

The motto of this year's report of Vetmeduni Vienna revolves around microscopic items. Research means going into detail, which is why the present report comes with a variety of microscopic images from histology, a field that often provides essential information to researchers and veterinarians in their quest for answers to scientific questions. All pictures have been taken at Vetmeduni Vienna.



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## Facts & Figures

### Sites and Establishments of Vetmeduni Vienna

#### 1. Campus

Floridsdorf, Vienna

### 2. Research Institute of Wildlife Ecology / Konrad Lorenz Institute of Ethology

Ottakring, Vienna

#### 3. VetFarm

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

#### 4. Wolf Science Center (WSC)

Ernstbrunn, Lower Austria

#### 5. Satellite of the Austrian Ornithological Centre (AOC)

Seebarn/Grafenwörth, Lower Austria

### 6. Reproduction Center Wieselburg

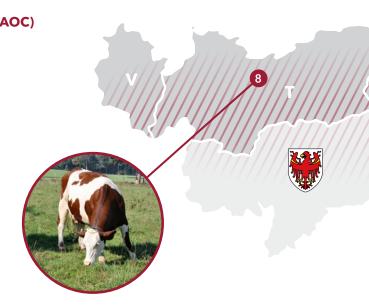
Wieselburg, Lower Austria

### 7. Interuniversity Department for Agrobiotechnology - IFA Tulln

together with the University of Natural Resources and Life Sciences Vienna and the Vienna University of Technology

### 8. Satellite Office: Ruminants in the Alpine Region

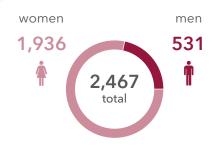
Innsbruck, Tyrol







as at: 04/01/2020





2019

### 45,450 animal patients\*

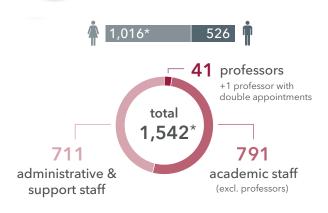
visited five species-specific university clinics

\* Figures do not include poultry and visits for the purpose of herd health management (livestock)

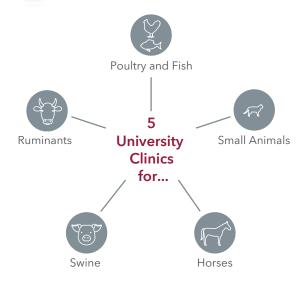


as at: 31/12/2019





\* Since one person is counted as belonging both to the general (administrative & support) and the scientific staff, we have an instance of double counting which is adjusted for in the total number.



The year 2019 brought a number of far-reaching decisions. Alongside my re-election as Rector, of which I was very pleased personally and which is a major motivation, Vetmeduni Vienna could lay a number of forward-looking milestones: with the establishment of a new satellite entity in Tyrol, we want to move the topic of 'Ruminants in the Alpine Region' centre-stage with long-lasting effect. In addition, the European Association of Establishments for Veterinary Education (EAEVE) attested excellence and excellent management of our establishment during its on-site visitation, an assessment that instills a sense of pride and gratitude.

Petra Winter, Rector



### **Study Programmes**

- **Diploma Programme:** Veterinary Medicine
- Bachelor's Programmes:
  Biomedicine and Biotechnology
  Equine Sciences <sup>3</sup>
- **Doctoral Programme:** Veterinary Medicine
- PhD programme
- Master's Programmes:

European Master in Comparative Vertebrate Morphology (EUCOMOR, in English)¹ Interdisciplinary Master in Human-Animal Interactions (IMHAI, in English) Master in Evolutionary Systems Biology (in English)² Comparative Biomedicine (in English) Wildlife Ecology and Wildlife Management³

<sup>&</sup>lt;sup>3</sup> In cooperation with the University of Natural Resources and Life Sciences (BOKU), Vienna



### **Research Priorities**

Research activities at Vetmeduni Vienna are concentrated around these core topics:

- Endocrinology
- Nutrition physiology
- Infectious diseases (fish, poultry, swine)
- Food microbiology and risk analysis of animal-based food products
- Population genomics
- Translational medicine and comparative medicine
- Behavioural biology and behavioural ecology (incl. cognition)
- Wildlife ecology and medicine

The University of Veterinary Medicine, Vienna, is better placed than ever before in international comparison as shown by its excellent 5<sup>th</sup> place in the Shanghai Global Ranking of Academic Subjects. This is not only due to governing bodies which are ambitious and forward-looking while exercising due caution, but also to ongoing cooperation between researchers, teachers and students in a professional university environment characterised by mutual appreciation. Under these preconditions, the University of Veterinary Medicine, Vienna, is well equipped both for a successful long-term development at top international level and for providing training of a high recognised standard to the veterinary community in Austria.

Johannes Khinast, Chairman of the University Council

oto: Lichtmaister

<sup>&</sup>lt;sup>1</sup> In cooperation with the universities of Antwerp (BE), Gießen (DE), Poznan (PL) and Naples (IT), the programme expired on 30 Sept 2019

<sup>&</sup>lt;sup>2</sup> In cooperation with the University of Vienna

## Unique in Austria - Internationally Recognised

Vetmeduni Vienna is the only university in Austria specialising in veterinary medicine. It is among the leading higher education and research institutions of veterinary medicine in Europe.

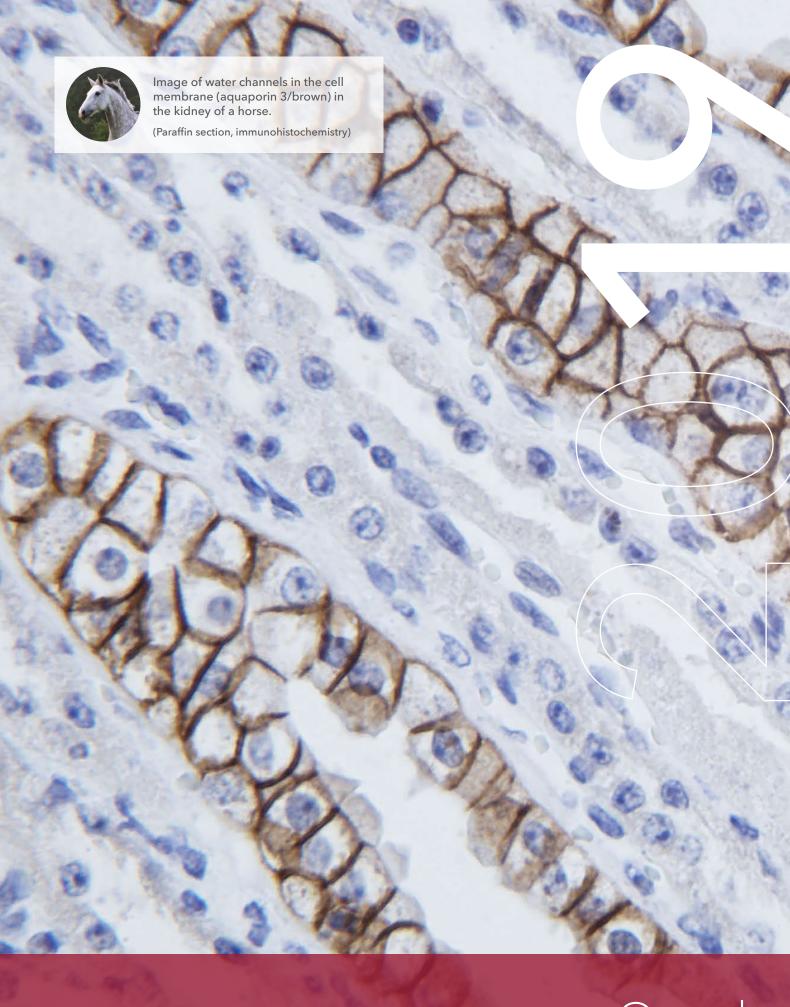
### **EAEVE Visitation**

Since 2013, Vetmeduni Vienna has been one of the few veterinary universities to be fully accredited by the European Association of Establishments for Veterinary Education (EAEVE). In November 2019, an international visitation team re-examined Vetmeduni Vienna on site. At the end of the one-week visitation. the EAEVE team of experts told the governing bodies of the university that it would issue a positive report without citing any major or minor deficiencies. This assessment was verified by the EAEVE Decision Board (ECOVE) in June 2020. If the final decision is positive, Vetmeduni Vienna will have its full EAEVE accreditation renewed for another seven years.



### 5<sup>th</sup> Place for Vetmeduni Vienna in the Global Ranking of Academic Subjects

Vetmeduni Vienna moved from 6<sup>th</sup> to 5<sup>th</sup> place in Veterinary Sciences in the Life Sciences category of this international ranking system, thus being among the world's top ten in this field. Since 2017, the number of subjects reviewed and evaluated by this Global Ranking of Academic Subjects in the categories of Natural Sciences, Engineering, Life Sciences, Medical Sciences and Social Sciences has grown to 54, the number of universities covered worldwide to more than 4,000.



Study

## Study

### Degree Courses: Skills for Working Life

Vetmeduni Vienna offers first-class training to its students: training is student-centred and based on clearly defined learning objectives. Teaching at Vetmeduni Vienna provides scientifically based competences and hands-on skills.

	2019	Women	Men		Total
D	Diploma Programme ir Veterinary Me		155	46	201
В	Bachelor's Pro Biomedicine a		logy 15	2	17
В	Bachelor's Pro Equine Science		11.39	0	11.39
M	Master's Prog Biomedicine a		ology 2	0	2
M	Master's Prog Evolutionary S		0.28	0.56	0.84
M	Master's Prog Comparative		7	1	8
M	Master's Prog Wildlife Ecolo Wildlife Mana	gy and	1.60	1.10	2.70
M	Interdisciplina Programme ir Human-Anima	۱	12	0	12
9	Doctoral Prog	ramme	17	1	18
Ð	PhD Studies		9	8	17

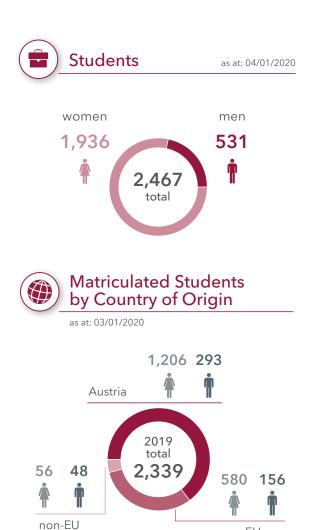
Note: In the case of cooperation partners, graduates are counted according to the allocation formula

#### Bachelor's Programme in Equine Sciences:

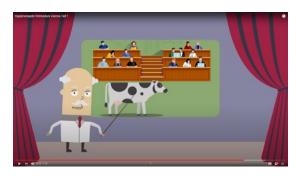
0.67 Vetmeduni Vienna; 0.33 University of Natural Resources and Life Sciences, Vienna

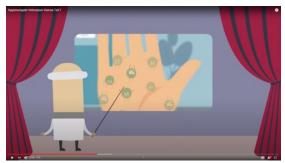
Master's Programme in Evolutionary Systems Biology: 0.28 Vetmeduni Vienna; 0.72 University of Vienna

Master's Programme in Wildlife Ecology and Wildlife Management: 0.1 Vetmeduni Vienna; 0.9 University of Natural Resources and Life Sciences, Vienna



**Hygiene measures:** as of the winter semester 2019/2020 students answer questions on the video's content in the course of self-assessment.







## Diploma Degree Programme in Veterinary Medicine: Focus on Hygiene

Hygiene measures are among the priorities of the diploma degree programme in veterinary medicine. Within the Outpatient Clinic I Class, students have their first contacts with animal patients in the outpatient departments during regular office hours. The recently produced animated short film 'Hygiene at Vetmeduni Vienna - Part 1' provides a humorous account of how to behave when coming into contact with potentially infectious animals or specimens in specially dedicated rooms, e.g. isolation stables.

In order to enhance awareness of responsible conduct in epidemiological and infectiological settings, etc., the university's current safeguards against infectious and epidemic diseases are tested during this class. Only students who have successfully completed the online course may subsequently work at the university clinics.

	Courses of Study	<b>†</b> †	Applica	nts	<b>†</b> †	Admis	ssions
	2019	Total	Women	Men	Total	Women	Men
D	Diploma Programme in Veterinary Medicine	1,242	1,044	198	235	199	36
B	Bachelor's Programme in Biomedicine and Biotechnology	151	118	33	43	34	9
B	Bachelor's Programme in Equine Sciences	43	41	2	33	31	2
M	Interdisciplinary Master in Human-Animal Interactions	22	19	3	18	17	1
M	Master's Programme in Comparative Biomedicine	27	24	3	17	15	2
	Total	1,485	1,246	239	346	296	50

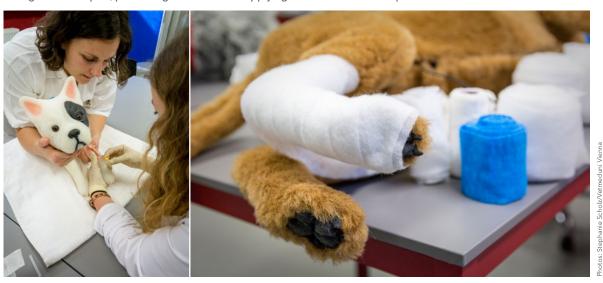
No figures are available for the Master's Programmes in Wildlife Ecology and Wildlife Management as well as Evolutionary Systems Biology since admission to these programmes is not managed by Vetmeduni Vienna.

## Teaching: Innovative and Forward-Looking

### Skills Lab VetSim Training Centre

The Skills Lab VetSim, a realistic veterinary training centre, offers prospective veterinarians the possibility to practise on synthetic animals the activities they need to perform routinely from the very beginning in daily clinical work. This kind of practical training significantly helps lay the foundation for the so-called 'day one competences'. Students can thus practise clinical skills from bandage change and wound management, ventilation and blood sampling to artificial insemination either independently or under guidance. New VetSim practising stations are being developed based on defined learning objectives to become an integral part of the curriculum of the diploma degree programme in veterinary medicine. In this connection, teachers of classes are asked to identify key clinical-practical skills, develop appropriate VetSim stations for practising these skills and integrate the stations thus developed into their teaching and exam schedules.

Practising, practising and more practising: In the Skills Lab VetSim, students practise their day one competences on different, newly acquired animal dummies and stations such as taking blood samples, puncturing the bladder or applying various suture techniques



Learning progress is an important indicator as to whether our efforts of imparting knowledge have been sufficient overall and will eventually lead to success. Under the new financing structure of our university, active students taking exams are rewarded with 16 ECTS per year of study. For this reason, policies and events in 2019 (Teaching Vets Symposium, kick-start breakfasts or measures of staff development) focused on the topic of student assessment.

Sibylle Kneissl, Vice-Rector for Study Affairs

Photo: Doris Kucera/Vetmeduni Vienna



### Inspiration in the Morning: **Kick-Start Breakfasts**

Once a month, the Office of the Vice-Rector for Study Affairs issues an invitation for breakfast. Besides coffee, fruit and pastries, the menu includes various topics and items of information from the fields of teaching and research. The speakers at these kick-start breakfasts are members of Vetmeduni Vienna and external experts. As of 2019, breakfast lectures are announced with a teaser video in the VetEasy Intranet.

### **Topics in 2019\* included:**

- Evaluation of teaching classes as a feedback and planning instrument
- Clinical reasoning a clinician's view of what this means
- Practical implementation of low-formalin teaching

\*) Videos of all lectures can be watched online after breakfast: http://vetmediathek-gallery.vetmeduni.ac.at/impulsfruehstueck



### **Teaching Vets on Tour**

From all over Austria a select number of practising veterinarians, called instructors, are involved in the training of students at Vetmeduni Vienna. In special didactic training modules and exchanges of experience within the 'Teaching Vets on Tour' programme, the university informs instructors about innovations in training at Vetmeduni Vienna, while drawing didactic inspiration for student-centred learning from these experts in the field. In 2019, this outreach programme was on tour in Lower Austria, Carinthia and Styria.

> Practising veterinarians ('instructors') are involved in the training programme of Vetmeduni Vienna and are informed about innovations in teaching at Teaching Vets on Tour events.



### **Awards for Teachers**

Dedicated teachers and innovative ideas are the core of outstanding university teaching. Every year at the Teaching Vets Symposium, awards are presented to the best teachers (Teacher of the Year; TOY), best students (Student of the Year; SOY) as well as to the best practising veterinarians (Instructor of the Year; IOY), who supplement the practical preparation and scientific training of our students. The awards are financially supported by Municipal Department 7 of the City of Vienna. Other prizes include the Vetucation® Award for the best e-learning projects and the student award of the Vetmeduni Vienna Students' Union Chapter (S.U.P.E.R.).

### Teacher of the Year

#### **Teacher of the Year (TOY) Clinical**

 Johannes Lorenz Khol (Clinical Unit of Ruminant Medicine)

#### **Teacher of the Year (TOY) Non-Clinical**

 Andrea Hölbl-Kovacic (Institute of Pharmacology and Toxicology)

#### Instructor of the Year

Andreas Kroesen (Pfoten Tierklinik)

### Teaching Vets Symposium #5

The fifth Teaching Vets Symposium was held on 23 Oct 2019, its focus being on 'student assessment', in other words on how to assess the students' learning progress. Keynote speeches on the benefits of academic teaching competence and changes in anatomy teaching were presented by Rudolf Egger, Head of the Centre for Teaching Competence of the Karl Franzens University Graz, and Christoph Mülling, Professor of Veterinary Anatomy at the University of Leipzig.

Sibylle Kneissl, Vice-Rector for Study Affairs, with the winners of the TOY and IOY categories.



Photos: Ernst Hammerschmid/Vetmeduni Vienn

HVU Chairman Martin Kraetzl presenting the students' award.



### S.U.P.E.R.: German acronym for students' award in praise of phenomenal commitment

With special awards in three categories, the Vetmeduni Vienna Students' Union Chapter (German acronym HVU) honours teaching staff members who have particularly catered to the needs, and supported the progress, of prospective graduates of our university during the year:

- Clinical Teachers: Theresia Licka (Clinical Unit of Equine Surgery)
- Pre-Clinical Teachers: Johannes Baumgartner (Institute of Animal Welfare Science)
- Administrative and Support Staff: Birgit Locsmandy (Student Services)

### Vetucation® Award: Best e-Learning Projects Honoured

The Vetucation® learning platform is intended to support in-class teaching. In order to acknowledge innovative ideas, existing and planned e-learning projects are honoured with the Vetucation® Award. The projects submitted were ranked by a jury prior to the Teaching Vets Symposium, introduced by short presentations or in the World Café during the event, whereupon the winners were selected based on the jury's ranking and the audience vote.

#### Winners of the Vetucation® Awards 2019

- Existing e-Learning Projects: Bianca Patan-Zugaj (Institute of Topographic Anatomy)
- e-Learning Projects in Development: Julia Hruza (Clinical Unit of Equine Surgery)

In the category of Existing e-Learning Projects, Bianca Patan-Zugaj (Institute of Topographic Anatomy) won first place with her project on 'X-Ray Anatomy: Horse's Limbs' (pictured below from left to right: Bettina Hartl, Sandra Geiger and Bianca Patan-Zugaj).

Julia Hruza, the happy winner for the Clinical Unit of Equine Surgery in the category of e-Learning Projects in Development. She received the award for her project of compiling a comprehensive case study on the castration of a horse (pictured on the right).





Photo: Michael Bernkopf/Vetmeduni Vien

### **Awards for Students**

### Students of the Year 2019

Students of Vetmeduni Vienna are proposed for the Students of the Year accolades based on their average marks and duration of studies. The Department of Cultural Affairs of the City of Vienna (Municipal Department 7) supports these awards.

- Diploma Degree Programme in Veterinary Medicine: Bettina Scharnböck
- Bachelor's Programme in Biomedicine and Biotechnology: Natalie Ludwig
- Bachelor's Programme in Equine Sciences: Marion Penz



Vice-Rector Sibylle Kneissl with the Students of the Year (SOY) 2019.



### Award of Excellence of the BMBWF

Karolina Hilse-Koller, PhD graduate at the Institute of Physiology, Pathophysiology and Biophysics, received the Award of Excellence of the Federal Ministry of Education, Science and Research (BMBWF).

Karolina Hilse-Koller and Elmar Pichl, Director General of the BMBWF's GD IV.



### Achievement Award of the BMBWF

The Achievement Award of the Federal Ministry of Education, Science and Research (BMBWF) was presented to Michael Moschinger, graduate of the Biomedicine and Biotechnology course of study.

Elmar Pichl, Director General of GD IV, Michael Moschinger and Dieter Klein.

### **Talent** Scholarships 2019

The Society of Friends of the University of Veterinary Medicine, Vienna awarded talent scholarships to Annemarie Penzinger, Julia Hart and Eva Gotthalmseder in 2019.



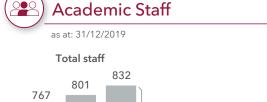


Research

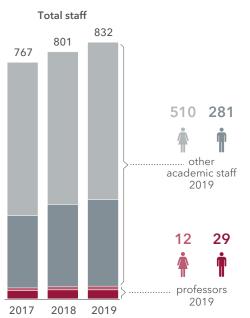
## Research

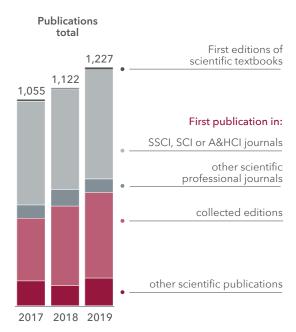
### We Present: **Current Research Projects**

Research at Vetmeduni Vienna has many facets. The variety of topics addressed is illustrated by the following examples of current research projects newly begun in 2019.









The COVID-19 pandemic has hit us all and is a reminder of the vulnerability of the globalised economy. In order to improve our response to such challenges in the future, we must be able to rely on a broad knowledge base, international cooperation and a functioning infrastructure. More than ever we need fundamental science in close cooperation with applied research, possibilities of rapid implementation and knowledge-based support of policy-making. The University of Veterinary Medicine, Vienna, will continue to make essential contributions

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

based on its special research portfolio and cooperation networks.

#### Christine Aurich

### Warmblood Fragile Foal Syndrome (WFFS) in Horses

The Warmblood Fragile Foal Syndrome (WFFS) is a genetic defect in horses inherited in an autosomal recessive mode and leading to impaired connective tissue formation. In order to characterise the symptoms of WFFS for the first time in greater detail, foals that were aborted during gestation, stillborn or died shortly after birth were examined. The WFFS/WFFS genotype caused the birth of non-viable foals, although the mare's pregnancy had been uneventful till the end. The clinical picture in the affected foals varied, meaning that in many cases WFFS remained undetected. Due to the skeletal deformities it causes, WFFS resulted in above average instances of difficult foaling. In addition to skin defects of greatly varying characteristics, lesions of blood vessels were identified that frequently resulted in death.

Funding agency: Brandenburg Stud Farm Foundation in Neustadt, Germany

Lizio

### Monika Ehling-Schulz

### Role of Megaplasmids in Pathogen Emergence: Bacillus cereus

The emergence of new pathogenic bacterial strains is often a consequence of horizontal gene transfer (HGT). Examples of HGT are found in the *Bacillus cereus* group: *B. anthracis*, a veterinary and human pathogen causing anthrax, and emetic strains of *B. cereus* that may trigger food poisoning. Both pathogens have megaplasmids encoding toxin genes. Plasmids belong to the so-called 'mobilome' (mobile genetic elements in a genome) of bacteria. Researchers of Vetmeduni Vienna, together with French research partners, investigate the risk of HGT-mediated spreading of a virulence megaplasmid within the *B. cereus* group. The research results may help to understand the mechanisms involved in the emergence and development of new pathotypes.

Funding agency: Austrian Science Fund (FWF)

# noto: Klaus Wassermann/VetmeduniV

### Anja Joachim

### The Role of Microgametes in the Development of the porcine coccidium *Cystoisospora suis* and its Interplay with the Host

Cystoisospora suis is a frequent protozoan intestinal parasite in young piglets. Its complex life cycle includes the development of different cell types, the so-called micro- and macrogametes. Indispensable for the development of these parasites is the fusion of gametes, which is similar to the union of a human egg and sperm. Inhibiting this fusion could effectively interrupt the life cycle of the parasite and, consequently, prevent the infection of piglets with this intestinal parasite. In order to come up with new control strategies targeting these stages of development, fundamental data on their biology, composition and specific function are required. The planned research project aims to gather this information through in-vitro examinations of the parasite.

Funding agency: Austrian Science Fund (FWF)



#### **LIFE WOLFALPS EU**

From the Western Alps (Italy, France), the wolf (Canis Lupus) has increasingly spread into the more eastern parts of the Alps in Switzerland, Austria, Germany and Slovenia. The goal of the LIFE Project LIFE18 NAT/IT/000972 LIFE WOLFALPS EU, involving a total of 19 partners, is to improve coexistence of humans and the expanding wolf population in the Alps. Its main objectives are monitoring, managing and maintaining the wolf population in the Alpine Region on the one hand, and taking measures to reduce conflicts and support the coexistence between humans and wolves, on the other. In Austria, the focus is on the protection of livestock herds and the reduction of illegal persecution.

Funding agency: Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK), EU (Commission of the European Union)

hoto: Vetmeduni Vienna

#### Anna Orlova

#### **Targeting STAT5 Oligomerisation in Leukaemia**

STAT5 is a key molecule in many solid and haematopoietic malignancies and is particularly associated with the development and progress of acute myeloid leukaemia (AML). Current treatment options against this aggressive cancer are very limited. The FFG Spin-off Fellowship now supports research into the development of new STAT5 inhibitors against acute myeloid leukaemia. The project validates new chemotypes of STAT5 inhibitors in vitro and in vivo as well as in preliminary preclinical studies. Its objective is to improve treatment options for cancer patients and offer a safe, targeted and personalised therapy for those affected.

Funding agency: Austrian Research Promotion Agency (FFG)

Photo: Michael Bernkoof/Vetmeduni Vien

#### Mona Saleh

## Exploring how *Myxobolus cerebralis* and *Tetracapsuloides* bryosalmonae determine the outcome of rainbow trout, Oncorhrynchus mykiss, Co-Infection



Myxobolus cerebralis and Tetracapsuloides bryosalmonae are widespread parasites infesting rainbow trout (RBT). The project is intended to establish differential protein profiles of RBT following infection with the two parasites. The characterisation of proteins as well as the identification of virulence factors of Myxobolus cerebralis and Tetracapsuloides bryosalmonae will be performed post-transcriptionally and post-translationally. Alongside differential modulation of the host response, researchers analyse the effect of proteins differentially expressed after single infections and co-infections with the two parasites. The results help to understand biological processes and pathways activated by the infection (e.g. signal transduction and/or activation of proteasomes) and develop new approaches to disease management.

Funding agency: Austrian Science Fund (FWF)

hoto: Privat

### **Traits First: Identification and Characterisation of Adaptive Traits**

In order to understand evolutionary processes of adaption, it is essential to know the selected trait. Candidate traits have been studied for some time to draw conclusions on adaptive processes. New sequencing techniques enable researchers to infer the selected trait based on genes carrying a signature of selection. Single genes affecting multiple traits (pleiotropy) present an impediment that should not be underestimated. In order to circumvent these limitations, the research project focuses on phenotypes, with a great number of them being examined by the most recent omics techniques. Evolutionary interpretation is used to identify those phenotypes that play a key role in processes of adaption.

Funding agency: Austrian Science Fund (FWF)

Richard Zink

### Assuring the Quantitative Conservation of the Re-Settled Ural Owl Populations in the Vienna Woods Biosphere Reserve & in the Dürrenstein Wilderness Area



Due to the re-introduction of the Ural owl, which had previously been extinct in Austria, two 'population nuclei' of this large owl could be established in Vienna and Lower Austria since 2009 thanks to EU and regional support programmes. This project is considered a best practice example of species protection. Two times 30 home ranges are required to conserve the current population. By releasing an appropriate number of owls till 2021, the project aims to reach two times 25-30 home ranges. The focus will be on the following priorities: fledglings born free are to be equipped with a transmitter in order to enable comparisons with released birds. In addition, a comprehensive qualitative analysis of the genetic variability of the established population of the Ural owl is to be carried out with a view to the timeline for terminating the release of these birds.

Funding agency: The State of Lower Austria (Lafo) and the State of Vienna (Municipal Department 22), co-financed by the EU

oto: Jessica Winter







### New CD Laboratory for Innovative Gut Health Concepts for Livestock

The inauguration ceremony of the new Christian Doppler Laboratory for Innovative Gut Health Concepts for Livestock took place on 21 March 2019 at the campus of Vetmeduni Vienna. The CD laboratory is dedicated to building a solid knowledge base and new scientific strategies to strengthen and improve intestinal health in livestock. In addition, new avenues for nutritional concepts will be explored. These approaches will subsequently form the basis for developing health strategies. Christian Doppler Laboratories serve application-oriented fundamental research where researchers cooperate with innovative companies. The industry partner for this new CD Laboratory is BIOMIN GmbH. The Christian Doppler Laboratory for Innovative Gut Health Concepts for Livestock is headed by Qendrim Zebeli, Head of the Institute of Animal Nutrition and Functional Plant Compounds.



### Digitalisation: Go-Ahead for the DiLaAg Project

Digital technologies in agriculture not only facilitate an individual's work, but mechanisation, electronics and automation will also have a major global impact on economic and environmental development as well as on nutrition and climate protection. For the purpose of forming a scientific nucleus in the field of digitalisation, these three universities - Vetmeduni Vienna, University of Natural Resources and Life Sciences (BOKU), Vienna, and the Vienna University of Technology - are the first to join forces to train young scientists in the new major PhD programme 'DiLaAg - Digital Technologies in Agriculture' and launch a platform for research and counselling with the focus, among others, being on the interfaces between veterinary medicine and agriculture.

hoto: BOKU Wien

### Research Projects at a Glance

In 2019, funding was granted for many project proposals submitted by Vetmeduni Vienna researchers. These are the new projects:

Funding Agency	Title	Project Leader
Animal Cancer Foundation	Synergistic effects of proteasome inhibitors and Auranofin in canine and human osteosarcoma	Cordula Gabriel
Austria Wirtschaftsservice	Clever Dog Toy: ein Prototyp zur intelligenten Beschäftigung von Haushunden	Ludwig Huber
Federal Ministry of Sustainability and Tourism	Festigung des Wiener Habichtskauz-Bestands im Biosphärenpark Wienerwald	Richard Zink
Canine Health Foundation American Kennel Club	Lipid composition and lipid droplet dynamics in pyometra affected endometrial epithelial cells	Cordula Gabriel
Swiss Ethics Committee on Biotechnology	Gentherapieansätze in der Veterinärmedizin	Herwig Grimm
EU (Commission of the European Union)	PROTON - Proton transport and proton-coupled transport	Elena Pohl
EU (Commission of the European Union)	Biosecurity practices for pig farming across Europe	Beate Conrady (ehem. Pinior)
EU (Commission of the European Union)	Novel tools for test evaluation and disease prevalence estimation (Harmony)	Amélie Desvars-Larrive
EU (Commission of the European Union)	Initiative zur Forschungsförderung und Innovations- kapazität von Geflügeltierarztbetrieben	Dieter Liebhart
EU (Commission of the European Union)	Knowledge Platform on Food, Diet, Intestinal Microbiomics and Human Health	Evelyne Mann-Selberherr
EU (Commission of the European Union)	LIFE WOLFALPS EU	Felix Knauer
FFG	Targeting STAT5 oligomerization in leukemia	Anna Orlova
FFG	Bettwanzen: Entgiftung von Permethrin	Georg Duscher
FFG	CartiScaff2clinics	Florien Jenner
FWF	Traits first: identification and characterization of adaptive traits	Christian Schlötterer
FWF	Nim-mediated Metronidazole Resistance in Bacteroides fragilis	Monika Ehling-Schulz
FWF	The role of microgametes in the development of the porcine coccidium Cystoisospora suis and its interplay with the host	Anja Joachim
FWF	Exploring how Myxobolus cerebralis and Tetracapsuloides bryosalmonae determine the outcome of rainbow trout, Oncorhrynchus mykiss, co-infection	Mona Saleh
FWF	Monitoring of lethal avian haemosporidian infections by dead bird surveillance	Herbert Weissenböck
FWF	Role of megaplasmids in pathogen emergence: Bacillus cereus	Monika Ehling-Schulz

#### NOMENCLATURE

FFG Austrian Research Promotion Agency

FWF Austrian Science Fund

OeAD Austrian Agency for International Mobility and Cooperation

WWTF Vienna Science, Research and Technology Fund

N.B.: This table presents an excerpt from those research projects that were granted funding in 2019. Some projects are subject to confidentiality provisions, so no information on these projects may be published.

Social problems require solution-oriented approaches and a tightly knit network of fundamental and clinical research. The current COVID-19 pandemic is a very striking example of this necessity. Thanks to the efforts of the entire university, full accreditation of Vetmeduni Vienna was renewed in autumn 2019 by the European Association of Establishments for Veterinary Education (EAEVE). The EAEVE's positive response to our veterinary curriculum implemented in 2014 encourages us in our endeavour to use innovative and forward-looking teaching methods for providing our students with the skills necessary to succeed in the veterinary profession. Young people need a culture of open and courageous debate to be able to act responsibly. Let us inspire our students with enthusiasm for veterinary medicine and let us teach them courage, openness and critical thinking!

#### Veronika Sexl und Sabine Hammer,

Chairwoman and Deputy Chairwoman of the Senate of the University of Veterinary Medicine, Vienna

### Scientific Events\*

31 Jan - 1 Feb 2019

### **3<sup>rd</sup> Annual Symposium on Comparative Medicine**

Hosted by the Unit of Molecular Genetics, Unit of Functional Cancer Genomics and the Institute of Animal Breeding and Genetics, the symposium focused on topics such as Comparative Immunity and Microbiology, Comparative Immunity and Cancer or Tissue Repair and Barriers.

#### 4 - 5 April 2019

### 5<sup>th</sup> Symposium of the Graduate School for Pig and Poultry Medicine (PaP)

The Graduate School for Pig and Poultry Medicine (PaP) held its annual symposium in April. The event started with a reunion for participants and carers of PaP with the Scientific Advisory Committee followed by a discussion of the activities of the programme.





2 May 2019

### 10<sup>th</sup> ÖTT Meeting: Animal Welfare - On Animals' Quality of Life

Already its 10<sup>th</sup> meeting, the Platform of Austrian Veterinarians for Animal Welfare (ÖTT) discussed practice-related proposals for improving the handling of animals under the motto 'On Animals' Quality of Life'. Roughly 200 veterinarians attended the meeting.

### 17 - 18 May 2019

### **2<sup>nd</sup> Comparative Oncology Mast Cell Meeting Vienna**

Comparative oncology is a field of research dedicated to improving the oncological treatment in both humans and pets (dogs). Experts from the USA and Europe came together at this meeting to develop consensus criteria for strengthening treatment programmes for mast cell tumours in dogs based on comparative oncology approaches.



<sup>\*)</sup> Excerpt of scientific events organised at the campus of Vetmeduni Vienna in 2019. All events are listed in the diary of events at: www.vetmeduni.ac.at/veranstaltungen



Poultry parasitology: At this symposium, researchers were joined by veterinarians and representatives of the veterinary pharmaceutical industry.

#### 28 - 29 June 2019

### **4**<sup>th</sup> International Symposium on Parasite Infections in Poultry

The 4<sup>th</sup> International Symposium on Parasite Infections in Poultry was convened at the end of June. For two days 140 scientists from 23 countries shared information about various areas of poultry parasitology. Contributions focused on the huge limitations of preventive and therapeutic options to combat these pathogens.

### 4 - 6 July 2019

### First Symposium of the European College of Animal Reproduction

In the first week of July, the First Symposium of the European College of Animal Reproduction (ECAR) took place. The topics of the 30 presentations and 60 posters ranged from gynaecology and obstetrics to perinatal medicine and reproductive biotechnology in a great variety of animal species. More than 130 veterinarians (researchers, clinicians, experts in the field), 50 residents from eight European countries and students of the reproduction immersion module participated in the symposium.

### **Evening programme:**Gala dinner in the Orangerie of Schönbrunn Palace



#### 2 - 6 Sept 2019

### Course for Cryopreservation, Embryo Transfer and Assisted Reproduction in Mice

This introductory course on embryo transfer, reproductive biotechnology and transgenic techniques was aimed at providing background information and offering practical training in the techniques necessary for successful assisted reproduction and cryopreservation in laboratory mice



: Stephanie Scholz/Vetmedu

#### 9 - 11 Sept 2019

### **50<sup>th</sup> International Symposium on Essential Oils (ISEO)**

The idea of this International Symposium on Essential Oils (ISEO) was developed by researchers during a symposium of the Society for Medicinal Plant and Natural Product Research more than 50 years ago. Based on this initiative, ISEO has grown into an international and interdisciplinary platform of research and industry.



Views from many disciplines:

Organisers Zsófia Virányi, Birte Wrage, Kristin Andrews, Judith Benz-Schwarzburg, Susana Monsó, Maria Botero, Jean-Loup Rault and Susanne Waiblinger.

#### 23 Sept 2019

### Animal Minds & Animal Ethics: Across Species, Across Disciplines

This interdisciplinary congress addressed such core topics as animal cognition, animal welfare and animal ethics. More than 100 interested delegates participated in this multidisciplinary exchange at Vetmeduni Vienna.

### 10 Oct 2019

### Mini-Symposium: Salmonella Infantis Infections in Poultry

Mid-October saw the convening of a 'mini-symposium' on the topic of 'Salmonella Infantis Infections in Poultry' held in cooperation with the Österreichische Qualitätsgeflügelvereinigung (QGV, roughly translated Austrian Association of Quality Poultry) at the campus of Vetmeduni Vienna. Among the topics participants discussed were the spreading of salmonella infections in Austria and other European countries as well as studies on re-contamination.

#### 19 Oct 2019

### 1st National Fish Health Workshop

The Aquatic Animals Chapter of ÖGT (Austrian Veterinarian Society), the TGD (Austrian Animal Health Service) as well as ÖVA (Austrian Association of Official Veterinarians) invited to a first workshop on fish health in October, with new developments in diagnostics and therapy being on the agenda.

#### 20 Nov 2019

### Ticks and Tick-Borne Zoonoses in **Eurasia**

At this lecture series on ticks and tick-borne zoonoses in Eurasia, researchers discussed the incidence of ticks, tick-borne encephalitis (TBE) in early summer, vaccination coverage and borrelia in birds.

#### 25 Nov 2019

### Symposium: Climate Change - Discourse between Science, Society and the Media

Together with the Austrian Academy of Sciences, Vetmeduni Vienna convened this symposium on 'Climate Change - Discourse between Science, Society and the Media', which focused on topics such as air quality, ethics in science and challenges in climate science.



### **Awards for Researchers\***

Adnan Hodzic • Alice Auersperg • Anna Orlova • Anna Schachner • Barbara Maurer • Christian Robben • Christian Schlötterer • Clair Firth • Cordula Gabriel • Elisabeth Heiderich • Emir Hadzijusufovic • Eva Maria Ringler • Frans J. M. Smulders • Georg Duscher • Heidi Neubauer • Iris Uras-Jodl • James Anthony McGetrick • Janna Vogelgesang • Johannes Herbel • Karolina Hilse-Koller • Katharina Brugger • Kathrin Kober-Rychli • Kerstin Seitz • Maria Adelaide Marconi • Maria Helnwein • Martin Wagner • Michael Hess • Michael Moschinger • Mona Saleh • Monika Dzieciol • Nadja Affenzeller • Nicole Luckschander-Zeller • Nina Hamann • Patrick-Julian Mester • Richard Moriggl • Roman Labuda • Rozalia Majercikova • Sabine Hammer • Sabrina Karl • Samuel Camenzind • Sebastian Kollmann • Stanislav Indik • Susanne Waiblinger • Tatiana Marschik • Tobias Suske • Viktoria Brandstetter • Viktoria Neubauer • Yasamin Vali

### Department 1

### Wilhelm Türk Award of the Austrian Society of Haematology and Oncology (OeGHO)

Iris Uras-Jodl, Institute of Pharmacology and Toxicology Photo: Uli Regenscheit/DGHO Service GmbH 2019



Karolina Hilse-Koller, PhD programme (Unit of Physiology and Biophysics) Photo: Martin Lusser





### Department 2

### Sinnecker Kunz Award for Early Career Researchers

Adnan Hodzic, Institute of Parasitology Photo: Adnan Hodžic/Vetmeduni Vienna

### Association of Austrian Small Animal Veterinarians (VÖK) -Award for Scientific Work in the Area of Small Animal Medicine

Sabine Hammer, Institute of Immunology







### **Department 3**

### Austrian Hygiene Award 2019 (ÖGHMP)

Patrick-Julian Mester, Food Microbiology Unit Photo: Martin Bobal/Vetmeduni Vienna



Clair Firth, Veterinary Public Health and Epidemiology

Photo: Alexander Wijnants/Vetmeduni Vienna





### **Department 4**

### Poster Award Computer Tomography Working Group of the German Society of Veterinary Medicine (DVG)

Yasamin Vali, Clinical Unit of Diagnostic Imaging
Photo: Michael Bernkopf/Vetmeduni Vienna



### Award of the Forster-Steinberg Foundation

Nadja Affenzeller, Clinical Unit of Internal Medicine Small Animals
Photo: Michael Bernkopf/Vetmeduni Vienna



### **Department 5**

### Conference Award (2<sup>nd</sup> place) 6<sup>th</sup> European Student Conference on Behaviour and Cognition

James Anthony McGetrick, Konrad Lorenz Institute of Ethology
Photo: Karin Bayer/Vetmeduni Vienna



#### **Christopher Barnard Award**

Eva Maria Ringler, Comparative Cognition Unit of the Messerli Research Institute

Photo: Max Ringler



### Science for All

New scientific discoveries are not just intrinsically exciting but also have a lasting impact on society. Researchers of the University of Veterinary Medicine, Vienna, are constantly exchanging perceptions with their colleagues from all over the world. However, research results are not only of interest to the scientific community: Corporate Communications of Vetmeduni Vienna keeps all interested parties informed about the most recent developments in the university's scientific work.

### 10th Anniversary Celebration of Wolf Science Center

On 25 April 2019, the tenth anniversary of the Wolf Science Center (WSC) was celebrated in its home community of Ernstbrunn/Lower Austria. The programme was rounded off by scientific presentations on the domestication and behaviour of wolves and dogs and a special ceremony at the visitors' centre of the Wildlife Park Ernstbrunn. The numerous guests of honour of the festive event included Karl Wilfing, President of the Lower Austrian Diet, on behalf of the State Governor Johanna Mikl-Leitner, Heinrich XIV Reuss, Owner and Director of the Wildlife Park Ernstbrunn, as well as Horst Gangl, Mayor of the Market Community Ernstbrunn.





s: Ernst Hammerschmid/Vetmedun

### Garden Day - Herbs from A to Z

From seedlings for sale to all-you-ever-wanted-to-know-about-herbs stands at the Garden Day: plant lovers could take a look around the Botanical Garden, seek advice or stock up on specialised books. A great variety ranging from garden herbs to medicinal plants was available for our visitors who could at the same time obtain tips on plants and animals, for instance which plants are toxic for animals.



Stephanie Scholz/Vetmeduni Vienr



### Groundbreaking Ceremony for the Construction of our Small Animals Clinic

The University Clinic for Small Animals, which caters for roughly 45,000 patients a year, will get a new, central clinic building. By commission of Vetmeduni Vienna, the Bundesimmobiliengesellschaft (BIG) is building a new Small Animals Clinic and renovating parts of the existing infrastructure. With the groundbreaking ceremony on 24 May 2019, construction work was officially launched.

For more information on the construction project go to:

www.vetmeduni.ac.at/kleintierklinikneu



### Campus Open Day 2019

Complete success: on 25 May 2019, Vetmeduni Vienna again opened its doors to interested visitors. More than 3,700 guests took this opportunity to look behind the scenes of Vetmeduni Vienna. On a perfect early summer day, they were able to visit numerous units, attend guided tours or gather information about study programmes. The Soft Toy Clinic registered a new record high, with 320 young visitors having their cuddly toys treated there.





### Vetmed Children's University 2019

While our students were off enjoying their well-earned summer holidays, the lecture halls of Vetmeduni Vienna were far from silent: July 2019 saw more than 796 kids attending lectures, seminars and guided clinic tours on campus. Since 2012, the Vetmed Children's University has been giving kids aged seven to twelve an opportunity to learn first-hand about veterinary research. For two days, the young researchers became familiar with student life and learned much about animals under anaesthesia, wild animals in the city or the history of veterinary medicine.





### Assistance Dog Certificate Award Ceremony

Guide dogs, signalling dogs and service dogs assist people with disabilities in daily life. They need to be certified to officially qualify for assistance jobs. Since 2015 the Messerli Research Institute of Vetmeduni Vienna has been in charge of carrying out assistance dog examinations throughout Austria: 13 new human-animal teams received their certificates in the Great Hall of Vetmeduni Vienna on 16 July 2019. Almost 260 dog owners and their four-legged assistants have been certified in Austria since the establishment of this official examination and coordination authority for assistance dogs. Dogs can be tested for their suitability as assistance animals beginning at the age of 18 months. Depending on the tasks to be assumed by the dog, it may take roughly one and a half to two years to reach certification.

### science camp 2019

Scientific presentations, hands-on experience and workshops: Vetmeduni Vienna continued its outreach to pupils aged 17 to 20 years in 2019 by inviting them to a university study trial run. The young people were able to obtain a first-hand glimpse of life on campus and get to know the different aspects of the veterinary profession. The curriculum included animal welfare in livestock production, feed and food science, or poultry medicine and veterinary practice, with swine, cattle and chicken at the centre of attention.



### 10 Years of the Ural Owl Re-Settlement Programme in Austria

The Ural owl vanished from Austria's forests around the mid-20th century. With the aim of protecting this species and promoting re-introduction, 22 Ural owls were released in Lower Austria in 2009. The project had been initiated by the Research Institute of Wildlife Ecology (FIWI) of Vetmeduni Vienna and celebrated its tenth anniversary on 17 June 2019. The official ceremony also included the presentation of an illustrated book on the owl's re-introduction. In the afternoon, the ornithologist Wolfgang Scherzinger held a lecture on the Ural owl illustrated by facts and figures on the re-settlement project.





o: Jessica Wir



### Summer Quiz Rallies

Intriguing questions around animals were to be answered by participants in the Floridsdorf Holiday Games Programme and the Summer City Camp in the summer of 2019. During a total of three quiz rallies, roughly 50 young researchers explored the University Clinic for Swine and visited the animals on campus, while at the same time finding out a lot of interesting facts about day-to-day work at Vetmeduni Vienna.

### Celebrating Research in Lower Austria

For the second time, research in Lower Austria was celebrated in Palais Nieder-österreich in Vienna on 27 Sept 2019. Visitors were invited to ask questions, try out, test and discover research aspects at numerous stations in five thematic fields. Vetmeduni Vienna was represented with topics such as cognition research, the differences between wolf and dog, domestic bird species as well as food quality and veterinary research.



Photo: Klaus Ranger



### Science Day - Celebrating Science at Vetmeduni Vienna

A celebration of science: 45 posters were submitted by researchers of Vetmeduni Vienna and assessed by different juries of experts. The winners in the categories of 'science journalism' and 'university environment' were selected at this Science Day. The criteria used for assessing the posters were their relevance, design and intelligibility. The event was rounded off by a musical contribution by Nuno Maulide, the presentation of awards for outstanding scientific work, the kick-off of the Entrepreneurial Vetmed initiative as well as offering opportunities for networking.

## Science Communication and Public Relations

Fostering a keen and critical eye on research and enhancing understanding for the methods and perspectives of researchers is the goal of science communication. All year round, Vetmeduni Vienna relies on proactive science communication providing comprehensive information on research and teaching to journalists and the general public. Vetmeduni Vienna keeps interested parties informed with insights into its research activities, be it through press releases, press conferences or by editing scientific content for online and social media channels.



### **Public Relations 2019**



### 53 press releases

1-2 per week, 136 news items in total (awards, staff, etc.)

About 160 media inquiries per year



### **Website** www.vetmeduni.ac.at

with almost **2.4 million** unique page views per year



**70** guided tours



attended by roughly **1,700** people



More than **10,000** Facebook fans www.facebook.com/vetmeduni.vienna



**VETMED Magazine** (3 times per year) with a print run of **6,500** copies per issue around **3,800** subscribers



More than **800** Twitter followers @VetmeduniVienna, www.twitter.com/vetmedunivienna



More than 60 information folders



About **80** YouTube videos www.youtube.com/user/vetmedvienna

### **VETMED - The Magazine**

Day-to-day practice, interviews on ongoing research projects, student excellence, etc.: VETMED is the university's official magazine keeping its readers up to date on current events, developments and projects that involve Vetmeduni Vienna. Regular coverage includes life on campus, research, teaching, university clinics, administration and management. VETMED is read by staff, students, veterinarians and other important stakeholders of the university at home and abroad. Printed on recycled paper for many years, the magazine is produced in a CO<sub>2</sub> neutral manner as of 2019.



Die Tierärztliche Hochschule in Wien

Honorata Maria Benndorf

### Imparting Knowledge Via Social Media

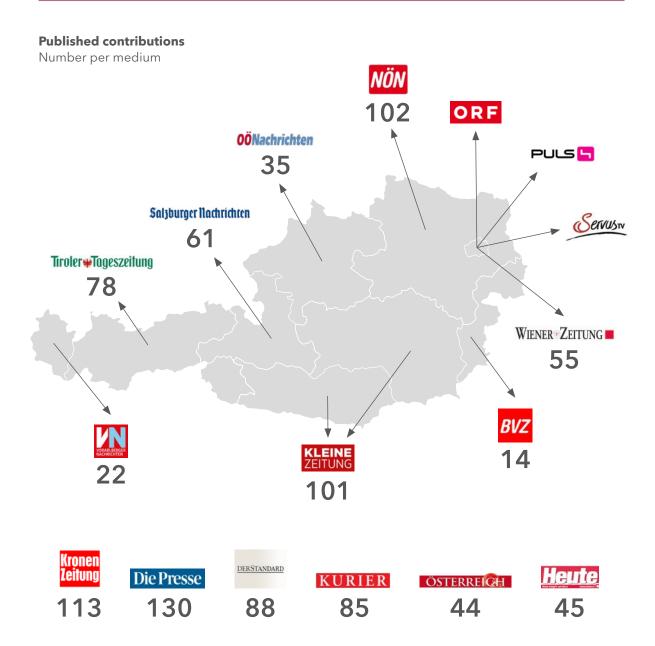
The social media platforms Facebook, Twitter and YouTube are used by Vetmeduni Vienna for information and entertainment as well as for providing research contents. In so doing, the university increasingly relies on videos and infographics which help to edit and impart complex contents in a clear and user-centred way. In addition, the university benefits from the coverage of these platforms to draw the interested public's attention to calls for study participation and research projects. Since 2019 an additional focus has been on using these social media channels to provide prospective students with insights into the study programmes of Vetmeduni Vienna.



### Media Echo: Research in the Media

2019 saw a total of 53 press releases sent out to specific media in Austria and abroad. In addition, Corporate Communications replied to some 160 media inquiries on research, clinical expertise and recent trends in teaching and learning.

### **National Media Presence 2019**













Entenfellners Tier-Welt/ServusTV: "Ratten - ein Abbild unserer Gesellschaft?"

AMÉLIE DESVARS-LARRIVE orscherin VetMed Universität Wien



Wien heute/ORF: "Tiernotfälle zu Weihnachten"

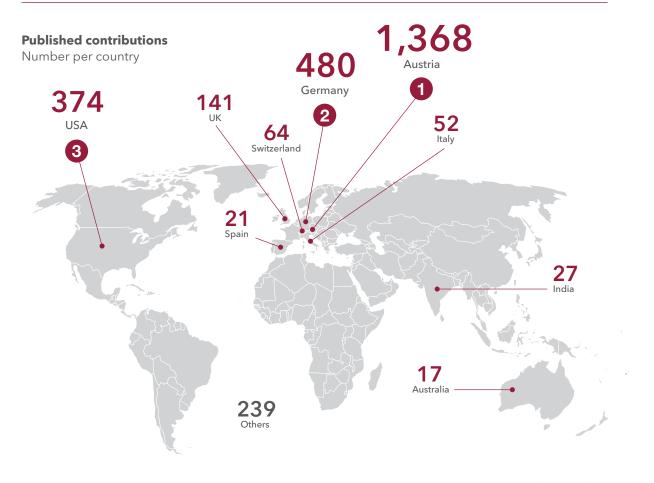


Mittag in Österreich/ORF: "Blutspende für Hunde"



Café Puls/Puls 4: "Gelsenplage in Österreich"

#### **International Media Presence 2019**



#### **Highlight Clippings International**











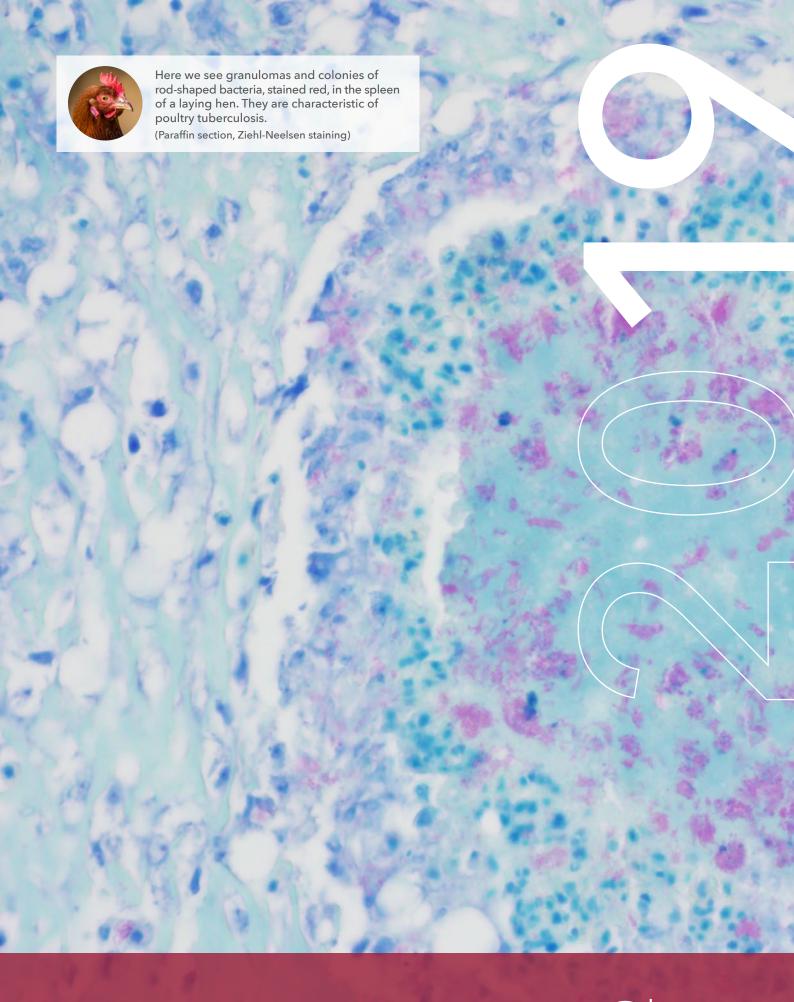




arte: "Die Wahrheit über die Lüge"



Bayerischer Rundfunk/Gut zu wissen: "Die Kuhstall-Pille: Was schützt Bauernhof-Kinder vor Allergien?"



# University Clinics

# University Clinics

# Animal Welfare and Cutting-Edge Medicine

The campus of Vetmeduni Vienna houses five university clinics where animal patients are cared for around the clock. Frequently, cases that are challenging from a clinical and scientific perspective often result in new findings which may benefit both animals and humans.

Some 17,000 animals were admitted as inpatients and about 27,000 were treated as outpatients, thus making up a total of roughly 45,000 animal patients for the five university clinics specialised in different species on the campus of Vetmeduni Vienna. In addition, the University Clinic for Poultry and Fish managed around 30,000 patients and samples in 2019. The university clinics are teaching hospitals and provide training and continued professional development for students and veterinarians, while at the same time taking in patients referred by private clinics and private-practice veterinarians.



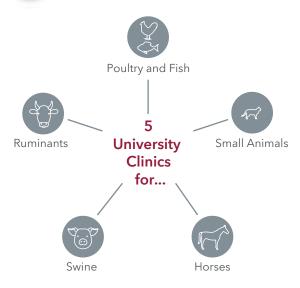


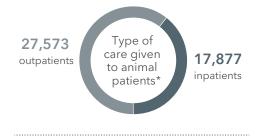




Patient Visits 2019

#### **University Clinics**





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The University Clinic for Poultry and Fish managed a total of 29,691 patients and samples in 2019.

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

# Synergies Between Clinical Work, Research and Training

Residents is the term used to refer to veterinarians who, after graduation, enter a residency programme to acquire a specialisation, for instance in large animal surgery, anaesthesiology or ophthalmology. The programme they follow is of international dimension based on a curriculum specified by European or American colleges. The three- or (optional) four-year residency programme is in preparation for the exams required by these colleges to achieve the related Diplomate status for the chosen field of specialisation. The necessary exams are to be taken after completion of the three-year residency programme. Meanwhile Vetmeduni Vienna boasts 86 Diplomate veterinarians, while 23 candidates are currently enrolled in the programme.



Residency programmes offer intensive specialisation in a clinical specialty field, e.g. poultry medicine.



#### **Residency Programmes**

Vetmeduni Vienna offers courses in 15 areas of specialisation



#### ANAESTHESIA AND ANALGESIA

ECVAA

(European College of Veterinary Anaesthesia and Analgesia)



#### OPHTHALMOLOGY **ECVO**

(European College of Veterinary Ophthalmology)



#### DIAGNOSTIC IMAGING **ECVDI**

(European College of eterinary 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)



#### 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, COM-PANION ANIMALS, ONCOLOGY ECVIM-CA, Oncology

(European College of Veterinary Internal Medicine, Companion Animals - Oncology)



#### INTERNAL MEDICINE, HORSES ECEIM

(European College of Equine Internal Medicine)



#### CLINICAL PATHOLOGY **ECVCP**

(European College of Clinical Pathology)



#### 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)



#### VETERINARY PARASITOLOGY **EVPC**

(European Veterinary Parasitology College)



#### VETERINARY PATHOLOGY **ECVP**

(European College of Veterinary Pathologists)

as at the end of 2019

# Knowledge Transfer to Animal Owners and Veterinarians\*

Vetmeduni Vienna routinely informs animal owners about clinical and research findings. In addition, the university fosters dialogue between specialists and veterinarians. Symposia and lecture series are held to discuss both questions arising in practice and in the latest research results.

13 Jan 2019

#### 4<sup>th</sup> Vienna Reptile Symposium: 'Take a Deep Breath' - Respiratory Diseases in Reptiles

It was the fourth time that a symposium for reptile friends took place at the University of Veterinary Medicine, Vienna. Reptile experts of the University Clinic for Small Animals gave advice under the heading 'Take a Deep Breath - Respiratory Diseases in Reptiles'.



18 Jan 2019

# 14<sup>th</sup> Alumni Event of the Equine University Clinic

Under the topic 'Update on Equine Surgery - Diagnostic Clarification and Therapy', alumni of the Equine University Clinic met for the fourteenth time to share their knowledge.

25 Jan 2019

#### 9<sup>th</sup> Kremesberg Conference on Herd Health Management in Ruminants

The Kremesberg Conference addressed topics such as diseases of the uterus, monitoring of cows in heat and management of calves.

23 - 24 Feb 2019

#### **6<sup>th</sup> Austrian Dog Trainers Congress**

The two days were filled with lectures, discussions, exchanges of views and experiences with experts. The agenda included topics like optimisation of training, human-animal relationships or positive psychology for dogs.

9 Mar 2019

#### 8th Austrian Equine Expert Meeting

The 8<sup>th</sup> Austrian Equine Expert Meeting addressed topics such as horse husbandry, equine behaviour, construction of new stables as well as young people and horses, horse industry and portraits of specific breeds.

<sup>\*)</sup> Excerpt of scientific events for animal owners and veterinarians organised at the campus of Vetmeduni Vienna in 2019. All events are listed in the diary of events at: www.vetmeduni.ac.at/veranstaltungen





23 Mar 2019

#### New World Camelid Symposium for Animal Owners

This year experts from the University Clinic for Ruminants talked about endoparasites, dental diseases and defecation disorders in alpaca crias.

#### 11 Apr 2019

# **Lecture Evening of the ÖGT Equine Chapter**

The focus of this evening event organised by the ÖGT's equine chapter was on 'dental medicine and maxillary surgery - new approaches and findings', with experts from Vetmeduni Vienna's Clinical Unit of Equine Surgery making the presentations.

#### 14 June 2019

## Congress on the Future of Veterinary Medicine 2019

In cooperation with Vetmeduni Vienna, the Austrian Chamber of Veterinary Surgeons hosted a congress on the future of the profession (Zukunftskongress 2019) in the Great Hall of our university. Topics ranging from 'training and young talents', 'work and family life' to 'veterinarians and the general public' revolved around the profession itself.

#### 21 Sept 2019

## Professional Development Event of the ÖGT's Ungulate Chapter

The meeting informed about the most recent developments and used practical examples to illustrate how animal welfare can be well-integrated into work. A select number of experts of Vetmeduni Vienna was available for an exchange of experience.



o: Julietta Rohrhofe

#### 26 Sept 2019

#### 26th Freiland and 33rd IGN Meeting

'Modern livestock husbandry in the 21st century – ecology, animal welfare and sustainabiltiy' was the topic of the joint Freiland and International Society of Livestock Husbandry (IGN) Meeting. It provided an opportunity for scientific exchange and discussions on new research findings and practice-centred solutions.

#### 12 Oct 2019

#### 9th Equine Symposium

The motto of the 2019 Equine Symposium was 'First aid for horses - How to identify an emergency. What to do until the veterinary surgeon arrives'. Roughly 630 equestrians and people interested in horses accepted the invitation to this meeting. A live demonstration on a dummy illustrated how a horse was to be properly rescued after an accident.

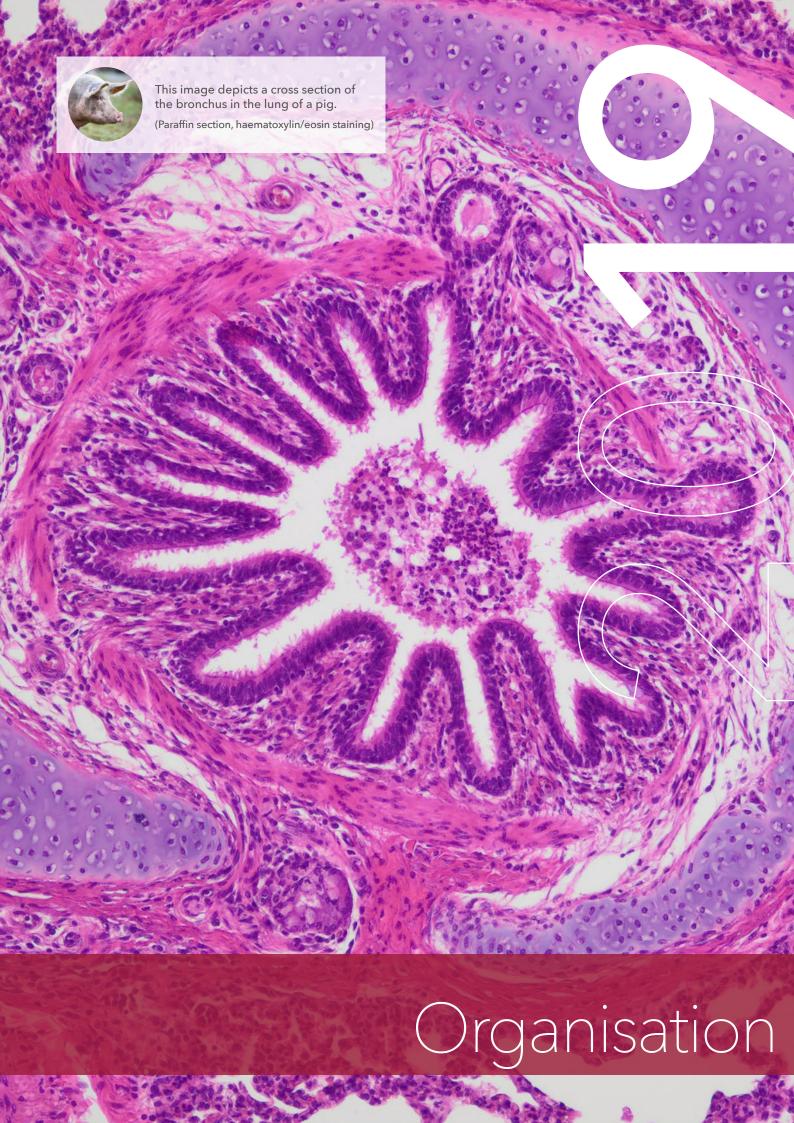
#### 18 - 20 Oct 2019

#### 3<sup>rd</sup> Vienna Pain Day

At the third Vienna Pain Day, veterinarians, researchers and students of Vetmeduni Vienna discussed and exchanged views on the topic of pain, the focus being on pain and behaviour in small animals and horses.



Florien Jenner/Vetmeduni Vier



# Organisation

# Working at Vetmeduni Vienna

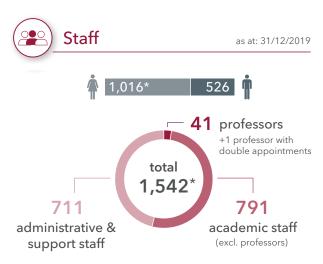
About 1,500 staff work at Vetmeduni Vienna in teaching, clinical work, research and administration. They contribute their expertise as researchers, teachers, veterinarians, administrative and support staff to the university's daily operations.



Re-elected:
Petra Winter will continue to lead Vetmeduni
Vienna in the Rectorate period 2021 - 2025.

#### **Petra Winter Re-Elected as Rector**

On 17 Sept 2019, the University Council of Vetmeduni Vienna re-elected the incumbent Petra Winter in a fast-track procedure (in accordance with §23b (1) of the 2002 University Act) as Rector of the University of Veterinary Medicine, Vienna. In re-electing her, both the Senate and the University Council of Vetmeduni Vienna were aiming for continuity and honoured the incumbent Rector's unflagging dedication to our university.



\* Since one person is counted as belonging both to the general (administrative & support) and the scientific staff, we have an instance of double counting which is adjusted for in the total number.

Despite COVID-19, Vetmeduni Vienna is well on track to achieve all the target values for basic research output and for studies in which students take exams as defined in the Performance Agreement for the 2019-2021 period. This has only been possible thanks to the enthusiasm and commitment of staff members to proceed full steam ahead for our university. Construction of our Small Animals Clinic is progressing according to schedule, while 60 places for teaching and research horses have been created at VetFarm and a birdhouse for galliforms built at the Konrad Lorenz Institute of Ethology. I am particularly pleased with VetWoman, a support programme for high potential females launched in 2019.

Manuela Raith, Vice-Rector for Resources



Leukaemia research: Together with his team, Florian Grebin is exploring molecular mechanisms underlying the aetiology of leukaemia.

## Florian Grebien: New Professor for Medical Biochemistry

In January 2019, Florian Grebien began his full-time professorship in medical biochemistry after having become Head of the Institute of Medical Biochemistry of Vetmeduni Vienna in early 2018. Together with his team, Grebin is exploring molecular mechanisms underlying the aetiology of leukaemia with the so-called 'fusion proteins' being at the centre of attention. The objective of these research efforts is to develop new options for treating blood cancers.

#### Reconciliation of University and Family Life

Vetmeduni Vienna lays particular emphasis on implementing a range of measures for all groups of employees (working in administration, research and university clinics) as well as for students to ensure reconciliation of work/study and family life. After having been certified in the Work and Family Life Audit, and after having participated in the pilot project of the University and Family Life Audit in 2011, Vetmeduni Vienna has been certified in the special university audit. Following successful re-auditing in 2018, the university was awarded the certificate at the presentation ceremony of a special 'family-friendly employers' event in January 2019.

Childcare options help parents manage their day-to-day commitments and find time for continued professional development as well. In addition, Vetmeduni Vienna once again offered professional day care for our staff's children during the summer of 2019. A total of 30 childcare places were available per week. Roughly 80 children aged three to twelve were enrolled in the nine-week programme. Vetmeduni Vienna also offered free childcare on two other extra holidays taken up by about 30 children each.

Summer holidays: During an excursion to the university clinic, the children learned a number of key facts about turtles and how to keep and feed them.





#### Parent-Child Room

Within the context of Vetmeduni Vienna's audit for the University and Family Life Certificate, a group workroom at the university library was adapted to become a parent-child room. As of mid-March 2019 this first room of its kind on campus offers studying parents the opportunity to learn and work in a flexible manner. The newly equipped group workroom features a functional work area for students as well as a special workstation' for children. The parent-child room is freely accessible during regular opening hours (no prior notification required) in compliance with its usage rules and 'rules of the game'.



Play corner: A selection of toy utensils makes for variety, e.g. a well-appointed toy kitchen, an easel, a play tent with tunnel as well as a comfy resting and reading corner with child-friendly book shelf.

# VEmpowerment: Advancement of Women and Work-Life Balance

For the purpose of promoting high potential females, Vetmeduni Vienna launched the VEmpowerment programme, its core elements being training and professional development as well as support measures to promote uninterrupted research and career paths alongside private care duties. The first major initiative within VEmpowerment is the VetWoman programme aimed at advancing women by developing their scientific career and leadership qualities. A jury selected ten highly talented candidates in December 2019 to enter the programme in February 2020.



Career development: As part of VEmpowerment, the VetWoman programme for the advancement of women was created.

Award for innovative organisation development: (from left to right): Matthias Bauer (CoreFinding), Elena Russold (Anaesthesiology, Vetmeduni Vienna), Gabriela Pesch (CoreFinding), Nadja Affenzeller (Internal Medicine Small Animals, Vetmeduni Vienna), Sabine Trost (Staff Development, Vetmeduni Vienna) and Wolfgang Soritsch (Salesforce, presented the award) at the award ceremony.

#### HR Award 2019: Vetmeduni Vienna Reaches 3<sup>rd</sup> Place in the Tools & Services Category

The University of Veterinary Medicine, Vienna, received a bronze medal in the Tools & Services category at the HR Award 2019 for its human resources and organisation development project on the future of the new Small Animals Clinic. All 200 employees of the clinic were involved in this HR/organisation development process. Assisted by the external CoreFinding company, this process was aimed at enabling all the parties concerned to initiate and implement the change of internal culture by themselves inhouse. The HR Award is considered the most important accolade in the field of human resources and was presented during the multi-day industry event 'HR Inside Summit' at the Vienna Hofburg on 9 Oct 2019.

# Regionalisation Initiative 'VetmedRegio'

With targeted measures in Austria's federal states, Vetmeduni Vienna intends to raise awareness for the importance of veterinary medicine in society.

#### IHS Study on Veterinary Care Services in Austria Presented

At a press conference in June 2019, Vetmeduni Vienna - together with the Austrian Chamber of Veterinary Surgeons (ÖTK), the Federal Ministry of Labour, Social Affairs, Health and Consumer Protection (BMASGK) and the Institute for Advanced Studies (IHS) - presented the results of a study on veterinary care services in Austria. They provide insights into veterinary training programmes, future challenges and structural changes in the profession.



Results of the IHS study presented by: Martin Unger (IHS), Kurt Frühwirth (ÖTK), Petra Winter (Vetmeduni Vienna) and Ulrich Herzog (BMASGK) (from left to right).

The IHS study on veterinary care services in Austria (Veterinärmedizinische Versorgung in Österreich) can be retrieved from the website of Vetmeduni Vienna: https://www.vetmeduni.ac.at/de/infoservice/berichte/



# Cooperation with the State of Carinthia

On 20 Feb 2019, the foundation for intensive cooperation was laid between the state of Carinthia and Vetmeduni Vienna for the purpose of exploiting synergies and ensuring the supply of veterinary services. To this end, representatives of Vetmeduni Vienna and Carinthia signed a letter of intent. The set of measures planned for Carinthia includes, inter alia, research projects carried out by Vetmeduni Vienna in association with experts of the Hohe Tauern National Park as well as the introduction of summer and winter schools for professional development within a lifelong learning perspective.



Cooperation: Petra Winter signing the letter of intent pictured with Peter Kaiser, Beate Prettner and Otto Doblhoff-Dier.

#### 1<sup>st</sup> Mallnitz Days

Under the sustainable concept for upgrading and further developing the university infrastructure in Carinthia, Vetmeduni Vienna cooperates with the Hohe Tauern National Park, a park that is ideally suited for research and teaching in wildlife science.

At the 1st Mallnitz Days, well-known experts from Vetmeduni Vienna presented their extensive knowledge in numerous workshops ranging from A to Z, including age determination of red deer or the future of chamois in the Eastern Alps.



Wildlife ecology and management: Willdlife researcher Walter Arnold (centre) during the excursion to the Seebach Valley.



Johannes Lorenz Khol, specialist veterinarian for cattle, will head the Innsbruck-based Competence Centre for Ruminants in the Alpine Region.

#### Preparation for a Satellite Office in Tyrol

Tyrol, too, was included in the implementation of Vetmeduni Vienna's regionalisation initiative with the establishment of a satellite office in Innsbruck in December 2019 in association with the Austrian Agency for Health and Food Safety (AGES). Its purpose is to become a competence centre for ruminants in the Alpine Region with a focus on both teaching and research. The new branch office is part of Vetmeduni Vienna's University Clinic for Ruminants.



# Organisation

#### **EMAS Certification**

On the occasion of the conference 'Green Cooperation - Joint Action for the Environment & the Climate' held in early June 2019 at Schönbrunn Palace, representatives of Vetmeduni Vienna received the EMAS registration certificate. For a total of two years, Vetmeduni Vienna worked towards this EMAS certification by reviewing its own environmental performance and defining targets for optimisation laid down in its environmental statement Umwelterklärung. Between 25 and 27 March 2019, the TÜV SÜD regional certification body carried out a three-day audit at the campus followed by our university being EMAS certified by the Federal Environmental Agency. In addition, since April 2019 Vetmeduni Vienna has been a member of the Alliance of Sustainable Universities (Allianz Nachhaltige Universitäten), an informal network of currently 16 Austrian universities advocating sustainability issues.

**Proud recipient:** Christian Mathes with Federal Minister Maria Patek, Daniela Lexer and Alexander Moravec after receiving the registration certificate.



**Measures** 



#### **Toner collection boxes**

New collection boxes for used toner cartridges - a recycling project for the benefit of the Austrian Children's Cancer Charity



#### **LED lighting**

Outdoor lighting switched over to LED (launched in Dec 2018)



#### **Bicycle stands**

New and more bicycle stands on the campus



#### **Waste separation**

New and more waste separation points on the campus



#### **Insect-friendly**

Flower meadows for insects



ioto: Bojan Prole

For more information on EMAS go to: www.vetmeduni.ac.at/universitaet/emas/



#### Horse Husbandry at VetFarm

Adaptations applied to the VetFarm teaching and research entities have enabled Vetmeduni Vienna to keep horses. The Haidlhof estate now offers a total of 60 places for horses for teaching and research purposes. Owing to these alterations 25 ponies can be kept in the so-called Erlbacherhaus, a historic building (circa 1830) put to a new use. Its overall useful area of 270 m² includes playpens, boxes for settling in, a preparation room and an open walkway. Outside, the horses may enjoy 600 m² of a reinforced and partly roofed pen including rolling spots and shelter as well as five hectares of paddock. Other special features of the estate include ad-lib hay feeding via hayracks, a flexible locking system as well as a separate dung site.



Historic setting: The Erlbacherhaus is the last surviving house of the former Haidlhof housing estate. In order to prevent water from entering the building during heavy rainfall, the stable for the 25 ponies has been built well above ground level.

# Establishment of the Institute of Food Safety, Food Technology and Veterinary Public Health

2019 saw the launch of the Institute of Food Safety, Food Technology and Veterinary Public Health consisting of the following units: Food Microbiology; Food Hygiene and Technology; Veterinary Public Health and Epidemiology.

The Unit for Veterinary Public Health and Epidemiology conducted further surveys on the mass flows of antibiotics and the development of antimicrobial resistance, especially in porcine health management, within the Vet Austria cooperation project with the Federal Ministry of Labour, Social Affairs, Health and Consumer Protection (BMASGK) and the Austrian Agency for Health and Food Safety (AGES).



**Newly established:** The new institute comprises three units and addresses different aspects of how to ensure the safe production of food of animal origin.

hoto: Michael Bemkopf/Ve

#### New: Committee of Hygiene, Animal Epidemics, Zoonoses and Biosecurity

In March 2019, the Committee of Hygiene, Animal Epidemics, Zoonoses and Biosecurity was newly constituted. A supporting and advisory body, the committee and its working groups on hygiene/biosafety and animal pandemics/zoonoses played a key role in drafting the Biosecurity Handbook, which defines uniform rules for the entire campus on hand hygiene, protective clothing, movement of animals and persons as well as the disposal of animal carcasses. In addition, the safeguards against infectious and epidemic diseases have been revised and made available to the university's faculty and other staff through the internal VetEasy Platform.

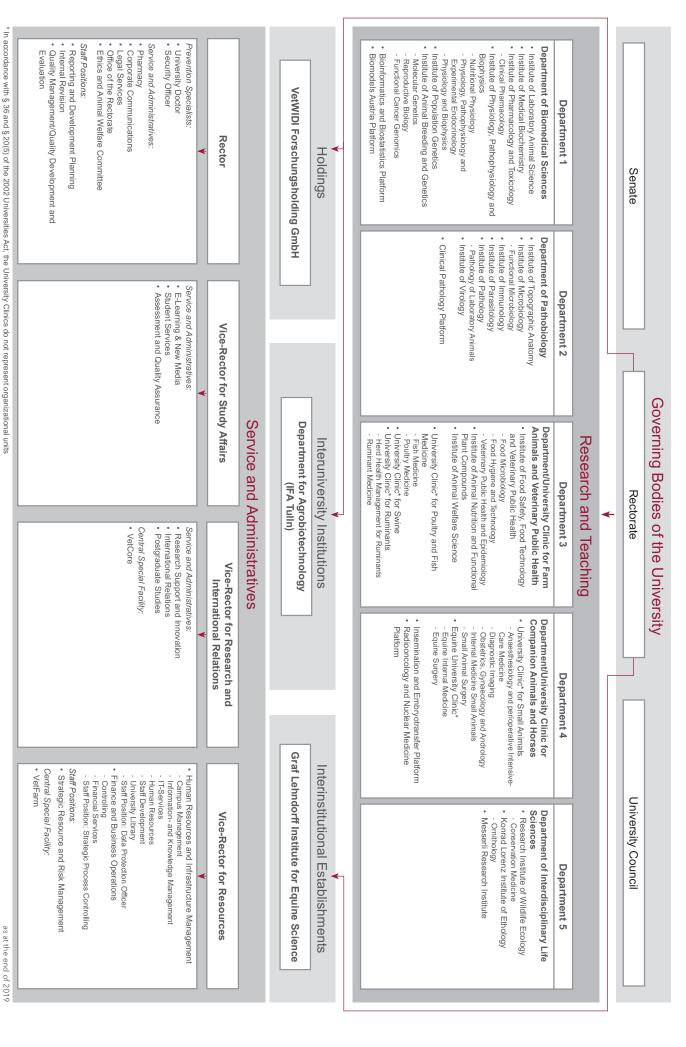


On-campus safety: 2019 saw both the publication of the Biosecurity Handbook that provides uniform rules on issues ranging from hand hygiene to protective clothing and a revision of the safeguards against infectious and epidemic diseases.

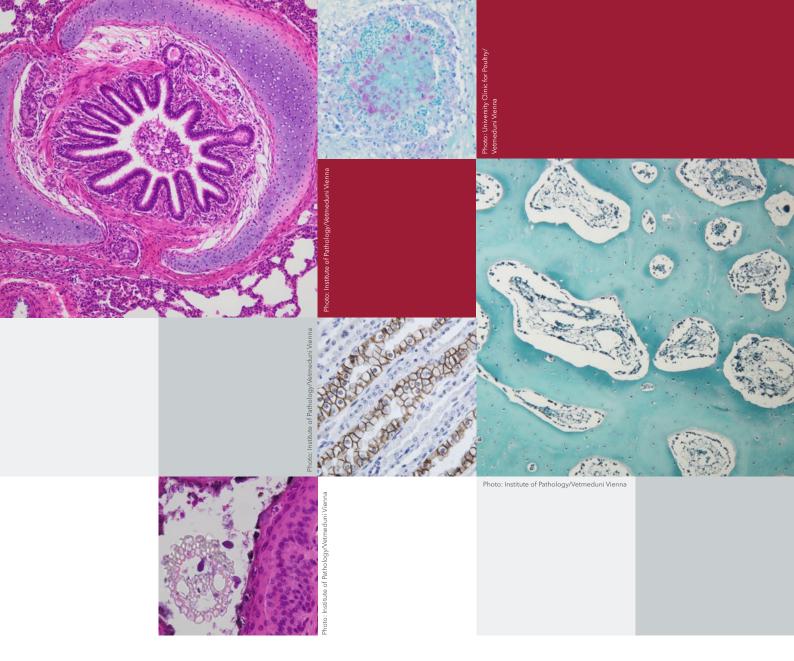


to: Christian Houdek/Vetmeduni Vienna

# Organisational Chart of Vetmeduni Vienna



 $<sup>^*</sup>$  In accordance with  $\S$  36 and  $\S$  20(5) of the 2002 Universities Act, the University Clinics do not represent organizational units



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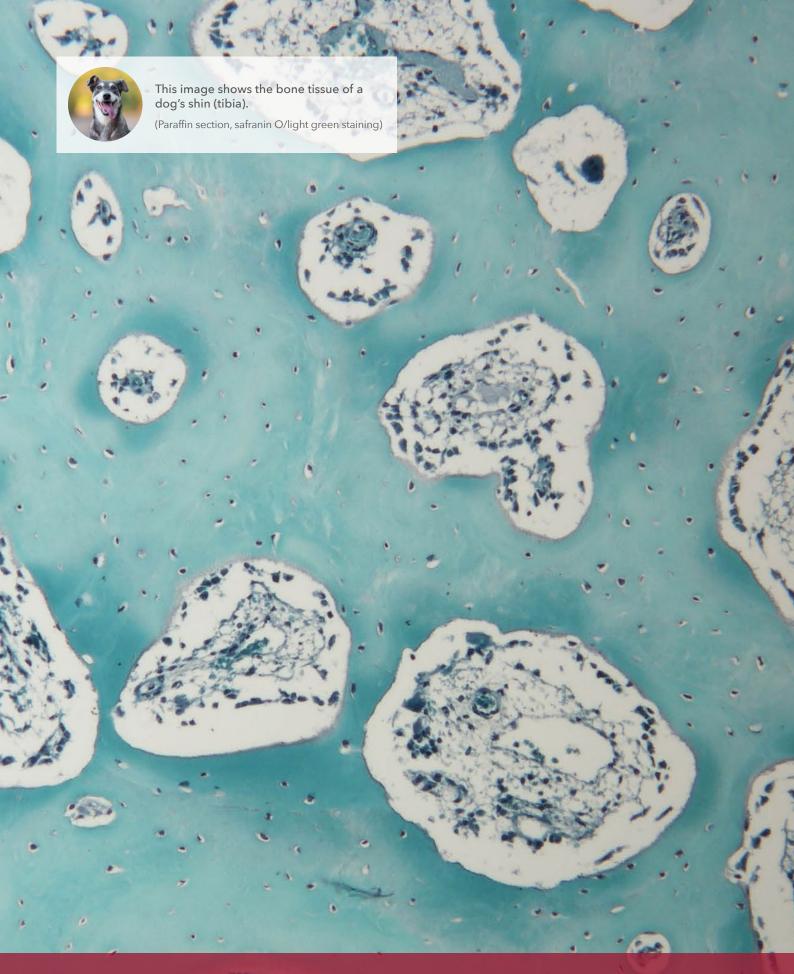
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University of Veterinary Medicine, Vienna
Veterinaerplatz 1, 1210 Vienna, Austria
T +43 1 25077-0
communication@vetmeduni.ac.at
www.vetmeduni.ac.at

vetmeduni vienna