vetmeduni

Annual Report 2021
University of Veterinary Medicine, Vienna

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

University

Petra Winter
Rector

2021 was another very gratifying year for our university. Be it upgrades in digitalisation or infrastructure: our staff did a great job to enhance the future viability of Vetmeduni in teaching, research and clinical operations. My special thanks for this effort! I am pleased to bid a cordial welcome to all new staff members. Thanks to the new Performance Agreement concluded with the Federal Ministry of Education, Science and Research, the university's daily operations are core funded for the next three years and Vetmeduni is a partner of the Austria-wide Uni-Med-Impulse-2030 initiative. This helps us to intensify our research within the One Health approach and enlarge our training facility in Tyrol.

Johannes Khinast
Chairman of the University Council

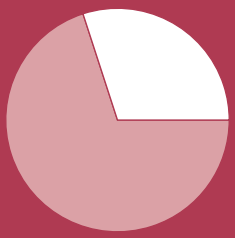
Vetmeduni is looking back on yet another challenging year. The Corona pandemic continues to be part of everyday university life and forces us to greatly reconsider our approach in many areas. The university has adopted a comprehensive response and submitted a longterm strategy for sustainable hybrid teaching to ensure teaching and research at internationally top levels. Moreover, enhanced efforts to promote excellence in third-party funding is a major factor to strengthen the Vetmeduni's ranking in the international premier league of universities. This has been impressively demonstrated with the university scoring eighth place in the international Shanghai Global Ranking.

Manuela Raith
Vice-Rector for Resources and Digitalisation

I am very pleased that our university succeeded in reaching a balanced result for the objectives agreed and implemented in the 2019-2021 Performance Agreement period. My special thanks go to all staff members for their team spirit and extraordinary commitment. 2021 saw the launch of a new x-ray system for horses and a new computer tomograph financed by additional funds for investment in our research and clinical infrastructure. I am particularly pleased that we were recertified a family-friendly university under the 'hochschuleundfamilie' audit programme. This gives a boost to our activities in various areas designed to reconcile work/study and family life.

University

PROFESSORS



12 women

26 men

38 total

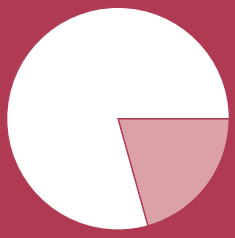
ACADEMIC STAFF

493 women

261 men

754 total

STUDENTS

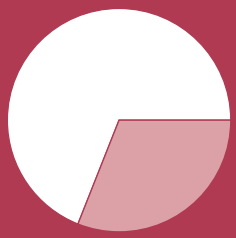


1,985 women

517 men

2,502 total

ADMINISTRATIVE AND SUPPORT STAFF



468 women

207 men

675 total

STAFF

1,467

STUDENTS

2,502

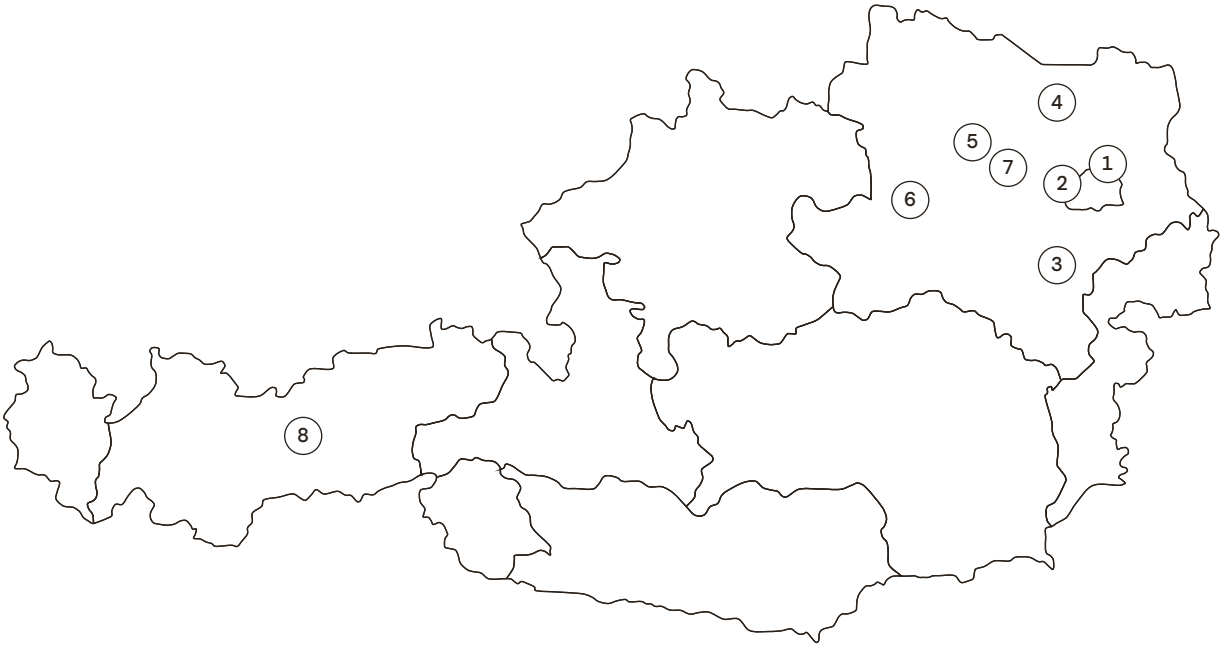
total (degree and non-degree students)

ANIMAL PATIENTS

47,680

total (figures exclude productive poultry and visits for the purpose of herd health management)

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 University of Natural Resources and Life Sciences, Vienna (BOKU) and the Vienna University of Technology (TU Wien)

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

Photos: (1) Thomas Suchanek/Vetmeduni, (2,5,6) Michael Bernkopf/Vetmeduni, (3) Manfred Kisling/Vetmeduni, (4) Roobert Bayer/WSC/Vetmeduni, (7) BOKU Media Relations Office, (8) Felizitas Theimer/Vetmeduni


1


2


3


4


5


6


7


8

EMAS Certification

During recertification, the EMAS Audit (Eco-Management and Audit Scheme) largely focused on Diagnostic Imaging, the University Clinic for Ruminants, VetFarm as well as Campus Management. The Vetmeduni satellites FIWI and KLIVV, as well as VetFarm, were successfully included in the EMAS Eco-Management system in 2021. We have been able to implement numerous projects and measures throughout our campus to meet sustainability requirements, such as: greening the parking deck wall, cultivating wildflower meadows for insects and leaving heaps of dead wood, setting up a bike repair stand, converting the campus's outdoor lighting and the library's indoor lighting to LED.

University and Family Life: Recertification

After a positive audit process in autumn 2021 the University of Veterinary Medicine, Vienna, has been awarded the 'hochschuleundfamilie' (=university and family) certificate for another three years. With this new audit in mind, Vetmeduni developed comprehensive additional measures to better support its staff in reconciling work/study and family life. Unlike many other audits of its kind, 'hochschuleundfamilie' is not a current snapshot but rather a reflection of a continuous improvement process monitored by a specialised consulting firm.

Sustainability Advisory Board Adopted

Vetmeduni assumes responsibility for sustainable action in teaching, research, knowledge transfer and university management. In summer 2021, the Rectorate decided to establish a consultative body called Sustainability Advisory Board (Nachhaltigkeitsbeirat), the overarching aim being to promote sustainable development in teaching and research and coordinate such development with the sustainability concept of the campus as defined for EMAS certification.

Successful Completion of VetWoman and VetTalents

In 2020, Vetmeduni initiated the targeted VetWoman and VetTalents support programmes to promote the scientific career of up-and-coming young talents. October 2021 saw the closing event for the two coaching formats. Highlights of these programmes included so-called research-monitoring activities as well as fireside chats, where participants discussed successful career paths with role models: in 2021 the university's guest was Doris Schmidauer, a free-lance business consultant with many years of experience in politics. The programme to advance women will improve career prospects for female junior scientists and enhance the predictability and reliability of scientific careers, its aim being to have women and men equitably represented at Vetmeduni on all rungs of a scientific career and in all subjects.

For more information on the closing event go to: www.vetmeduni.ac.at/universitaet/infoservice/presseinformationen/presseinformationen-2021/erfolgreicher-abschluss-fuer-vetwoman-und-vettalents

Photos: (1) Thomas Suchanek/Vetmeduni, (2) Die Fotografen/State of Tyrol

SDG Sustainability Campaign

In 2020, Vetmeduni launched its sustainability campaign under the UN's Sustainable Development Goals. This campaign was continued in 2021, with an online discussion format – VetmedTalk – being added under the motto: 'Understand today. Change tomorrow.' Within this format, researchers and vets of Vetmeduni and partner institutions answer questions from a diverse audience and present their most recent research results. In particular the related communication campaign in the social media gained wide attention.

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

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

UNInteresting – uniko campaign

With the 'UNInteresting? – ideas to improve our life' campaign, an initiative of Universities Austria (uniko), research results were again transported into daily life in 2021. Inter alia, Vetmeduni participated with contributions to the info screens of Wiener Linien, Vienna's public transport operator, on the topics of 'Sustainable travel' (rules of conduct when hiking on pastures) and 'Food and shopping' (food safety: proper storage of fish and meat – as part of the SDG priorities communication).

VetmedRegio Regionalisation Initiative

Under the VetmedRegio regionalisation initiative, cooperation between the state of Tyrol and Vetmeduni was enhanced in 2021 and sealed with a cooperation agreement in 2022. Collaboration aims to further strengthen veterinary care services in Austria through early connectedness of students to their (home) regions.

From left to right: Rector Petra Winter, Deputy State Governor Josef Geisler, State Governor Günther Platter and Federal Minister Martin Polaschek.

2021 also saw the establishment of a new animal home on the property of the Caritas village St. Anton in the Salzburg Pinzgau district, where animals and people with and without disabilities can get in touch with each other. The Messerli Research Institute provides the scientific background for involving people with disabilities in the operation of the animal home. This kind of scientifically supported collaboration between an animal home and a Caritas village is unique in the German-speaking area.

For further measures in the Austrian states go to: www.vetmeduni.ac.at/de/universitaet/vetmedregio

AMONG THE TOP IN GLOBAL RANKING OF ACADEMIC SUBJECTS

In the year under report, Vetmeduni again is among the top ten in the global ranking of academic subjects, also known as Shanghai Ranking. In Life Sciences and the associated subject of Veterinary Sciences the University of Veterinary Medicine, Vienna, ranks 8th in the global ranking of academic subjects. With its 31st place in the Quacquarelli Symonds world university rankings by subjects, Vetmeduni remained within the top 50 universities worldwide.

NEWS FROM THE INSTITUTES

- Conversion of the Wolf Science Center (WSC) into a core facility unit

As of June 2021, the Ernstbrunn-based Wolf Science Center has become an independent core facility of Vetmeduni. It offers interested researchers the possibility of carrying out various scientific projects with wolves and dogs, both raised under comparable conditions. Some of the current projects include studies on cooperation behaviour and cognitive skills, but also physiological studies involving the detailed analysis of faecal, urine or saliva samples.

- Messerli Research Institute celebrates tenth anniversary

The Messerli Research Institute (MFI) has been founded with the support of the Swiss Messerli Foundation under the aegis of Vetmeduni in cooperation with MedUni Vienna and the University of Vienna. This university competence centre focuses on a variety of aspects of human-animal interaction and its foundation in ethics, comparative medicine and animal behaviour. On 29 October 2021, numerous guests of honour of the Messerli Foundation, Vetmeduni Rector Petra Wimmer, researchers, staff and students of the institute met to celebrate the tenth anniversary with a festive ceremony.

New Professorships

Karin Schwaiger
Food Hygiene
and Technology

New Associate and Assistant Professorships

Bibiana Rojas
Global Change Biology

Olga Makarova
Antimicrobial Resistances
within a One Health Context

For portrayals of the new professors in the VETMED Magazine go to:
www.vetmeduni.ac.at/vetmedmagazin

Photos: (1,2) Michael Bernkopf/Vetmeduni, (3) Fereshteh Ghazisaeed, (Study) Niko Havranek/Vetmeduni

Study


Fossa
Supraspinata
Spina scapulae
Tub.
Supraglenoidalis
Cavitas glen

Leonida Fusani
Spokesman of the Department of Interdisciplinary Life Sciences

The past year was an eventful one for our department. At the Konrad Lorenz Institute of Ethology (KLIVV) we welcomed the new Assistant Professor for Global Change Biology, Bibiana Rojas. Walter Arnold, the long-term Professor and Head of the Research Institute of Wildlife Ecology (FIWI), was awarded the Grand Decoration of Honour in Silver for Services to the Republic of Austria on the occasion of his retirement in emeritus status. Now the vacancies of the Professorship for Wildlife Ecology and the leadership of FIWI must be filled. We cordially congratulate Alice Auersperg of the Messerli Research Institute (MFI) on being awarded the renowned START Scholarship of the Austrian Science Fund (FWF).

Sabine Hammer und Anja Joachim
Chairwoman and Deputy Chairwoman of the Senate of the University of Veterinary Medicine, Vienna

A new structure has been developed for Vetmeduni over the past years going back to before the outbreak of Corona, a pandemic that continued in 2021. It encompasses the campus as our centre of work as well as activities at satellite facilities, work from home and on official journeys. Given all that, the campus address remains the main point of contact in our working life. Quite a few were almost nostalgic upon their ‘return’ from remote work. One of the lessons learned during the pandemic is that sufficient mobility, flexible communication and the simple pleasure of getting together need to be maintained. We wish that all staff members and alumni enjoy coming to the campus and being together ‘like before’, while being aware that a virus might change this quickly.

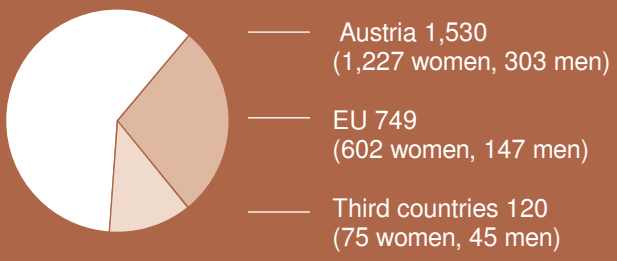
Marlene Colbow
Chairwoman of the Student Union of the University of Veterinary Medicine, Vienna (HVU)

Unfortunately, teaching in 2021 continued to be determined by the Covid 19 pandemic, with online classes being part of the students’ daily life. Together, the Rectorate, teachers and students met the ups and downs of openings and lockdowns with the objective in mind to ensure the best possible setting for teaching at our university. At the end of last year, a number of students could return to lecture halls, while the foundations for hybrid teaching were laid. Many thanks to all those who were involved in and supported this project. I hope that this new and more flexible form of teaching will remain with us for many years to come as a positive reminder of the crisis.

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

Students

MATRICULATED STUDENTS BY COUNTRY OF ORIGIN



APPLICANTS/ADMISSIONS 2021 (FOR THE 2021/22 ACADEMIC YEAR)	APPLICANTS			QUALIFIED FOR ADMISSION		
	WOMEN	MEN	TOTAL	WOMEN	MEN	TOTAL
Diploma Programme in Veterinary Medicine	1,077	171	1,248	205	37	242
Bachelor's Programme in Biomedicine and Biotechnology	114	38	152	31	14	45
Interdisciplinary Master's Programme in Human-Animal Interactions	13	1	14	13	1	14
Master's Programme in Comparative Biomedicine	22	4	26	14	1	15
Total	1,226	214	1,440	263	53	316

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 2021/22 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
Interdisciplinary Master in Human-Animal Interactions (IMHAI)

Evolutionary Systems Biology[2]

Comparative Biomedicine – Infection Biomedicine and Tumour Signalling Pathways

Wildlife Ecology and Wildlife Management[3]

Doctoral Programme
Veterinary Medicine

PhD Programme

[1]in cooperation with the University of Natural Resources and Life Sciences, Vienna (BOKU). This programme will be phased out. It is no longer possible to be (re-)admitted to this programme as of the 2021/22 academic year.

[2]in cooperation with the University of Vienna

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

Media Workshop: The Virtual Lecture Hall

In 2021, the media workshop was enlarged by a new area of work that enables teachers to present classes online and produce high-quality teaching videos. It has been equipped with top quality media technology. A ‘greenscreen’ installed in this room may be used by teachers to teach against virtual backgrounds (lecture halls, campus areas). A specially adjusted video workflow ensures automated and rapid optimisation, publication and archiving of the videos made and offers students no-hassle access via their learning platform.

Education Awards

Under the motto ‘Collaborate and interact’, the Teaching Vets Symposium #7 focused on virtual reality as an option in training. In his keynote address Michael Wagner, Paediatrician at the University Clinic for Paediatric and Adolescent Medicine and Head of the Paediatric Simulation Centre in Vienna, introduced his mixed reality project, which revolves around simulation-based training and instruction methods in paediatrics. At the same time, the symposium continued its tradition of highlighting exemplary teachers presenting eleven projects in entertaining one-minute videos. The event closed with a ceremony in which awards, supported by the City of Vienna, were presented in the categories of Teacher, Instructor and Student of the Year as well as the Vetucation® Student Award of the Students' Union.

For all award winners go to:
www.vetmeduni.ac.at/teachingvets

Audience Response System ‘Poll Everywhere’

Since the introduction of this system in 2020, Poll Everywhere has been well accepted by both students and teachers: a total of more than 2,000 questions have been generated so far with more than 180,000 answers given by students. Owing to the high usage figures and the positive feedback from teachers and students the Poll Everywhere license has been widened making it now available not only to undergraduate students but to all students of Vetmeduni.

Illustrations: Matthias Moser/Vetmeduni

H5P: Interactive Learning Contents

The cutting-edge technology H5P enables teachers to create interactive learning contents (videos, quizzes, presentations, etc.). An information campaign including instructions, tutorials and training sessions raised the teachers' awareness for this option. In addition, a workflow has been developed to rapidly provide interactive learning contents, including performance assessments, via our learning platform.

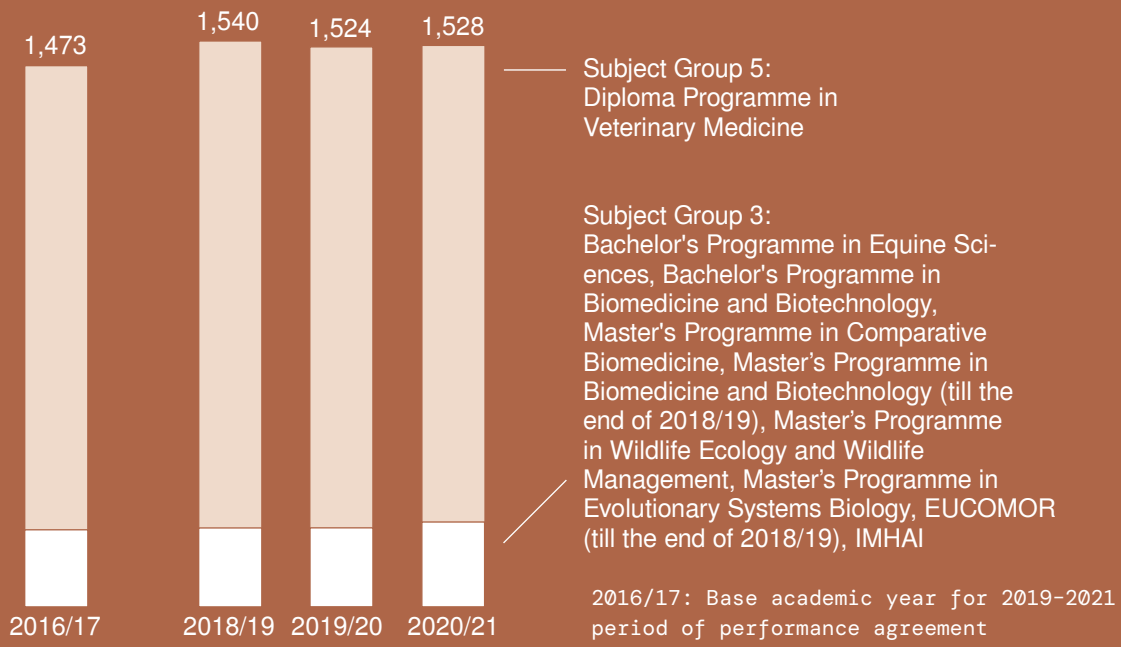
Fresh Impetus for Teaching

Contributions by experts on pedagogics and didactics in the monthly 'kick-start breakfast' series invite attendees to discuss the topics presented. The 2021 topics included, inter alia:

- Telemedicine – the Digital Veterinary Practice
- Self-Regulated Learning in Medical Education
- Workplace-Based Learning Using the Jigsaw Method

Videos of all presentation can be viewed online: iissrv1.vu-wien.ac.at/vetmediathek/Webgalerien/impulsfrueh-stueck/index.html#/?playlistId=0&videoId=0

DEVELOPMENT OF DEGREE COURSES SUBJECT TO EXAMS – CORE INDICATOR 1 OF THE PERFORMANCE AGREEMENT WITH THE MINISTRY OF SCIENCE



Graduates

2020/21	WOMEN	MEN	TOTAL
Bachelor's Programme in Biomedicine and Biotechnology	16	3	19
Master's Programme in Evolutionary Systems Biology[1]	0.56	1.12	1.68
Master's Programme in Comparative Biomedicine	9	1	10
Master's Programme in Wildlife Ecology and Wildlife Management[2]	1.3	1	2.3
Interdisciplinary Master's Programme in Human-Animal Interactions	11	3	14
Bachelor's Programme in Equine Sciences[3]	12.06	0	12.06
Diploma Programme in Veterinary Medicine	140	44	184
Doctoral Programme	16	7	23
PhD Programmes	13	6	19
total	218.92	66.12	285.04

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

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

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

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

Research

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

In 2021, as in previous years, our researchers successfully submitted a great number of projects for third-party funding and increased their publications in renowned journals. Technology transfer, too, presented an opportunity to celebrate significant achievements – despite a pandemic still ongoing. Of course, Corona containment policies reduced international mobility in 2021, a situation that could be partially compensated by virtual and hybrid congresses and conferences. But, as I see it, science is largely kept alive and going by personal interaction, so we do hope that a steady and interpersonal exchange will again become possible in the near future in spite of the current crisis.

Armin Saalmüller
Spokesman of the Department of Pathobiology

2021 was yet another year in which members of our staff received prestigious prizes and awards, among them Christiane Weissenbacher-Lang, Herbert Weissenböck and Anna Feix. Findings from FWF-financed citizen science projects on the spreading of invasive mosquitoes in Austria were published with success, as were joint studies focusing on illnesses caused by resistance to antiparaciticides in sheep. A joint project on anthrax pathogens has been launched in cooperation with the Ministries of Agriculture and Defence. The Institute of Morphology initiated an international project for the development of teaching models in line with the Three Rs principle. In addition, findings of translational medicine on, inter alia, tumour markers in lymphomas and prostate cancer were published in top-level journals.

Mathias Müller
Spokesman of the Department of Biomedical Sciences

We are looking back on a turbulent year dotted by lockdowns and are pleased that our researchers were successful in getting their propositions accepted in assessment procedures conducted by various research support entities. We wish them a lot of joy and success in implementing their interesting projects! Vetmeduni bids farewell to Gottfried Brem, its valued Professor in Animal Breeding and Genetics, and cordially welcomes Peter M. Roth, its new Professor in Computational Medicine. We wish both of them the best of health, much joy and fulfilment for the new phase in their life! We thank all students and our employees for their mutual understanding, their patience and flexibility in fruitful collaboration in teaching and research.

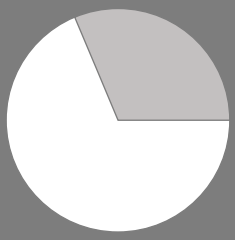
Photos: (1) Christian Steinbrenner/Vetmeduni, (2) Stephanie Scholz/Vetmeduni, (3) Thomas Suchanek/Vetmeduni

Research

792

ACADEMIC STAFF TOTAL

PROFESSORS 2021

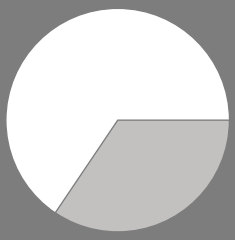


12 women

26 men

38 total

ACADEMIC STAFF 2021



493 women

261 men

754 total

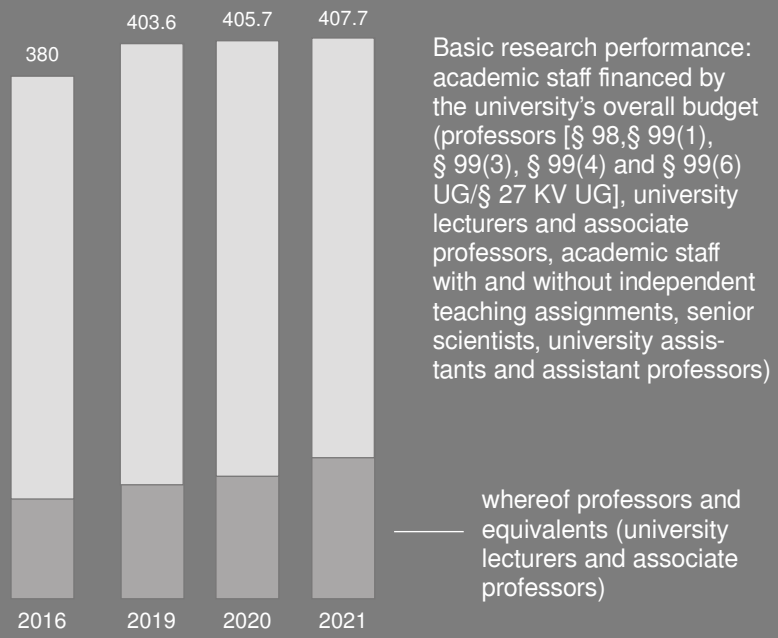
CAREER POSITIONS WITHIN ACADEMIC STAFF

8 women

1 man

9 total

STAFFING DEVELOPMENT IN THE SCIENTIFIC FIELD (BASIC RESEARCH PERFORMANCE – CORE INDICATOR 2 OF THE PERFORMANCE AGREEMENT WITH THE MINISTRY OF SCIENCE)



2016: Base year for performance agreement period 2019-2021

A great variety of research questions are addressed by scientists at Vetmeduni. Research projects newly authorised in 2021 include inter alia:

Development of a tumour-cell-based vaccine for the treatment of equine cancers

Project leader: Sabine Brandt
Funding agency: Austria Wirtschaftsservice Gesellschaft mbH

Papillomavirus-induced tumours in horses pose a major therapeutic challenge for the treating vet. This is particularly true of benign but locally aggressive skin tumours. Up to 12 per cent of all horses worldwide suffer from so-called sarcoids. The Research Group Oncology (RGO) of Vetmeduni's Clinical Unit of Equine Surgery under the leadership of Sabine Brandt has been the first to succeed in stably infecting primary equine fibroblasts with virions of the bovine papillomavirus types 1 and 2 responsible for the development of sarcoids. Characterisation of the infected cells has shown that they are almost identical with natural sarcoid cells. It is of particular note that all viral genes are transcribed in the cells, which indicates a corresponding expression at protein level. Consequently, these in-vitro-generated tumour cells have now been introduced by Vetmeduni for application as vaccines for the immunotherapy of sarcoids since preliminary data suggest an effective therapeutic potential. This project has been carried out by the RGO and supported, inter alia, with prototype funding of Austria Wirtschaftsservice Gesellschaft (AWS).

Non-coding RNAs in oncogene-induced biomolecular condensates

Project leader: Florian Grebien
Funding agency: Austrian Science Fund (FWF)

The spatial organisation of biochemical processes within a cell enable special biochemical reactions to be performed very efficiently. Unlike membrane-enclosed organelles, those without membrane develop through biomolecular condensation of proteins and RNA similar to oil droplets in a vinaigrette. Scientists assume that there are cancer-specific biomolecular condensates which cannot be found in normal cells but which are important for the growth of cancer cells. In the present project, Florian Grebien and colleagues explore the role of cancer-specific regulatory RNA molecules in the regulation of oncogenic biomolecular condensates. Using imaging methods and the so-called CRISPR/Cas9 technology, they analyse whether cancer-specific RNAs interact with oncogenic fusion proteins in biomolecular condensates and how their loss impacts the formation and stability of these structures. The research results will help to better understand the new concept of oncogenic biomolecular condensates and the role of regulatory RNAs within this context and to develop strategies for targeted inactivation of these structures.

Photos: Thomas Suchanek/Vetmeduni

Doctoral programme ‘Cognition and Communication 2’

Project leader: Ludwig Huber
Funding agency:
Austrian Science Fund (FWF)

Vienna has increasingly developed into a major centre of comparative behavioural and cognition research. The Austrian Science Fund (FWF), the University of Vienna (spokesman: Tecumseh Fitch) as well as the University of Veterinary Medicine, Vienna (spokesman: Ludwig Huber) support this development with a multi-stage, integrated, English-speaking PhD training programme on cognition and communication in animals and humans, the objective being to train doctoral students to conduct interdisciplinary research into cognition and communication from a biological perspective. The focus is on the question of how animals as well as humans solve problems of the real world such as in communication and interaction with their kind in daily social life. Participants in the programme learn to explore the behaviour of animals and humans by addressing a great number of cognitive and ethological questions both in laboratory and field work. In so doing, they work with a broad range of species including: reptiles (crocodiles), birds (pigeons, ravens, parrots, Darwin’s finches), elephants, pigs, canines (wolves and dogs), humans as well as non-human primates (marmosets).

Doctoral programme doc. funds.connect – ‘PAIR – Pre-clinicAL Ion Beam Research’

Overall project leader: Dietmar Georg, Medical University of Vienna
Project partner at Vetmeduni: Corina Itze-Mayrhofer
Funding agency:
Austrian Science Fund (FWF)

Radiation with charged particles enhances the possibilities of cancer therapy. The PAIR– Pre-clinical Ion Beam Research project supported under the doc.funds.connect programme examines new approaches to pre-clinical research in ion beam therapy using in-vivo and in-vitro tumour models. Five inter-disciplinary PhD projects cover the fields of medical radiation physics, molecular and cell biology, imaging and data analysis. The PhD students are embedded in an interinstitutional network of scientists of the Medical University of Vienna, the University of Veterinary Medicine, Vienna, as well as the University of Applied Sciences Wiener Neustadt. Major parts of the programme consist of inter-disciplinary-type classes promoting the students’ training and qualifying them for a career in science and industry. Another key element of PAIR involves the research infrastructure of the MedAustron centre. Integration of the results obtained in the PAIR project are intended to produce a more detailed picture of the effect of ion beams at molecular and cellular levels and help to better understand their application.

COwLEARNING for sustainable beef and dairy supply (#ConnectingMinds CM 400-B)

Overall project coordination: Marianne Penker and Stefan Hörtenhuber, University of Natural Resources and Life Sciences, Vienna (BOKU)
Project coordination by Vetmeduni: Susanne Waiblinger
Funding agency: Austrian Science Fund (FWF)

Today’s greatest societal challenges include mitigating climate change, ensuring a healthy diet and maintaining high biodiversity. Switching to a sustainable agri-food industry plays an essential role in achieving these objectives, with sustainability involving a high quality of life (and work) for both animals and humans and sustainable consumption practices. In Austria, with its high proportion of permanent grassland, beef and dairy supply is of special importance. A participatory, transdisciplinary approach, including the relevant stakeholders along the entire supply chain, is used to develop future scenarios, integrated farm-to-fork assessments and a ‘serious game’. This is how the project team composed of BOKU and Vetmeduni scientists as well as practice partners wants to find options of establishing a more animal-friendly, ecological, economically and socially sustainable dairy and beef supply system.

Precision feeding in gestating sows based on automated detection of body condition and individual needs (FEEDURA)

Project leader: Johannes Baumgartner
Funding agency: Austrian Research Promotion Agency (FFG)

Precision feeding (PF) helps to improve animal health, quality of life and productivity of livestock while reducing feed and emissions. With the automated 'Compident' sow feeding station, developed in the 1990s, Schauer Agrotronic GmbH has created the technical preconditions for automated single feed supply to gestating sows. However, PF has not been examined in terms of the nutrient status of the animals thus fed. Within the FEEDURA project, both project partners (Institute of Animal Welfare Science and Messrs. Schauer) want to develop a computer vision and AI-assisted method to record the body condition of sows whenever they use the feeding station. With this information, the system could automate the feed curve and continuously adjust it to the nutrition status of the sows. In addition, the sows' behaviour within the group is automatically monitored by various sensors and analysed for any correlation with their individual feed needs. Proof of concept trials and internal validation of the developed Body Condition Monitoring system are carried out at the VetFarm Medau, while external validation is provided by three commercial sow units.

Ageing and cognitive dysfunction syndrome in dogs influence postural control

Project leader: Barbara Bockstahler
Funding agency:
Austrian Science Fund (FWF)

Elderly dogs often suffer from the so-called cognitive dysfunction syndrome (CDS), the veterinary equivalent of human Alzheimer's disease (AD). This has prompted researchers to frequently use dogs as models for exploring AD. In the present project, scientists analyse the extent to which the ageing process and CDS influence postural control (which is reduced in the elderly and in AD patients). For this purpose, a pressure measuring platform is used to measure the oscillations of the so-called centre of pressure under varying conditions, which is an indirect measure of the functionality of postural stability. Researchers hypothesise that ageing, CDS and tasks requiring mental alertness are key factors in postural instability. In the future, this project is intended to provide non-invasive methods of measurement to extend the diagnosis of age-related and cognitive pathologies by a functional aspect and enable the assessing of disease progression and objectively test therapeutic methods.

Leptospirosis in cattle in Lower Austria (LORN): A targeted approach to enhance veterinary diagnostics and prevent zoonotic occupational exposure

Project leader: Amélie Desvars-Larrive
Funding agency: Office of the Lower Austrian Government

Leptospirosis is a widespread global zoonosis affecting humans and animals. It is caused by bacteria of the Leptospira spp. strain. Numerous animal species have turned out to be reservoirs of pathogenic Leptospira. In cattle, this leads to infectious diseases and in particular to fertility disorders and thus to loss of production. Live bacterial cultures are used for identifying infections (presence of antibodies) in humans and animals. The test panel will include locally circulating reference strains to ensure a meaningful interpretation. However, up until now no strain has been isolated in Austria so that serological diagnosis relies on 'foreign' strains. The isolation of Leptospira strains from field tests is rather challenging. The 'Leptospirosis in cattle in Lower Austria' (LORN) project is conducted by VetFarm scientists in cooperation with AGES IVET Mödling. It aims to isolate Leptospira strains of infected cattle in Lower Austria, thus improving the sensitivity of serological diagnosis for humans and animals. LORN is intended to have a permanent positive impact on public health in Austria. Moreover, the genetic analysis of circulating strains helps to elucidate the role of cattle in the epidemiology of leptospirosis in Lower Austria.

Photos: Thomas Suchanek/Vetmeduni

Effect of climatic changes on bovine fertility in Lower Austria

Project leader: Vitezslav Havlicek
Funding agency: GFF Niederösterreich – Gesellschaft für Forschungsförderung Niederösterreich m.b.H. (research promotion agency of Lower Austria)

Global warming and the related negative consequences of higher ambient temperatures for cattle have become a major challenge for livestock husbandry and sustainable production. Heat stress is one of the most well-known manifestations of global warming in livestock and is mainly associated with reduced milk yield and fertility leading to shorter life expectancy in cows and enormous economic losses. However, there are few studies on heat stress under the conditions found in Austria. The present projects aims to analyse the impact of heat stress as found in Lower Austria on the micro-environment in the bovine oviduct and early embryonic development in dairy cows. A detailed understanding of the underlying molecular and cellular mechanisms caused by higher temperatures could be key to developing effective strategies of prevention and management. The project is carried out at three locations in Lower Austria (Reproduction Center Wieselburg, IFA Tulln and VetFarm Kremesberg).

Development of an artificial-intelligence-assisted ultrasound learning environment for students to reduce the use of horses in veterinary teaching (3 Rs – Reduce, Refine, Replace)

Project leader: Silvio Kau
Funding agency:
Forster-Steinberg Foundation

Complex imaging techniques such as ultrasound require enormous intensity in training. For lack of realistic alternatives, it is indispensable to apply these techniques to live horses during veterinary study. Consequently, the need of live animals in training is correspondingly high. This is an enormous challenge since animal welfare must rank first. Therefore, a number of examinations can be trained only to a limited extent or not at all. For this reason, the development of hands-on simulators is becoming increasingly important in research. A team of Vetmeduni is cooperating with specialists of the LMU Munich and private companies on solutions to simulate dynamic ultrasound examinations in equine medical training based on kinematic, sensor and machine learning technologies. This novel learning environment is intended to help reduce the need for live animals in university teaching and post-graduate further training modules. There are plans to fully replace them in early clinical training. Moreover, the possibility of repetitive training will increase the students' methodological efficiency, thus improving later interventions on live animals – an important step towards enhancing animal welfare in general.

Pilot study – systemic risk monitoring of food safety with the Austrian pig production chain as an example

Project leader: Annemarie Käsbohrer
Funding agency: University of Natural Resources and Life Sciences, Vienna (BOKU) / Federal Ministry of Agriculture, Regions and Tourism

The goal of the pilot study was to identify all data regarding the so-called value-added pork network, create a conceptual model and collate the data identified as relevant in the model to form the basis for systemic risk monitoring. Once the data sources relevant for mapping the value-added pork network had been identified, they were analysed under a network-based approach to show any mutual dependencies. Proper understanding of the value-added chain, in turn, is the basis for identifying the operations which are of critical importance to food supply. The value-added pork network covers, as fully and completely as possible, the actors and material flows from the original producer (animal owner) to the population. It includes animal owners (commercial breeding and fattening farms), slaughterhouses, meat processing plants, food retail distribution centres, food retail outlets as well as administrative population units (state, district, etc.). The project could be concluded successfully.

Dynamics of transposable elements

Project leader: Robert Kofler
Funding agency:
Austrian Science Fund (FWF)

Parasites such as lice in domestic animals are well-known to everyone. However, many will be surprised to hear that parasites may also spread in the human genome. These transposable elements (TEs) frequently copy themselves into new regions of our genome. Although this activity often results in illnesses, TEs have been very successful in evolutionary terms and account for 50 per cent of the human genome. However, the host tries to contain the activity of these transposable elements. It is being assumed that it does so by so-called piRNA clusters, which are regions within the genome resembling a mousetrap. When a TE jumps into such a cluster, short RNA pieces are produced which deactivate the TE. If a mousetrap worked in this manner, it would suffice to catch a single mouse to get rid of all the other mice in the house. However, most recent research raises doubts. If the so-called trap model was correct, computer simulations would require these clusters to show a special composition differing from the remainder of the genome. The current project will review and investigate this assumption. Using the most advanced sequencing technology, the researchers involved will decode the genome of fruit flies and check whether the predictions of simulations hold true.

Hidden properties: The kea's understanding of weight

Project leader: Megan Lambert
Funding agency:
Austrian Science Fund (FWF)

To successfully navigate their environment, animals must rely on some degree of knowledge about the physical world, including the properties of objects within it. Principal among these is weight: though it cannot be seen directly, weight pervades nearly every aspect of our daily lives, from adjusting our lifting forces to picking up objects of different weights, to flexibly selecting differently-weighted objects to solve tasks. Indeed, it has been suggested that humans have a uniquely sophisticated understanding of weight; however, we still know surprisingly little about other species' understanding of this property. This project examines weight understanding in the highly innovative kea parrot, focusing on (i) whether and how kea attend to the weight of objects, (ii) whether they infer the weight of objects without handling them directly, and (iii) whether they use information about weight to flexibly solve problems. Addressing these questions will provide insight into how non-human animals perceive and reason about the objects they interact with, and ultimately pinpoint critical differences between human and non-human minds.

Do human attitudes towards wolves and dogs actually reflect the human related temperament traits of the two species?

Project leader: Friederike Range
Funding agency:
Austrian Science Fund (FWF)

Wolves are very successful predators that can also be dangerous for humans, while at the same time they are the next of kin to our domestic dogs. Stereotypes such as the 'big bad wolf' and 'man's best friend' reflect both characterisations. Nevertheless, this perception may affect our own behaviour towards wolves and dogs which, in turn, may influence the response of these animals to humans and, consequently, our scientific discourse. In the current project, scientists will explore the attitude of humans towards wolves and dogs with the help of behavioural, neuronal and physiological measurements and test whether and how this attitude may influence the animals' behaviour when interacting with them. In addition, the social behaviour of wolves and dogs towards humans is to be examined in greater detail. The findings will help to better understand the interaction between humans and wolves/dogs, which is important for theories on domestication and wildlife management. The project is an interdisciplinary collaboration between researchers of the University of Veterinary Medicine, Vienna (Friederike Range and Sarah Marshall-Pescini) and the University of Vienna (Claus Lamm).

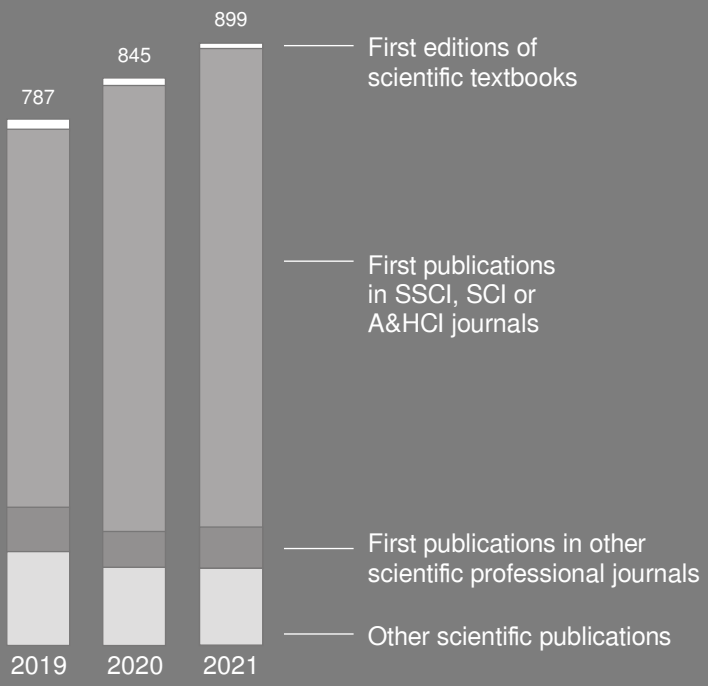
Mixed husbandry of pigs and chickens to improve animal welfare – development of risk minimisation strategies based on risk analysis

Project leader: Karin Schwaiger
Funding agency:
Schweisfurth Foundation, Germany

Keeping several species on joint pastures, which was quite common in former times, is hardly seen nowadays although symbiotic effects could be exploited. For instance, chickens pick ectoparasites from the skin of pigs; the pigs, in turn, offer chickens protection from natural enemies like birds of prey or foxes. Chickens find more worms and other food in the churned up soil. However, contact between different animal species involves the risk of enhanced inter-species transmission of pathogens, which may increase the risk for humans – in particular in view of food-associated zoonoses such as salmonellosis, campylobacteriosis and listeriosis. The planned research project will take a closer look at these risks using conventional (bacteriology) and state of the art methods (for example, molecular biology, MALDI-TOF-MS, FTIR). The identification of epidemiological correlations will help to derive science-based recommendations for effective risk management (for example, through enhanced meat inspection) while at the same time promoting animal welfare.

1,183

SCIENTIFIC PUBLICATIONS TOTAL



Note: The chart does not include any contributions to compilations since no real-life congresses were held due to the Corona pandemic making such figures non-representative.

Newly Approved Research Projects at a Glance

FUNDING AGENCY	PROECT TITLE	PROJECT LEADER
Office of the Lower Austrian Government	Progesterone measurements to optimise fertility in dairy cows	Elisabeth Hausmann
Office of the Lower Austrian Government	Leptospirosis in cattle in Lower Austria: a targeted approach to enhance veterinary diagnostics and prevent zoonotic occupational exposure	Amélie Desvars-Larrive
Office of the Upper Austrian Government	Mosquito Monitoring Upper Austria – 2021	Hans-Peter Führer
Austria Wirtschaftsservice Gesellschaft mbH	Development of a tumour-cell-based vaccine for the treatment of equine cancers	Sabine Brandt
Federal Ministry of Agriculture, Regions and Tourism	Improving the resilience of the local roughage production for cattle feeding	Qendrim Zebeli
EU (Commission of the European Union)	Cost action CA20103 – biosecurity enhanced through training, evaluation and rising awareness	Amélie Desvars-Larrive
EU (Commission of the European Union)	Use of phage applications to combat MRSA at the sow-piglet interface to reduce exposure of staff and contamination of the environment	Annemarie Käsbohrer
EU (Commission of the European Union)	Promoting innovation of ferMENTed fOods	Friederike Hilbert
Fellinger Cancer Research – non-profit private association promoting cancer research	Investigation of molecular mechanisms underlying the functional cooperation between CEBPA and TET2 mutations in acute myeloid leukaemia	Elizabeth Claire Heyes
FFG – Austrian Research Promotion Agency	SmartMask polysomnography tool for horses	Jessika-M. Cavalleri
FFG – Austrian Research Promotion Agency	Vector-borne diseases in the deployment areas of the Austrian Armed Forces: Kosovo and Bosnia-Herzegovina (BIH)	Hans-Peter Führer
FFG – Austrian Research Promotion Agency	Development of a gastroscopic model for the evaluation of new drug delivery systems	Lukas Schwarz

Note: This table presents an excerpt from those research projects that were granted funding in 2021. Owing to confidentiality provisions not all projects may be published.

FUNDING AGENCY	PROECT TITLE	PROJECT LEADER
FFG – Austrian Research Promotion Agency	3D printed intrinsic force prostheses for dogs	Eva Schnabl-Feichter
FFG – Austrian Research Promotion Agency	Systemic risk management and resilience planning for Austrian food supply security	Amélie Desvars-Larrive
FFG – Austrian Research Promotion Agency	Precision feeding in gestating sows based on automated detection of body condition and individual needs (FEEDURA)	Johannes Baumgartner
FFG – Austrian Research Promotion Agency	Investigation of climatic and anthropogenic influences on chamois for the development of sustainable management	Friederike Pohlin
Forster-Steinberg Foundation	Development of an artificial-intelligence-assisted ultrasound learning environment for students to reduce the use of horses in veterinary teaching (3 Rs – Reduce, Refine, Replace)	Silvio Kau
Fortra GmbH for research transfer of the Else Kröner-Fresenius Foundation	Obesity therapy and prevention by LRIG2 inhibition – a translational validation in a pig model	Maik Dahlhoff
FWF – Austrian Science Fund	Ageing and cognitive dysfunction syndrome in dogs influence postural control	Barbara Bockstahler
FWF – Austrian Science Fund	Non-coding RNAs in oncogene-induced biomolecular condensates	Florian Grebien
FWF – Austrian Science Fund	Oncogenic biomolecular condensation in NUP98-fusion leukaemia	Florian Grebien
FWF – Austrian Science Fund	Evaluation of ABC transporters in leukaemia	Florian Grebien
FWF – Austrian Science Fund	Dynamics of transposable elements	Robert Kofler
FWF – Austrian Science Fund	Does the size of piRNA clusters predict the abundance of transposable element insertions?	Robert Kofler
FWF – Austrian Science Fund	STAT5B as a novel prognostic marker of thrombosis risk in myeloproliferative neoplasms	Heidi Neubauer
FWF – Austrian Science Fund	Immunomodulatory products of the Siberian fluke Opisthorchis	Alba Hykollari
FWF – Austrian Science Fund	PoMo-cod: a polymorphism-aware phylogenetic codon model	Rui Carlos Pinto Borges

FUNDING AGENCY	PROECT TITLE	PROJECT LEADER
FWF – Austrian Science Fund	CDK8 as a novel target in lymphoid leukaemia	Veronika Sexl
FWF – Austrian Science Fund	Kea curiosity: context, causes and consequences	Megan Lambert
FWF – Austrian Science Fund	Social learning strategies in free-ranging dogs	Giulia Cimarelli
FWF – Austrian Science Fund	Cognition and Communication 2	Ludwig Huber
FWF – Austrian Science Fund	Hidden properties: the keas' understanding of weight	Megan Lambert
FWF – Austrian Science Fund	Do human attitudes towards wolves and dogs actually reflect the human related temperament traits of the two species?	Friederike Range
FWF – Austrian Science Fund	The limits of imagination: animals, empathy, anthropomorphism	Martin Huth
FWF – Austrian Science Fund	COwLEARNING for sustainable beef and dairy supply (#ConnectingMinds CM 400-B)	Susanne Waiblinger
FWF – Austrian Science Fund	PAIR – Pre-clinicAl Ion beam Research	Corina Itze-Mayrhofer
Gesellschaft für Forschungsförderung Niederösterreich m.b.H. (research promotion agency of Lower Austria)	JAK2 inhibitors and the innate immune response in CALR-driven MPNs	Karoline Kollmann
Gesellschaft für Forschungsförderung Niederösterreich m.b.H. (research promotion agency of Lower Austria)	Effect of climatic changes on bovine fertility in Lower Austria	Vitezslav Havlicek
INDIBA® Animal Health	Capacitive and resistive electrical transfer therapy in dogs with osteoarthritis of the hip joints – a pilot study	Barbara Bockstahler
Linnaeus University	Telomere dynamics in naked mole-rats	Dustin Penn
Municipal Department 24 – Strategic Healthcare and Social Planning	Mosquito Monitoring Vienna – 2021	Hans-Peter Führer
Austrian Academy of Sciences	Birds in two worlds: carry-over effects of environmental and individual winter conditions on spring migration ecology	Erica Calabretta
OeAD Austrian Agency for International Mobility and Cooperation	Socioeconomic and genetic monitoring for conserving the cultural inheritance in the indigenous 'Lobi' cattle of south-western Burkina Faso	Pamela Burger

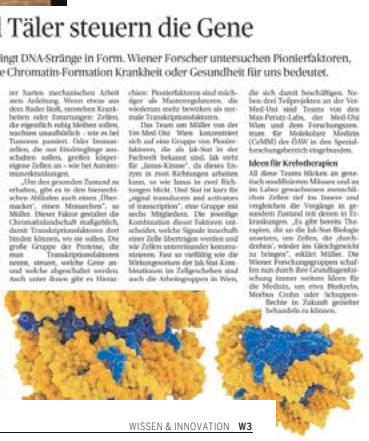
FUNDING AGENCY	PROECT TITLE	PROJECT LEADER
OeAD Austrian Agency for International Mobility and Cooperation	Turning fruit and vegetable wastes into livestock feed: sustainable feed resources with functional properties	Ratchaneewan Khiaosa-Ard
OeAD Austrian Agency for International Mobility and Cooperation	Conference on veterinary science and agriculture	Friederike Hilbert
OeAD Austrian Agency for International Mobility and Cooperation	Testing the domestication syndrome in free-ranging dogs – mobility grant	Sarah Marshall
OeAD Austrian Agency for International Mobility and Cooperation	Strengthening genetic biocontrol capacities under climate change in Armenia	Pamela Burger
OeAD Austrian Agency for International Mobility and Cooperation	Advancing local capacities for livestock breeding practice and research in Burkina Faso	Pamela Burger
Schweisfurth Foundation	Mixed husbandry of pigs and chickens to improve animal welfare – development of risk minimisation strategies based on risk analysis	Karin Schwaiger
City of Vienna	Bacillus cereus sepsis: first insights into the molecular basis of pathogenicity	Astrid Digruber
City of Vienna	Study of the role of fibroblast growth factor 23 for bone development in the neonatal phase using the animal model of suckling piglets	Julia Vötterl
City of Vienna	Automated quantification of avian malaria parasitaemia in blood smears by artificial intelligence	Tanja Himmel
City of Vienna	Residual nitrite and nitrate and formation of N-nitrosamines in organic and conventionally cured meat products available in Vienna	Kathrine Bak
Brandenburg Stud Farm Foundation Neustadt/Dosse	Effect of suppressed gonadal function with altrenogest on stress response and performance in mares during initial equestrian training	Martim Kaps
Stiftung Pro Pferd	West Nile Virus infections in horses in two affected countries (Austria and Hungary) – a preliminary study to analyse the mosquito biodiversity and mosquito-borne flavivirus prevalence in close proximity to previously WNV-affected horse populations	Hans-Peter Führer
Stiftung Pro Pferd	Heterologous prime boost vaccination against West Nile virus in horses	Phebe de Heus
The European College of Porcine Health Management Ltd	Investigations on the role of Stomoxys calcitrans as bacterial reservoir and distributor of antimicrobial resistance in swine production	Lukas Schwarz
The Research Council of Norway	CalfComfort: nurturing positive welfare in calves	Jean-Loup Rault

FUNDING AGENCY	PROECT TITLE	PROJECT LEADER
University of Natural Resources and Life Sciences, Vienna (BOKU) / Federal Ministry of Agriculture, Regions and Tourism	Pilot study – systemic risk monitoring of food safety with the Austrian pig production chain as an example	Annemarie Käsbohrer
Private association 'Freunde der Assistenzhunde Europas' (friends of Europe's assistance dogs)	Guide dog harness Helga	Barbara Bockstahler
Verein zur Förderung der Forschung im Gesund-heitssektor von Lamas und Alpakas e.V.	Epidemiological study on Bornavirus infections in New World camelids	Thomas Wittek
Volkswagen Foundation	Off-target effects of glyphosate on bacteriophages: mechanisms and implications for environmental health	Olga Makarova
Vienna Science, Research and Technology Fund (WWTF)	Systems Medicine of (emerging) infections	Mathias Müller
wings4innovation GmbH	Inhibitors of CDK6 expression	Karoline Kollmann

Science Communication and Public Relations

Make research feel tangible – Vetmeduni relies on proactive science communication offering journalists and the interested public comprehensive information. The university provides a look behind the scenes of its teaching, research and hospital work, be it through press releases and press conferences or editing scientific contents for online media, the publication of its own magazine or the use of social media channels.

Vetmeduni in the Media


Hügel und Täler steuern die Gene

Genetik. Chromatin bringt DNA-Stränge in Form. Wiener Forscher untersuchen Pionierfaktoren, die entscheiden, ob eine Chromatin-Formation Krankheit oder Gesundheit für uns bedeutet.



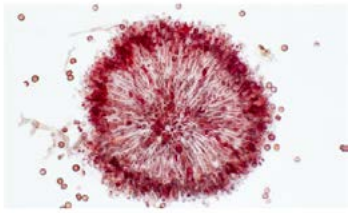
Hühner haben Charakter, Scharren und komplexe Emotionen

Die Haustiere wollen picken, scharren und sicher schlafen

Kakadus – neugierig, verspielt und ziemlich


Verschüttete Milch ist doch wertvoll


Das grosse Schlummern


Forschungsfrage
Vergiften Schimmelpilze Österreichs Weiden?

Gießkannenschimmel - Aspergillus spec. (c) imago/blickwinkel (F. Fox)

Schimmelpilze können für Mensch und Tier giftige Stoffwechselprodukte bilden. Durch die Klimakrise wächst


Die frühen Bürger Wiens und ihre Sprache

PUBLIC RELATIONS 2021

PRESS RELEASES, MEDIA INQUIRIES

CAMPUS

GUIDED TOURS

VETMED MAGAZINE (4 × PER YEAR)

WWW

NEWS ON WEBSITE

INFORMATION FOLDER

SOCIAL MEDIA

VETMED Magazine for Perusal

The university's own printed magazine VETMED informs about current research projects, recent scientific findings, news from the campus and cases from clinical practice. It is sent to more than 3,800 subscribers at home and abroad four times a year. Topics such as vaccine development in veterinary medicine, the use of antibiotics as well as mechanism of hibernation were the focus of reporting in 2021.

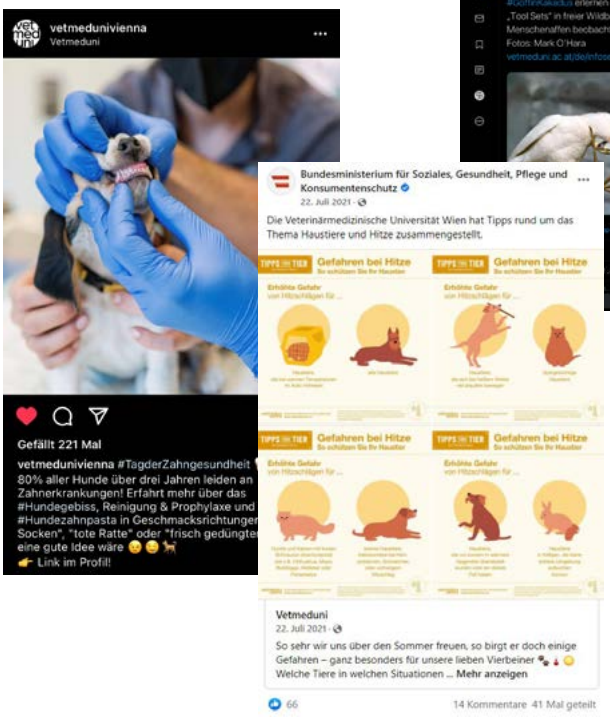
All editions are available online at:www.vetmeduni.ac.at/vetmedmagazin

dpa Infographics Award 2021 for VETMED Magazine

The infographic 'Vaccine development in veterinary medicine' in the 01/2021 edition gained 2nd place in the category 'Companies, institutions, NGOs, authorities, foundations and similar entities' of the dpa Infographics Award 2021.

Vetmeduni on Social Media

Research conducted at the university, tips for animal owners, information on relevant studies: Vetmeduni uses social media channels such as Facebook, Instagram, Twitter and YouTube to keep interested persons abreast of developments and to make direct exchanges as easy as possible. Followers are provided with infographics, peeks into VETMED Magazine, podcast tips, portrayals of our employees and most recently since 2021: live discussion rounds with our experts.



Events

Due to safety measures during the Covid-19 pandemic, a number of events were conducted online, others were postponed. Detailed information on the 2021 events is available (in German) on the website of Vetmeduni in the 'Events' section.

All events at: www.vetmeduni.ac.at/veranstaltungen

- On 16 March 2021 the 11th Kremesberg Conference took place online, its focus being on 'Joining forces for animal welfare'.
- The INPOMED – Innovations in Poultry Medicine Congress was held on 22 March 2021 in cooperation between the University of Veterinary Medicine, Vienna, and the Veterinary Research Institute (Czech Republic).
- The 2021 Children's University was organised both in small groups at the Campus of Vetmeduni and in the form of virtual livestreams. Throughout the summer, employees of Vetmeduni prepared contributions for an interesting science programme: www.kinderuni.online/vetmed

Videos of all presentations at: www.kinderuni.online/vetmed

Photo: (Animal Hospital) Thomas Suchanek/Vetmeduni

Animal Hospital

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

On the road to an innovative digital teaching and learning culture of high-quality standards, we were able to implement a number of important projects such as the expansion of our media workshop. The Teaching Vets Symposium and the ‘kick-start breakfast’ series offered ideas and a critical reflection of the virtual reality of teaching. Activities culminated in autumn with the hand-over of the newly built Small Animals Clinic. Before going into operation, the units involved adopted a new organisational structure of collegial leadership for day-to-day clinical work consisting of medical, nursing and administrative directors. In special workshops, employees prepared intensively for the new operational workflows, which are also reflected in the design of the clinic building.

Jörg Aurich
Spokesman of the Department/ University Clinic for Companion Animals and Horses

Alongside the university’s core tasks of veterinary research and teaching, clinical operations play a major role in the Department for Companion Animals and Horses. For many animal owners, Vetmeduni is synonymous with the university’s animal hospital. The new Small Animals Clinic was completed in 2021. Our special challenge now is to run this new building as a teaching hospital and integrate our studying colleagues into daily work. Research by the department in 2021 is reflected by an increasing number of scientific publications and a greater inflow of competitive research funds for the department. Successful examples include, inter alia, Austrian FWF funding for Barbara Bocksthaler and German BMEL funding for Christine Aurich.

Michael Hess
Spokesman of the Department/ University Clinic for Farm Animals and Veterinary Public Health

There was already some routine in online teaching and in the organisation of clinical and scientific services during the second year of the pandemic. It turned out that quite a few newly introduced approaches were there to remain. In terms of staff, the department benefited from an above average number of assistant professorships. The requirements for obtaining third-party funding continued to increase, while efforts to strengthen basic research and innovation with a view towards applications in veterinary fields of activity remained challenging. Within the overall context of the department’s tasks and range of services, new developments such as reduced flexibility in staffing and changes in performance incentives require optimisation.

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

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

Residency Programmes

ANAESTHESIA AND ANALGESIA 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 MEDICINE ECPVS

(European College of Poultry Veterinary Science)

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 HEALTH MANAGEMENT ECBHM

(European College of Bovine Health Management)

PORCINE HEALTH MANAGEMENT ECPHM

(European College of Porcine Health Management)

SPORTS MEDICINE ECVSMR

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

VETERINARY PARASITOLOGY EVPC

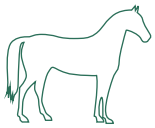
(European Veterinary Parasitology College)

VETERINARY PATHOLOGY ECVP

(European College of Veterinary Pathologists)

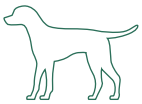
5 UNIVERSITY CLINICS FOR

POULTRY AND FISH

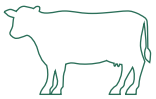


HORSES

SWINE



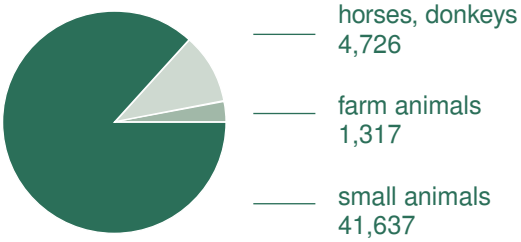
SMALL ANIMALS



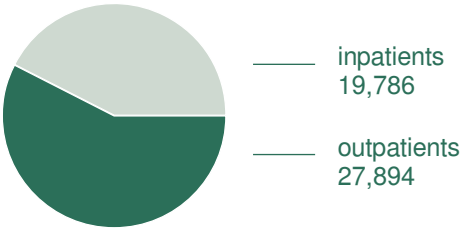
RUMINANTS

PATIENT VISITS 2021

2021 TOTAL 47,680



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 28,275 patients and samples in 2021.

RESIDENTS

21

Number of Residents who were in training in 2021 and quality-assured by the Residency Advisory Board.

DIPLOMATES

81

Number of Diplomates as at 31 Dec 2021.

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

Photos: Thomas Suchanek/Vetmeduni

Construction Progress for the New Small Animals Clinic

Following two years of construction, the builder and property owner Bundesimmobiliengesellschaft (BIG) handed over the new Small Animals Clinic to the University of Veterinary Medicine, Vienna, in November 2021. Built according to the most advanced clinical standards, the new Small Animals Clinic is setting not only national but also international standards. This is particularly true of the patient-oriented training of students, which is lifted to a new level owing to the architectural and organisational features of the building; at the same time this is the first clinic to ensure interdisciplinary care for our animal patients at a single location.

Publishing Information

Publisher:
University of Veterinary Medicine, Vienna,
Veterinärplatz 1, A-1210 Vienna

T 43 1 25077-0
communication@vetmeduni.ac.at

www.vetmeduni.ac.at

Editor-in-Chief
Rectorate of the University of
Veterinary Medicine, Vienna

Project Manager and Editor
Stephanie Scholz

Editorial Staff
Alexandra Eder, Nina Grötschl,
Patrick Müller, Thomas Zauner

Graphic, Design, Layout
Bueronardin

Infographics
APA-Grafik, Matthias Moser, Bueronardin

Editorial Review
Susanne Spreitzer, Laura Zechmeister

English Translation
Eva Holzmair-Ronge

Printed by:
Druckerei Janetschek GmbH,
Brunfeldstraße 2, 3860 Heidenreichstein

Print Run:
100 copies (English version)

Place of Publication:
Vienna, 2022

Subject to errata,
typesetting and printing errors.

klimaneutral
DURCH HUMUSAUFBAU
Geprüft vom Verband Druck & Medientechnik