology	Occurrence of Vibrio spp. in Fish and Seafood from Aquaculture	Hilbert Friederike
Federal Ministry of Agriculture, Forestry, Regions and Water Management	Parasites of Grazing Goats in Austria: Monitoring Drug Resistance and Development of Sustainable Control Strategies for the Practice (ParaGÖAT)	Hinney Barbara
FWF – Austrian Science Fund	Canine Theory of Mind? Testing the Concept of Seeing and False-Belief Understanding in Dogs	Huber Ludwig
FWF – Austrian Science Fund	Overimitation in Dogs: Ontogentic and Phylogenetic Influences	Huber Ludwig
National Institutes of Health	Development of a Chlamydia trachomatis Vaccine in an Outbred Pre-Exposed Swine Animal Model	Käser Tobias
United States Department of Agriculture	Predict and Protect against PRRSV: Combine PRRSV Forecasting Technology with Vaccine Efficacy Prediction to Prevent PRRSV Outbreaks	Käser Tobias
Austrian Academy of Sciences	Unraveling the Interplay of CDK6 and STAT5B in NPM/ALK-Driven Transformation to Define Therapeutic Vulnerabilities	Kendler Jonatan
BIOS Science Austria – association to promote life sciences	SCHAFfen Wir: A Study of the Efficiency of Sheep Dairy Farms in Austria	Khiaosa-Ard Ratchaneewan
EU (Commission of the European Union)	Supporting Governance Action to Improve the Prevention, Prosecution and Law Enforcement of Wildlife Crime	Knauer Felix
WWF Austria	Feasibility Study Lynx	Knauer Felix
European Hematology Association	The Consequences of CHIP Mutations	Kollmann Karoline
Austrian Academy of Sciences	Encountering Animals after Wittgenstein. Exploring the Potential of Descriptive Ethics to Provide Moral Criticism	Linder Erich

FUNDING AGENCY	PROJECT TITLE	PROJECT LEADER
FWF – Austrian Science Fund	Thyroid Hormone Receptor ß / AR Interplay in Prostate Cancer	Lukas Kenner
EU (Commission of the European Union)	A European Flyway Research Network for the Effective Conservation of Migrant Landbirds	Maggini Ivan
EU (Commission of the European Union)	Pipeline for Rapid Emergency for Diagnostics of Transboundary Infectious Diseases	Makarova Olga
City of Vienna	Prevalence of Extended-Spectrum β-Lactamase-Producing and Multidrug-Resistant Enterobacteriaceae Among Clinical Isolates from Dogs Admitted to a Veterinary Hospital in Vienna	Makarova Olga
Christian Doppler Research Association	CD-Laboratory for Detection and Reduction of Dormant Bacteria	Mikuni Patrick-Julian
Austrian Academy of Sciences	Investigating Disease Mechanisms and Targetable Dependencies in γδ T Cell Lymphoma Using Novel Oncogenic STAT5B-Driven Preclinical Models	Myat Khine Aung Myint
EU (Commission of the European Union)	EU-LI-PHE	Oczak Maciej
Austrian Association for Buiatrics	Characterisation of the First Colostral Milk Microbiome in Simmental Cows: Relationship with Somatic Cell Counts, Parity, Antibiotic Use and Mastitis Anamnesis	Penagos Tabares Felipe
FWF – Austrian Science Fund	Elementary Cognitive Processes in Dogs:Investigating Learning and Memory Abilities for Perceptual and Relational Features of the Environment	Range Friederike
FWF – Austrian Science Fund	Let me out! Proximate Factors Mediating Helping Behaviour in Pigs	Rault Jean-Loup
Austrian Association for Buiatrics	Assessing the Effects of Zearalenone in the Diet on the Rumen Microbiome Composition and Metabolism in Relation to the Health Status of Cows	Ricci Sara
HZI – Helmholtz Centre for Infection Research	Animal Pathogen Museomics at Vetmeduni	Richter Barbara
Austrian Federal Forests	Getting Ahead of the Enemy: Establishment of Long-Term Monitoring and Assessment of Phenotypic Diversity in Fire Salamander Populations in the Vienna Woods	Rojas Zuluaga Bibiana
GFF – research promotion agency of Lower Austria	Robust Automated Evaluation of Drone Images in Plant Breeding Using Artificial Intelligence	Roth Peter Michael
FWF – Austrian Science Fund	Inferring Gene Flow from Phylogenies with Ubiquitous Genomes	Rui Carlos Pinto Borges
FWF – Austrian Science Fund	Elicitation of Antibodies Broadly Neutralising the Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) Using Reverse Vaccinology	Rümenapf Hans Tillmann
City of Vienna	Evaluation of a Rapid Test for the Detection of Wing Deformation Virus (DWV) as an Indirect Marker for High Varroa Contamination in Honey Bee Colonies – ‘Bee Virus Free’	Rümenapf Hans Tillmann

FUNDING AGENCY	PROJECT TITLE	PROJECT LEADER
FWF – Austrian Science Fund	The Importance of Non-Additive Effects for Adaptation	Schlötterer Christian
Medical University of Vienna – AKH	Measurements of Biologically Effective UV Radiation in the Field of UV Disinfection of Drinking, Re-Use and Waste Water	Schmalwieser Alois
Adalbert Raps Foundation	Microbiological Quality of Vegan Products	Schwaiger Karin
Federal Ministry of Agriculture, Forestry, Regions and Water Management	Keel Bone Fractures in Austrian Layer and Layer Parent Flocks: Prevalence, Risk Factors, and Productivity	Sirovnik Koscica Janja
FWF – Austrian Science Fund	Telomere Dynamics as an Indicator of Cumulative Lifetime Experience in Domestic Chickens	Sirovnik Koscica Janja
FWF – Austrian Science Fund	The Role of Retinol Uptake Receptor, STRA6, in Stromal Cell-Mediated Regulation of B-Cell Immunity	Sitnik Katarzyna Maria
Federal Ministry of Agriculture, Forestry, Regions and Water Management	Detection of Bacillus thuringiensis Insecticides Along the Austrian Vegetable and Fruit Production Chain	Stessl Beatrix
FWF – Austrian Science Fund	SHIELD - Securing Host Immunity: Elimination versus Destruction	Strobl Birgit
Stiftung Pro Pferd – foundation to promote equine research projects	Comparison of Maximal Heart Rate During Exercise, Heart Rate Recovery Values and New Immunological Stress Biomarkers in Horses with and without Heart Valve Disease	Trachsel Dagmar
Federal Ministry of Agriculture, Forestry, Regions and Water Management	Chlamydia suis Induced Fertility Disorders in Sows: Optimisation of Diagnostics and Improvement of Understanding of Pathogenesis, Epidemiology and Resistance	Unterweger Christine
FWF – Austrian Science Fund	Landfill Foraging in Migratory Birds: Pain or Gain?	Marasco Valeria
Association for the Study of Animal Behaviour	Mobile Eye Tracking to Study Action Comprehension in Dogs	Viranyi Zsofia
FWF – Austrian Science Fund	Intention or Behaviour Readers? How Dogs Understand Human Intentional Actions and Ostensive Signals	Völter Christoph
Federal Ministry of Agriculture, Forestry, Regions and Water Management	Distribution and Prevention of Ocular Squamous Cell Carcinoma in Haflinger and Noriker Caused by the Genetic Risk Factor ‘DDB2-R’	Wallner Barbara
Federal Ministry of Education, Science and Research	National Contribution to the European BBMRI.ERIC Network #3	Walter Ingrid
FWF – Austrian Science Fund	Persistent Tissue Stages and Sequestrated Blood Stages in Avian Haemosporidian Infections	Weissenböck Herbert
Office of the Lower Austrian Government	For a Biodiverse, Climate-Friendly Vineyard Landscape in Lower Austria	Zink Richard
EU (Commission of the European Union)	Medicinal Plants for Animal Health Care: Translating Tradition into Modern Veterinary Medicine	Zitterl-Eglseer Karin

Photos: BKA/Wenzel

Vetmeduni on Social Media

Research at Vetmeduni, study calls, tips and interesting facts for animal owners as well as useful information for future or current students: the platforms Facebook, Instagram and X (previously Twitter) and YouTube are used for a direct, uncomplicated exchange 24/7 with interested followers. With the help of infographics, videos or livestreaming of discussion rounds with the university’s experts, Vetmeduni intends to make science communication as understandable and exciting as possible for a broad target group.

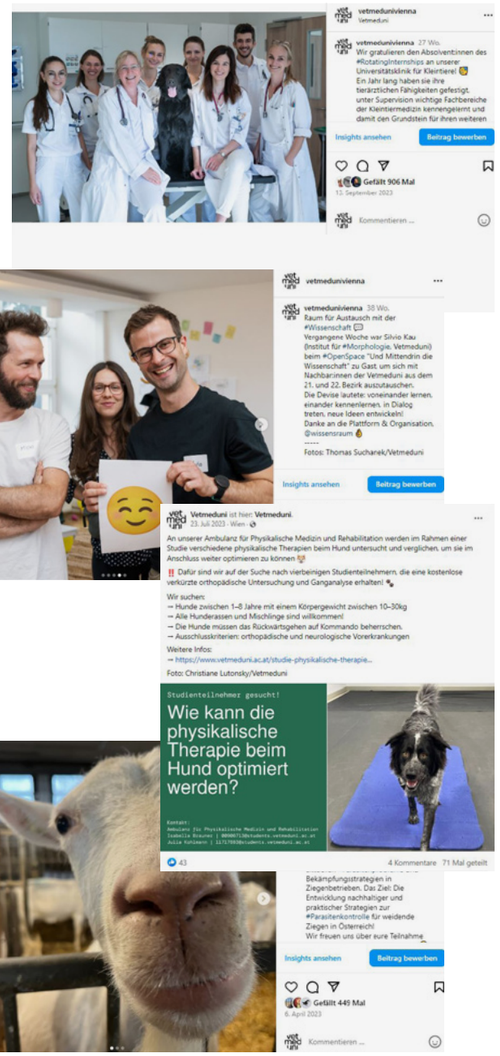
facebook.com/
vetmeduni.vienna

instagram.com/
vetmedunivienna

x.com/
vetmedunivienna

youtube.com/
vetmedunivienna

linkedin.com/
school/vetmeduni



The VETMED Magazine for Perusal

The university’s own VETMED Magazine reports on the latest scientific findings, current research projects, campus news as well as on cases from the university’s clinical practice. It is sent to more than 4,000 subscribers at home and abroad three times a year. Topics such as the new Small Animals Clinic, One Health, climate change and fundamental research were the focus of reporting in the 2023 issues.

All issues online:
https://www.vetmeduni.ac.at/universitaet/infoservice/vetmed-das-magazin

A New Look for VETMED Magazine

Large photos and a cool layout characterise the new appearance of VETMED Magazine. In summer 2023, the magazine presented itself for the first time in its fresh relaunch look matching the current corporate design of Vetmeduni. Since 1972, VETMED Magazine has accompanied the university in various forms and formats and provided insights into the veterinary world.

Magazine relaunch 2023.

Events

- **Sustainability Day of Vetmeduni**
  Under the Motto ‘Sustainable food supply and veterinary responsibility?’, the university’s Sustainability Advisory Board hosted the first Sustainability Day at Vetmeduni on 17 October. A keynote speech on the Austrian agricultural food system in the climate crisis, interesting presentations and an exciting panel discussion brought together a large number of Vetmeduni employees in the Great Hall of the university.

- **One Health Symposium in Innsbruck**
  Under the title ‘One Health Tyrol. Working together for healthy animals and humans’, Vetmeduni Vienna and Meduni Innsbruck organised their first joint event in Innsbruck on 18 October 2023. The experts of both universities and AGES presented current research findings and discussed how to enhance the integration of transdisciplinary approaches into science and teaching. The symposium was opened by Deputy Governor Josef Geisler and the Vice-Rectors of both universities, Christine Bandtlow and Jürgen Rehage.

- **Adieu with Applause: A Farewell to Professors**
  ‘Adieu with Applause’ is a new event format created in 2023 to allow all professors retiring in a given year to bid a ceremonial farewell to their colleagues and significant companions. During the moderated panel discussion, the acclaimed retirees not only had the opportunity to review their careers and major research achievements but also to share numerous anecdotes from their university lives and present short slide shows with photos of their companions.

- **Vetmed Children’s University 2023**
  Vetmeduni was the only Austrian university to be present in three locations of the Children’s University programme. On 20 and 21 July, children between the ages of seven and twelve once again studied and researched on campus, in the lecture halls, laboratories and seminar rooms of Vetmeduni. More than 900 children participated in courses appropriate for their age group. At the Children’s Summer University in Innsbruck, interested young researchers had for the first time an opportunity to get answers to all questions relating to cattle health and the veterinary profession. Horse health was the topic of KinderUniGraz. During an excursion to the Lippizaner stud farm in Piber, horse experts and veterinarians of Vetmeduni and the Spanish Riding Schools provided insights into the handling of the imperial mounts.

- **Culture of Remembrance: Lecture Series at Vetmeduni**
  Remembrance as a responsibility – in particular with a view to the period of National Socialism and Austrofascism. Vetmeduni understands this to be a moral obligation towards the displaced, their descendants and society on the one hand, and an institutional responsibility to strengthen the values required for a democratic, equal and cosmopolitan society on the other. For this reason, Vetmeduni introduced in 2023 a series of eleven lectures on the topic ‘From (keeping) silence to remembrance. Universities and their handling of persecution and marginalisation 1933-1945. The University of Veterinary Medicine, Vienna, and its history under Austrofascism and National Socialism – how do we deal with it today?’

For the lectures go to:
https://www.vetmeduni.ac.at/universitaet/profil/erinnern-als-verantwortung

All events at:
https://www.vetmeduni.ac.at/universitaet/infoservice/veranstaltungen

Photos: Thomas Suchanek/Vetmeduni

Science Communication and Public Relations

Make research tangible – Vetmeduni offers journalists and interested parties comprehensive information, thus enabling them to look behind the scenes of teaching, research and hospital work. From press releases and press conferences, appropriately edited scientific contents for online media to the university’s own magazine and social media channels: Vetmeduni Vienna relies on proactive science communication throughout the year. Press releases, together with numerous media inquiries addressed directly to the Public Relations Unit or the university’s experts, resulted in roughly 900 reports on a great variety of topics in national and international media (for instance: Die Presse, Kurier, Der Standard, APA-Science, Science.ORF.at, Die Zeit). Media monitoring recorded an average of 27 million contacts per month achieved with miscellaneous press releases in 2023.

Vetmeduni in the Media

PUBLIC RELATIONS 2023

PRESS RELEASES, MEDIA INQUIRIES

GUIDED TOURS

VETMED MAGAZINE (3 × PER YEAR)

NEWS ON WEBSITE

INFORMATION FOLDER

SOCIAL MEDIA

Unflappable, committed and innovative: The University of Veterinary Medicine, Vienna, stands for responsible action to ensure the health of humans, animals and the environment.

Animal Hospital

Photo: (Animal Hospital) Thomas Suchanek/Vetmeduni

Jürgen Rehage
Vice-Rector for Study Affairs and Clinical Veterinary Medicine

The key indicators for teaching, which are so important for the university's financing, were exceeded thanks to the great support of our students, especially those in the final phase of their studies. In addition, there was an increase in the number of applicants for study programmes. It actually doubled as a result of the necessary and consequently intensified marketing efforts to promote the master's programmes of Vetmeduni. Involving a high proportion of online teaching, the Precision Animal Health (PAH) Master's Programme in the winter semester was the first to run as a part-time programme to meet the changing needs of students. Moreover, it offers the opportunity to gain important experience with online teaching formats that can be of use for other study programmes as well. My thanks go to all teachers for their commitment and ongoing readiness to test new approaches.

Jessika-Maximiliane Cavalleri
Head of the Clinical Department for Small Animals and Horses

We thank Jörg Aurich and Ulrike Auer for their long-standing work as departmental heads and welcome Martina Mosing to the Anaesthesia professorship. In 2023, 65 diploma theses and seven dissertations were completed. Our extensive research activity is illustrated by over one hundred publications and the successful acquisition of third-party funding. In this context, we would like to congratulate Christine Aurich, Dagmar Trachsel and Iwan Burgener on their projects. Sincere congratulations also go to Lisa Kulmer on having been elected Teacher of the Year, to Sabine Schäfer-Somi on her EVSSAR Grant, to Yasamin Vali on her DVG Research Award, to Sabine Brandt on the Houska Award and to Florien Jenner on the Soft IP Award of Vetmeduni.

Andrea Ladinig
Head of the Clinical Department for Farm Animals and Food System Science

Our Department continues to focus on maintaining a healthy livestock and optimising livestock husbandry and feeding, as well as on food science and veterinary public health. There will be a new Centre for Veterinary Systems Transformation and Sustainability in our Department. For this purpose, Professors will be appointed for Herd Health Management involving digital health monitoring in farm animals, One Health systems science and sustainable plant-metabolite-animal interactions. As a Department we look forward to addressing the pressing issues of society from a scientific angle. I would like to thank all employees for their good cooperation during the not always easy times of restructuring and in particular Martin Wagner for his work as Head of the Department in the past year.

Photos: (1) Christian Steinbrenner/Vetmeduni, (2, 3) Michael Bernkopf/Vetmeduni

UNIVERSITY CLINICS

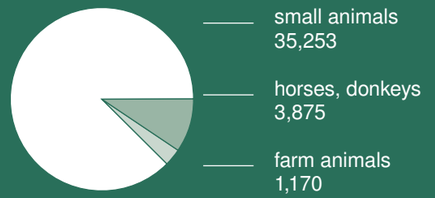
CLINICS FOR

POULTRY AND FISH · HORSES · SWINE · SMALL ANIMALS · RUMINANTS

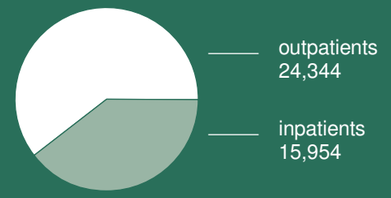
PATIENT VISITS 2023

TOTAL: 40,298

PATIENT VISITS AT THE UNIVERSITY CLINICS



CARE GIVEN TO ANIMAL PATIENTS



Figures exclude poultry and visits for the purpose of herd health management (livestock).

The University Clinic for Poultry and Fish managed a total of 30,858 patients

RESIDENTS

30

Number of Residents who were in training in 2023 and quality-assured by the Residency Advisory Board.

DIPLOMATES

70

Number of Diplomates as at 31 Dec 2023.

Residency programmes are veterinary medical study programmes with an international character that offer intensive specialisation in a clinical specialty field. Graduates of this three- to four-year training programme are called Diplomates.

Training Programmes ‘Residency’

ANAESTHESIOLOGY ECVAA

European College of Veterinary Anaesthesia and Analgesia

OPHTHALMOLOGY ECVO

European College of Veterinary Ophthalmology

DIAGNOSTIC IMAGING ECVDI

European College of Veterinary Diagnostic Imaging, Small Animal Track

SURGERY, LARGE ANIMALS ECVS

European College of Veterinary Surgery, Large Animal Surgery

SURGERY, SMALL ANIMALS ECVS

European College of Veterinary Surgery, Small Animal Surgery

DERMATOLOGY ECVD

European College of Veterinary Dermatology

POULTRY VETERINARY MEDICINE ECPVS

European College of Poultry Veterinary Science

VETERINARY INTERNAL MEDICINE, COMPANION ANIMALS ECVIM-CA

European College of Veterinary Internal Medicine, Companion Animals

INTERNAL MEDICINE, COMPANION ANIMALS ONCOLOGY ECVIM-CA, ONCOLOGY

European College of Veterinary Internal Medicine, Companion Animals – Oncology

INTERNAL MEDICINE, HORSES ECEIM

European College of Equine Internal Medicine

REPRODUCTIVE MEDICINE ECAR

European College of Animal Reproduction

BOVINE MEDICINE ECBHM

European College of Bovine Health Management

PORCINE MEDICINE ECPHM

European College of Porcine Health Management

SPORTS MEDICINE ECVSMR

European College of Veterinary Sports Medicine and Rehabilitation, Small Animal Track

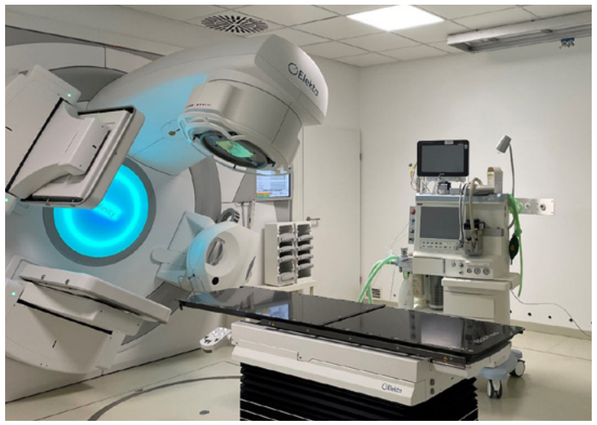
VETERINARY PARASITOLOGY EVPC

European Veterinary Parasitology College

VETERINARY PATHOLOGY ECVP

European College of Veterinary Pathologists

Photo: Martina Hurnaus/Vetmeduni



New Surgical Microscope at the University Clinic for Small Animals

Since 2023, the Small Animals Clinics has been the only veterinary clinic worldwide to have a robotically controlled surgical microscope that provides a 3D view of the site of surgery. The new Aesculap Aeos® is used in a variety of operations and offers surgeons a great many benefits: the wider field of view provides 16:9 widescreen images and, consequently, 50 per cent more information compared to the previous round field of view known from conventional surgical microscopes. A much greater depth of field provides additional information and a view the human eye alone cannot offer. 10x optical zoom and up to 95x magnification on a monitor help better identify small structures such as nerves. In soft tissue surgery, but also in neurosurgery, the new equipment enables surgeons to develop innovative surgical techniques or modernise existing ones.

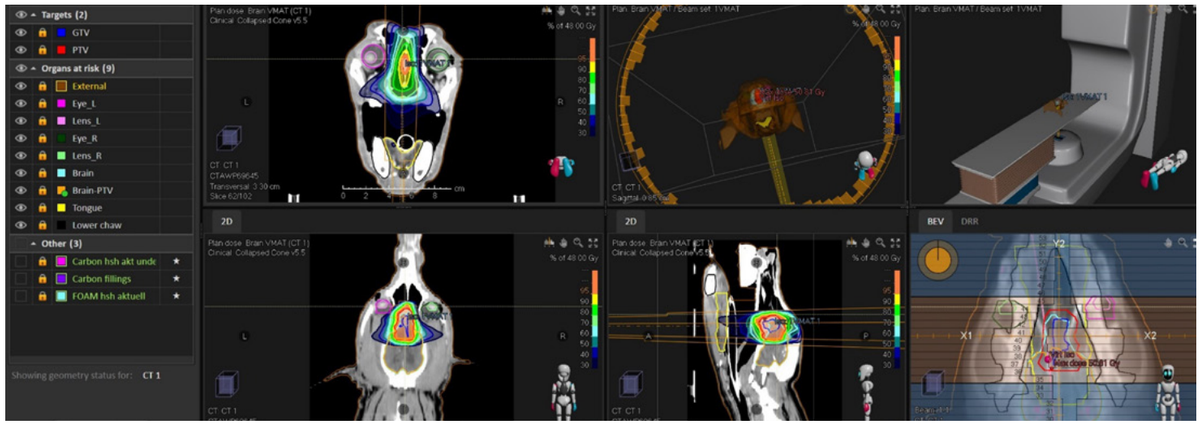
An asset for teaching and teamwork: thanks to the display on several screens, the entire staff of the operating theatre is now involved, resulting in optimised workflow efficiency. The use of the new surgical microscope will also modernise the clinical training of budding veterinarians. Special glasses and the 3D experience help impart specialised contents in a hands-on manner.

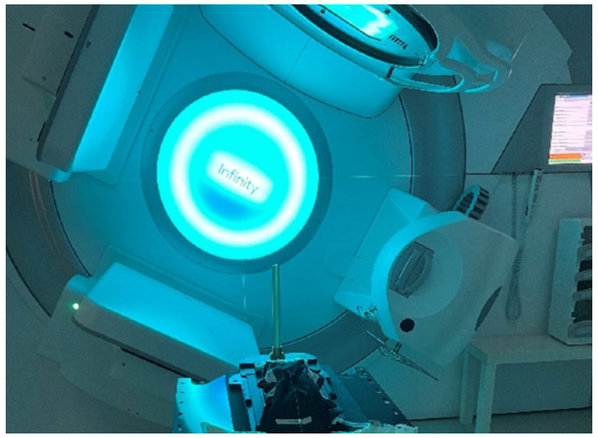
Cutting-Edge Linear Accelerator

Radiotherapy is among the most significant primary treatment methods for cancer in veterinary medicine and has kept gaining in importance in recent years. 2023 was the first year for Vetmeduni to boast a new cutting-edge Elekta Infinity linear accelerator, including a Ray Station planning software, for the radio-oncological treatment of its four-legged patients. The ultra-modern device is the only one of its kind in Austria. Owing to state-of-the-art technology, it enables precise and effective treatment of a wide variety of cancers. Alongside image-guided radiotherapy, it can be used for different radiation techniques, such as intensity-modulated radiotherapy, volumetrically-modulated rotational irradiation or high-precision irradiation in the form of stereotactic radiotherapy.

These irradiation techniques are based on a high-resolution multileaf collimator with 160 leaves and an integrated cone-beam-CT for image-guided radiotherapy. The leaves can be moved dynamically during irradiation and enable highly conformal shaping of the radiation field. The integrated cone-beam CT helps review the position of the tumour region to be irradiated before each radiotherapy session, thus enabling the treatment of cancers in almost any region of the body, such as skin and subcutaneous tumours as well as deeper-seated cancerous growths (brain tumour, tumours in the oral and nasal cavity, tumours in the thoracic, abdominal or pelvic cavity), while optimally sparing healthy tissue.

Photos: (1, 4, 6) surgical microscope, Miriam Kleiter, (2, 3, 5) linear accelerator, Michael Bernkopf/Vetmeduni





Publishing Information

Publisher
University of Veterinary Medicine, Vienna
Vetmeduni

T + 43 1 25077-0
communication@vetmeduni.ac.at
Veterinärplatz 1, 1210 Vienna

www.vetmeduni.ac.at

Responsible for the content
Rectorate of the University of
Veterinary Medicine, Vienna

Project Manager and Editor-in-Chief
Nina Grötschl

Editorial Staff
Alexandra Eder, Stephanie Scholz,
Christine Schwab-Schusser,
Veronika Steiner, Thomas Zauner

Graphic Design, Layout
Bueronardin

Infographics
Matthias Moser, Bueronardin

Editorial Review
Laura Zechmeister

English Translation
Eva Holzmair-Ronge

Printed by
Druckerei Janetschek GmbH
Brunfeldstraße 2, 3860 Heidenreichstein

Print Run
100 copies

Place and Year of Publication
Vienna, 2024

Subject to errata,
typesetting and printing errors.

klimaneutral
DURCH HUMUSAUFBAU
Geprüft vom Verband Druck & Medientechnik